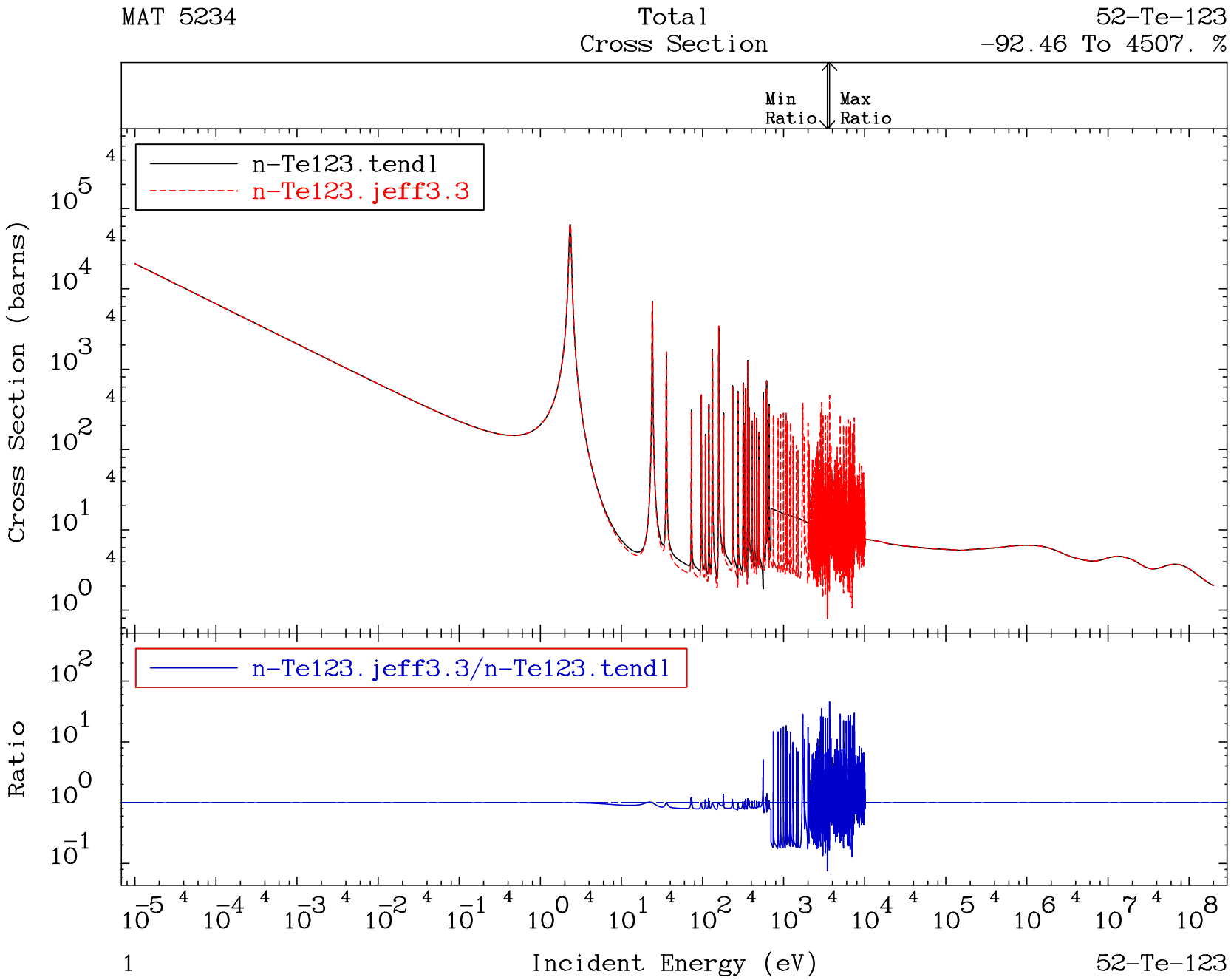
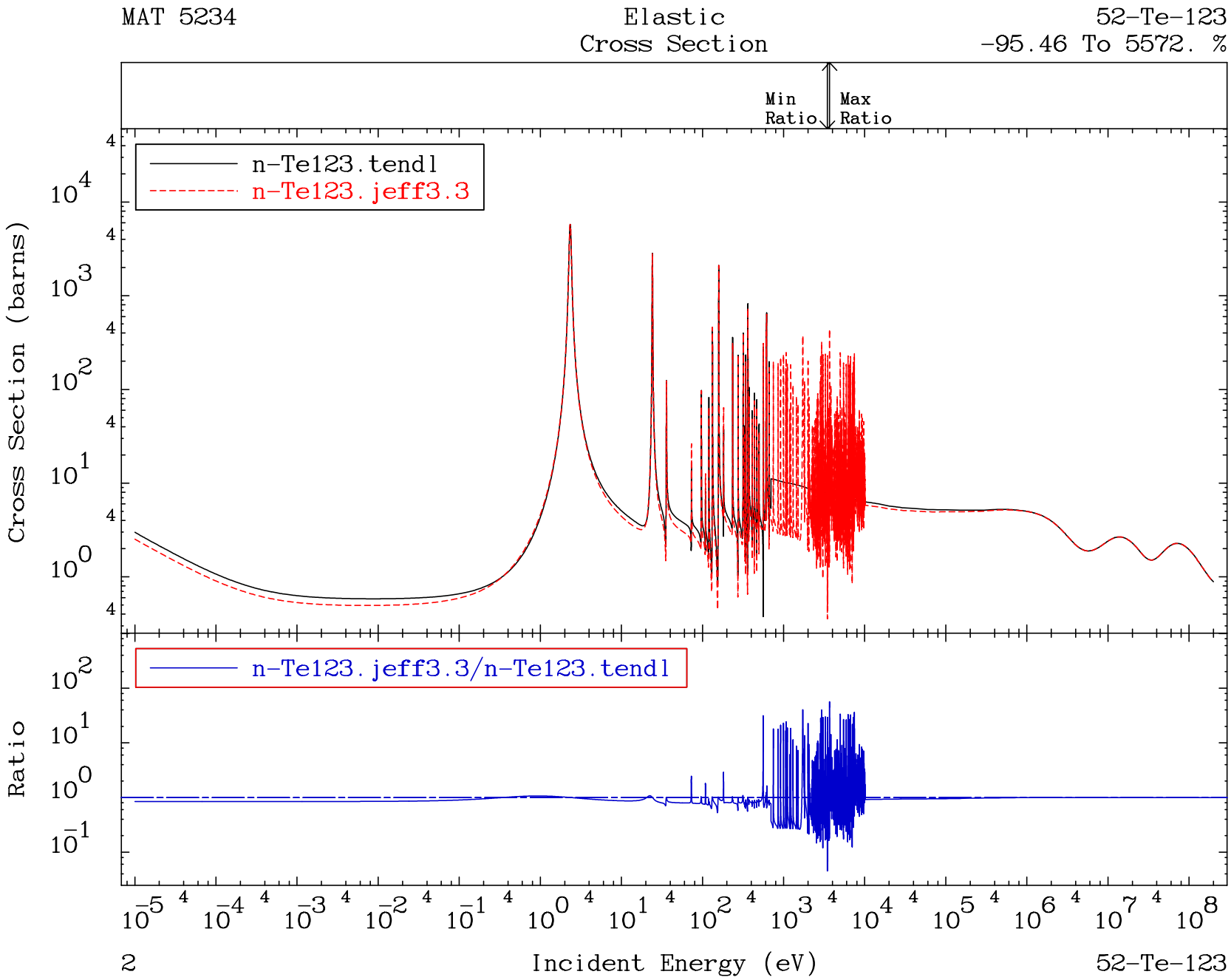
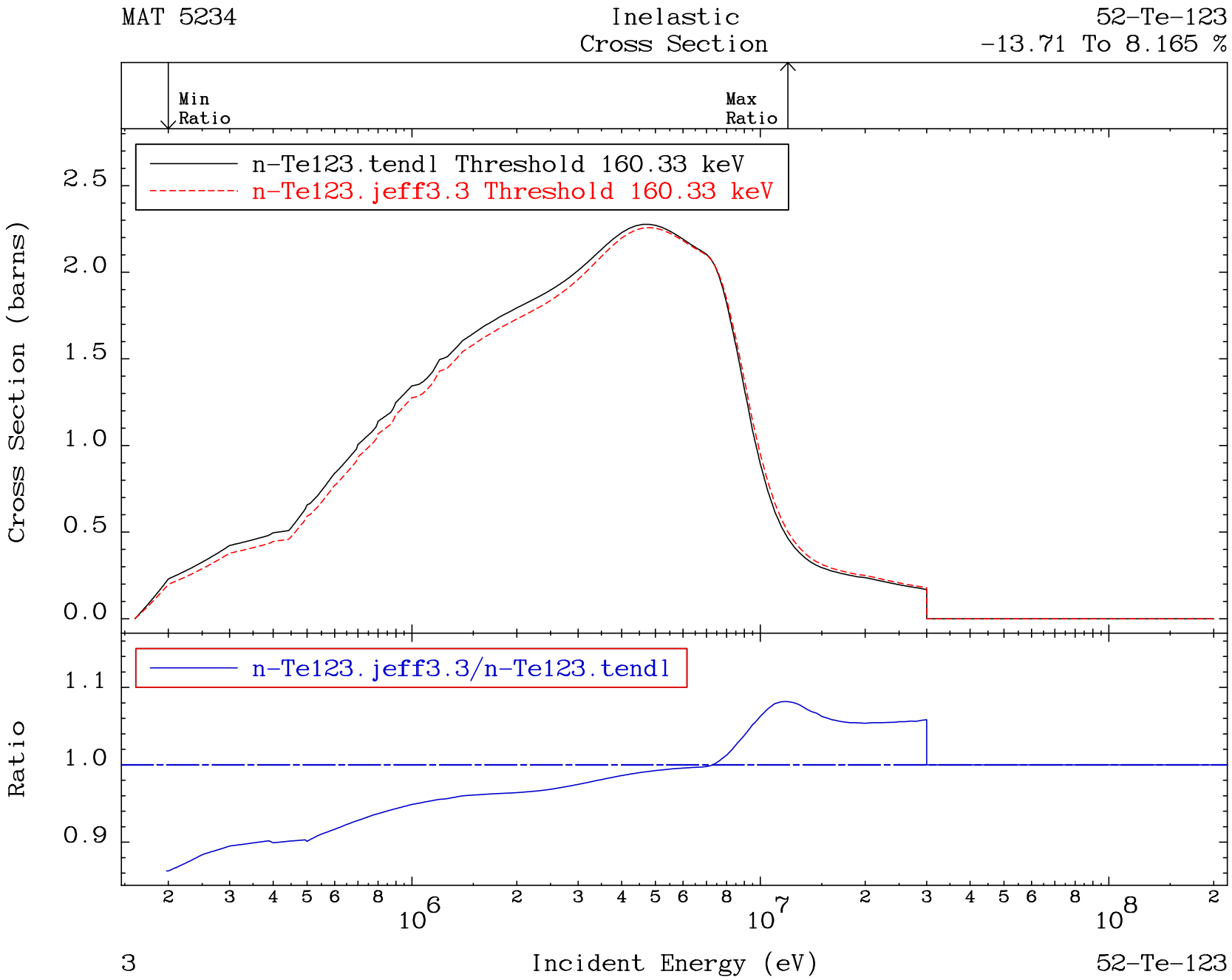
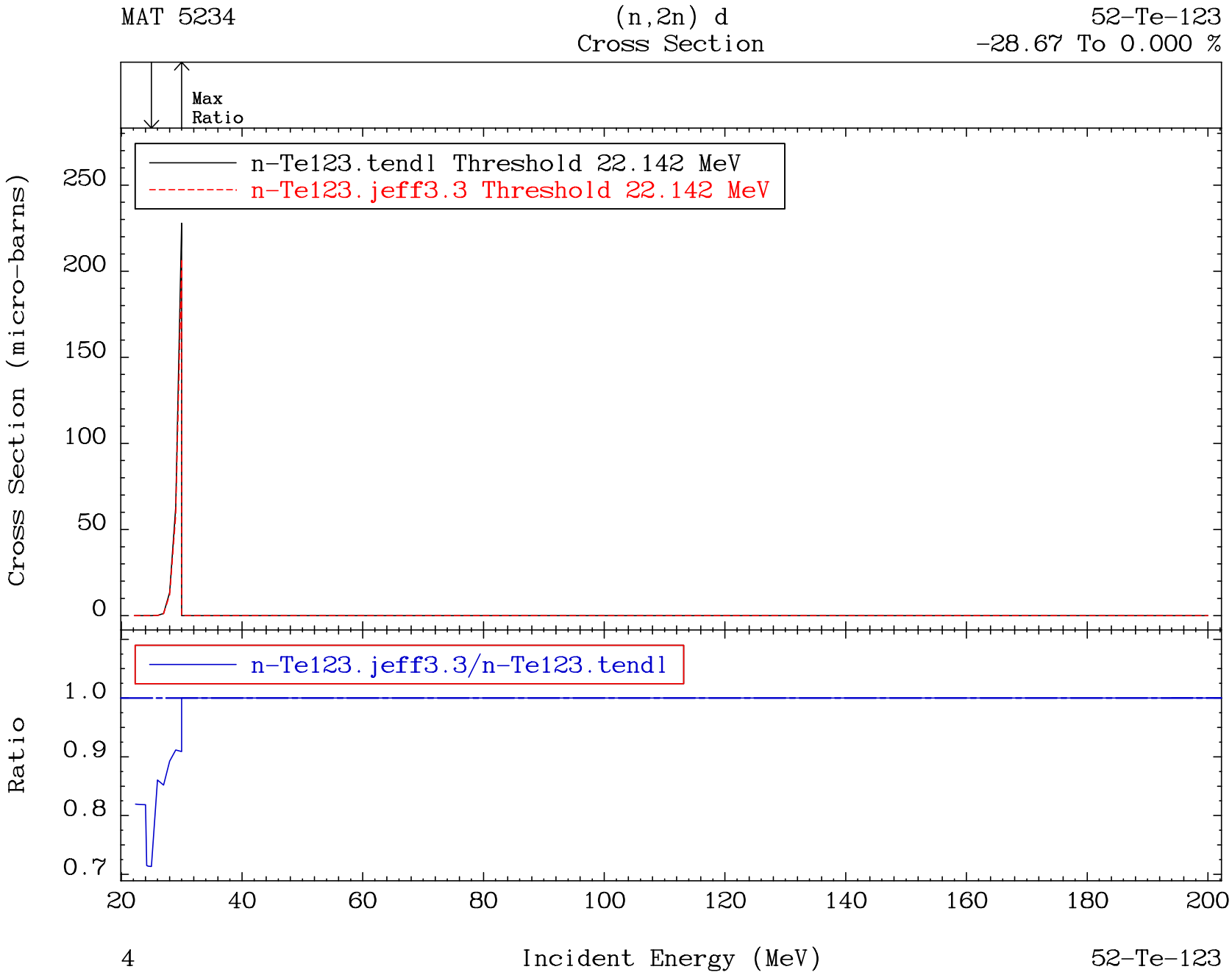
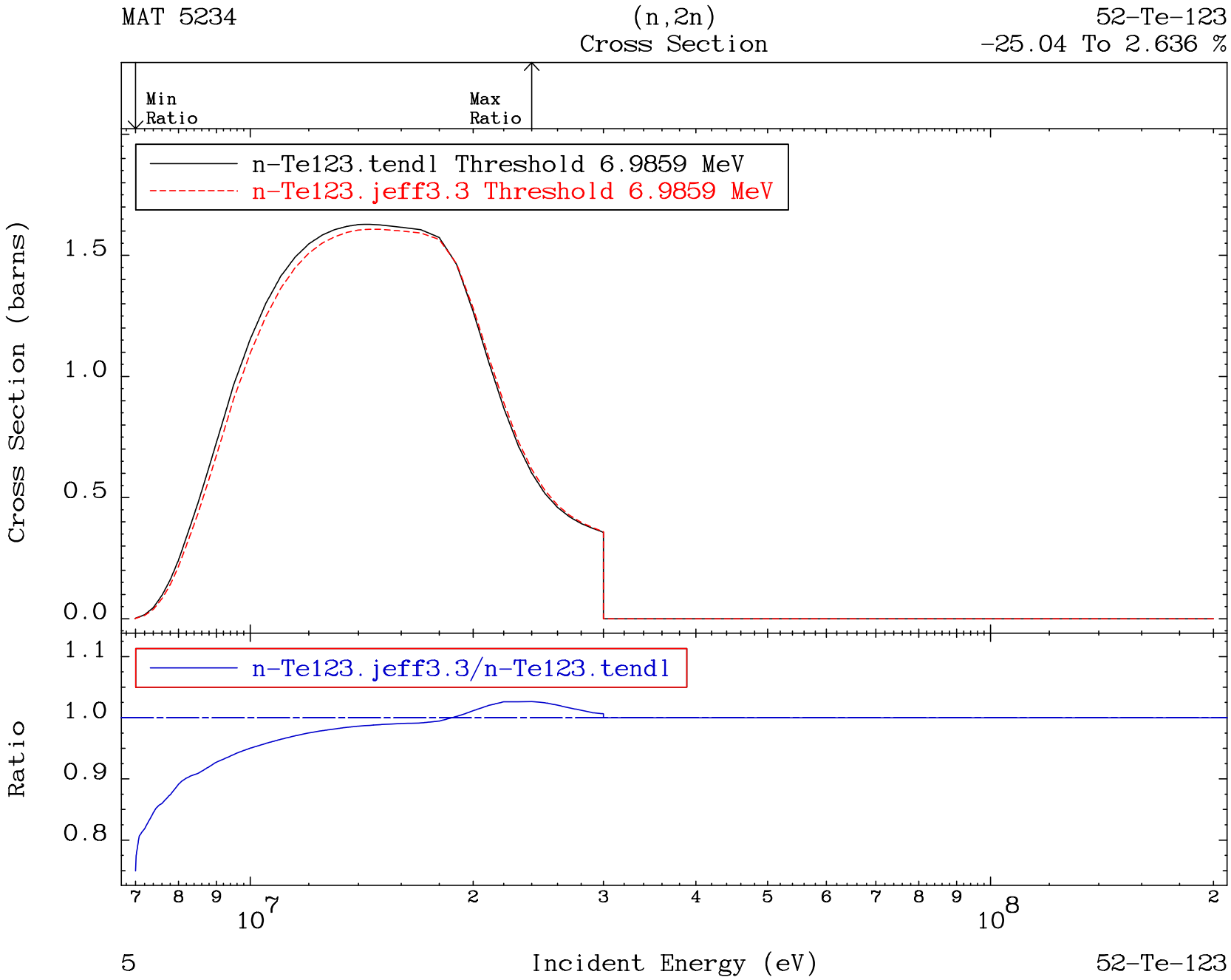
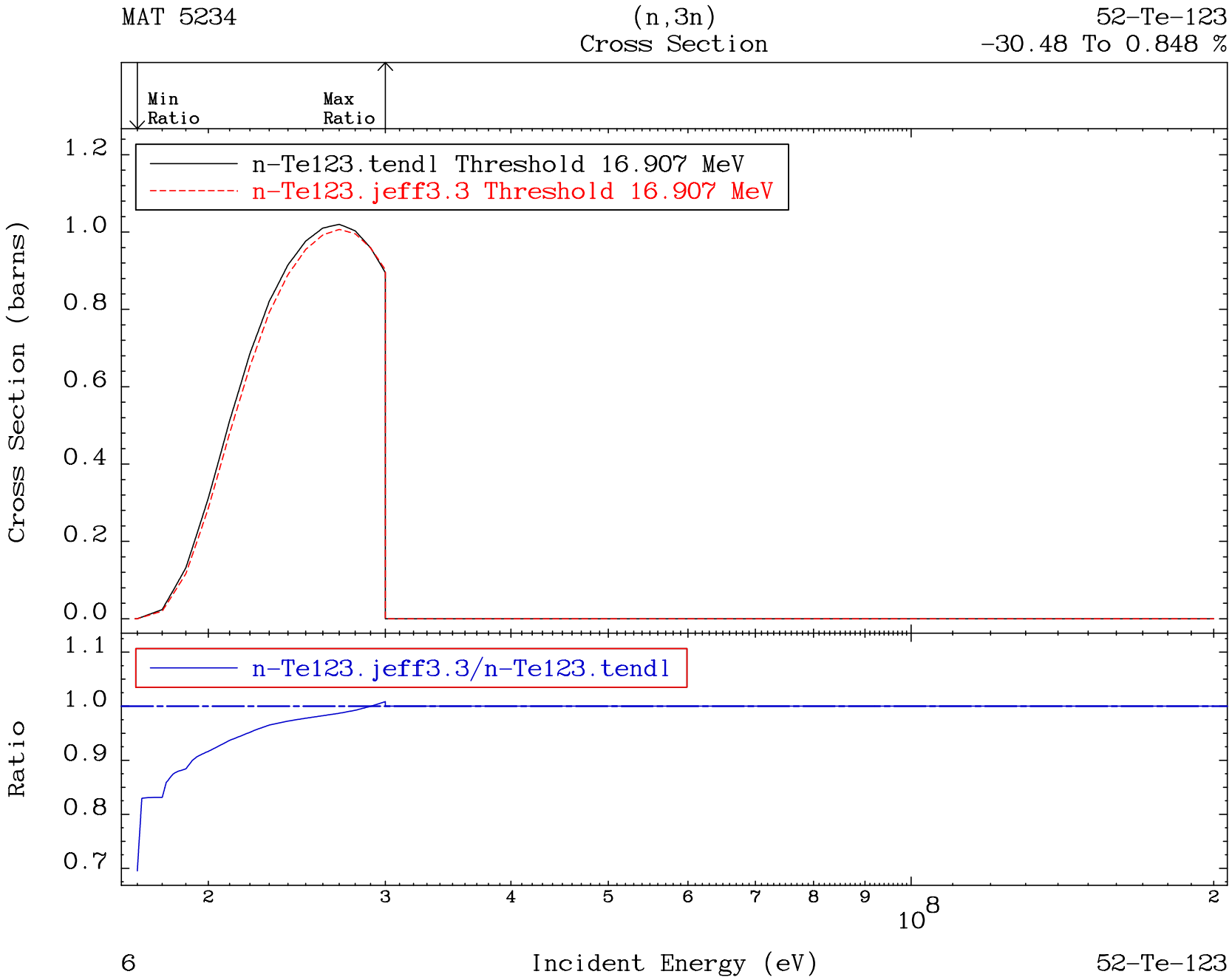

MAT 5234
Total
Cross Section
52-Te-123
-92.46 To 4507. %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
1
52-Te-123

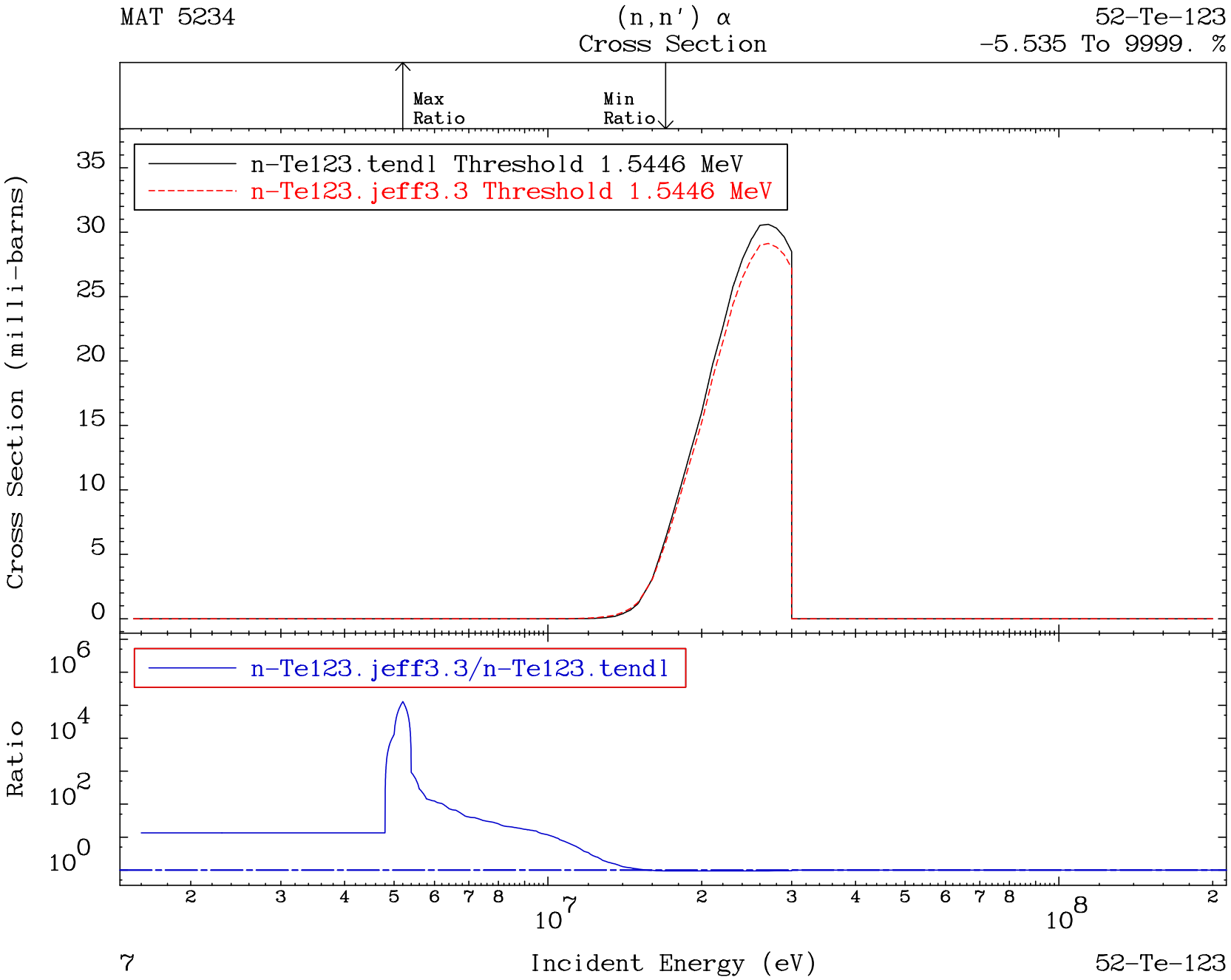

MAT 5234
Elastic
Cross Section
52-Te-123
-95.46 To 5572. %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
2
52-Te-123

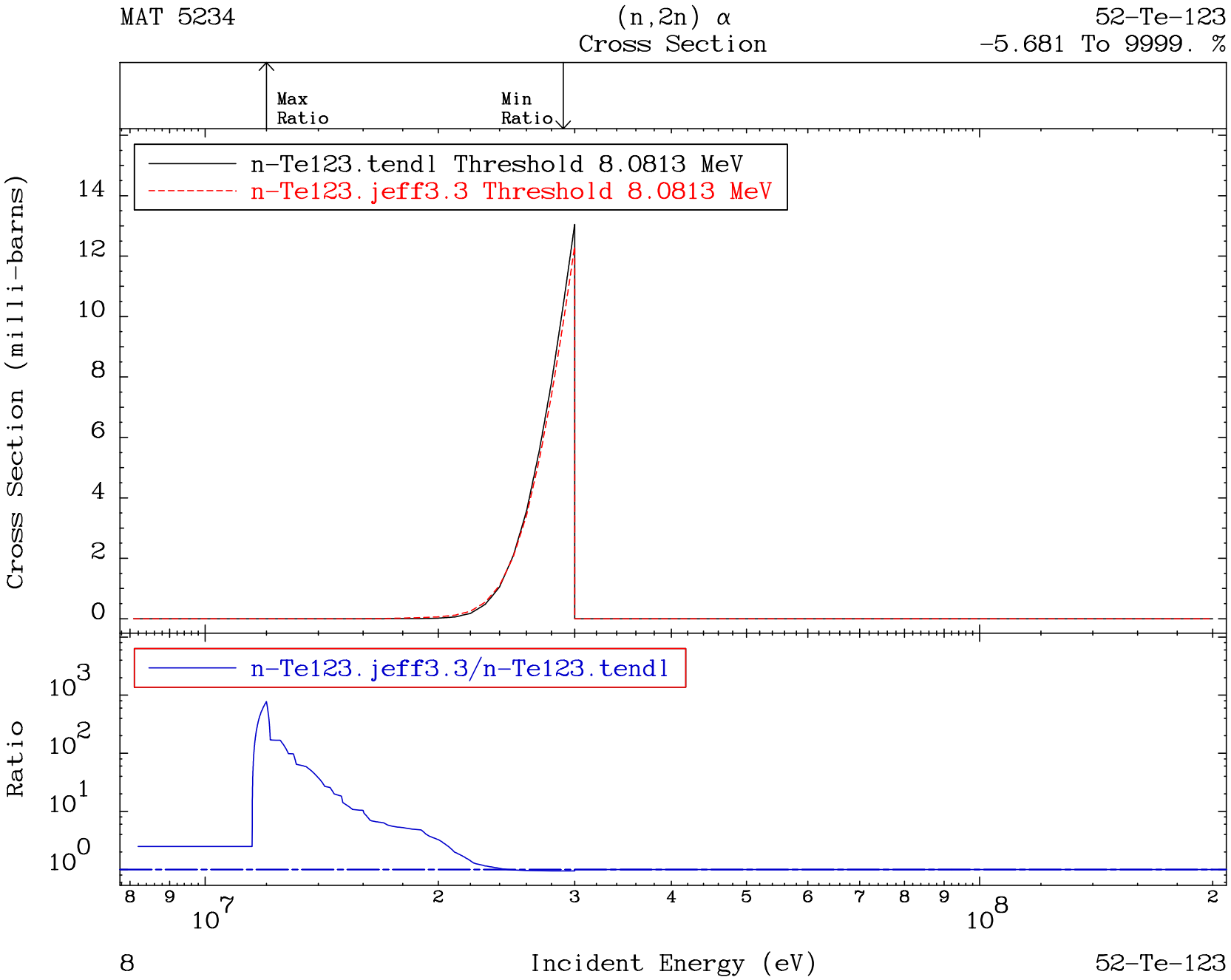

MAT 5234
Inelastic
Cross Section
52-Te-123
-13.71 To 8.165 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 160.33 keV
n-Te123.jeff3.3 Threshold 160.33 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.1
1.0
0.9
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
52-Te-123

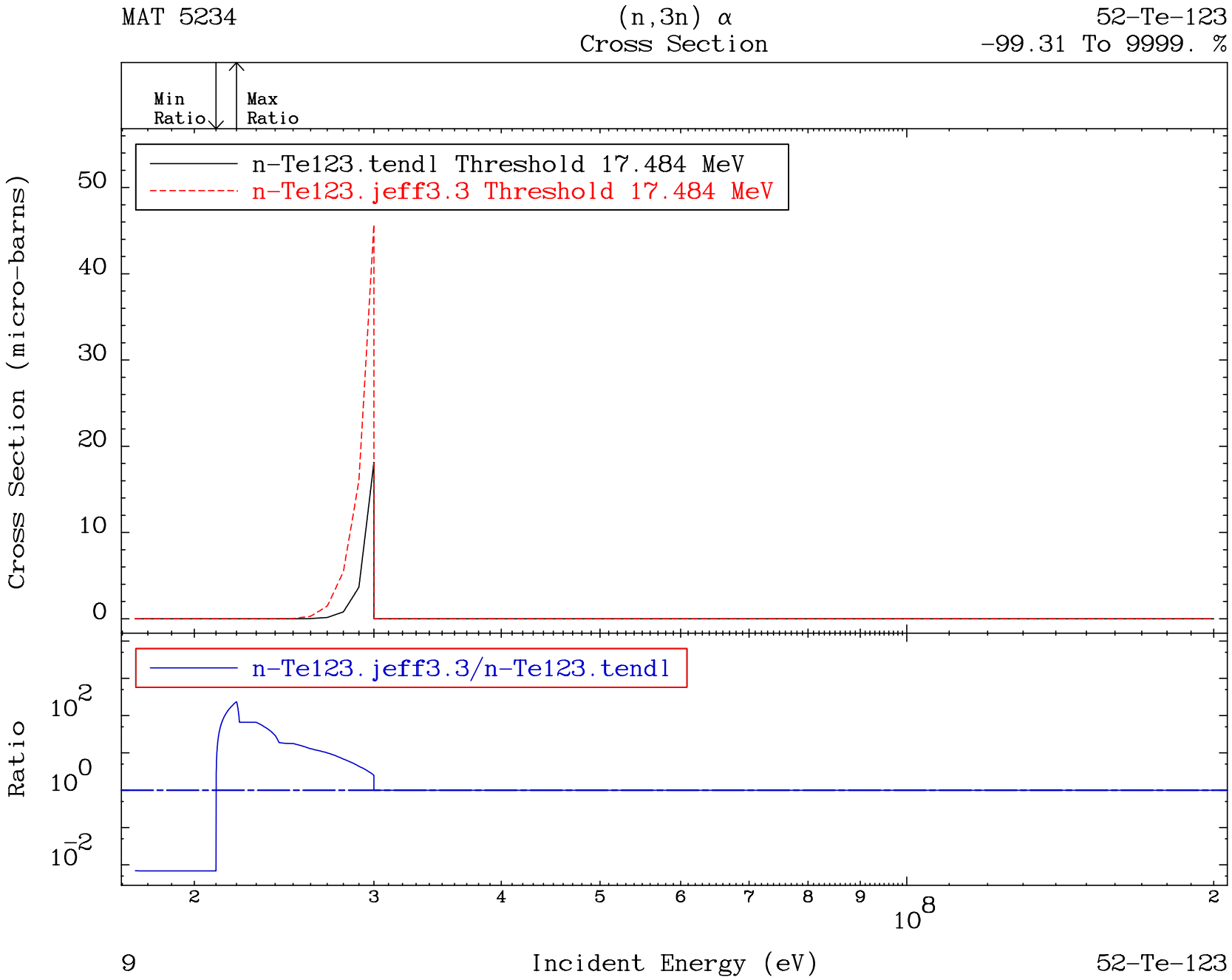

MAT 5234
(n,2n) d
Cross Section
52-Te-123
-28.67 To 0.000 %
Max
Ratio
n-Te123.tendl Threshold 22.142 MeV
n-Te123.jeff3.3 Threshold 22.142 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.9
0.8
0.7
20
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
52-Te-123

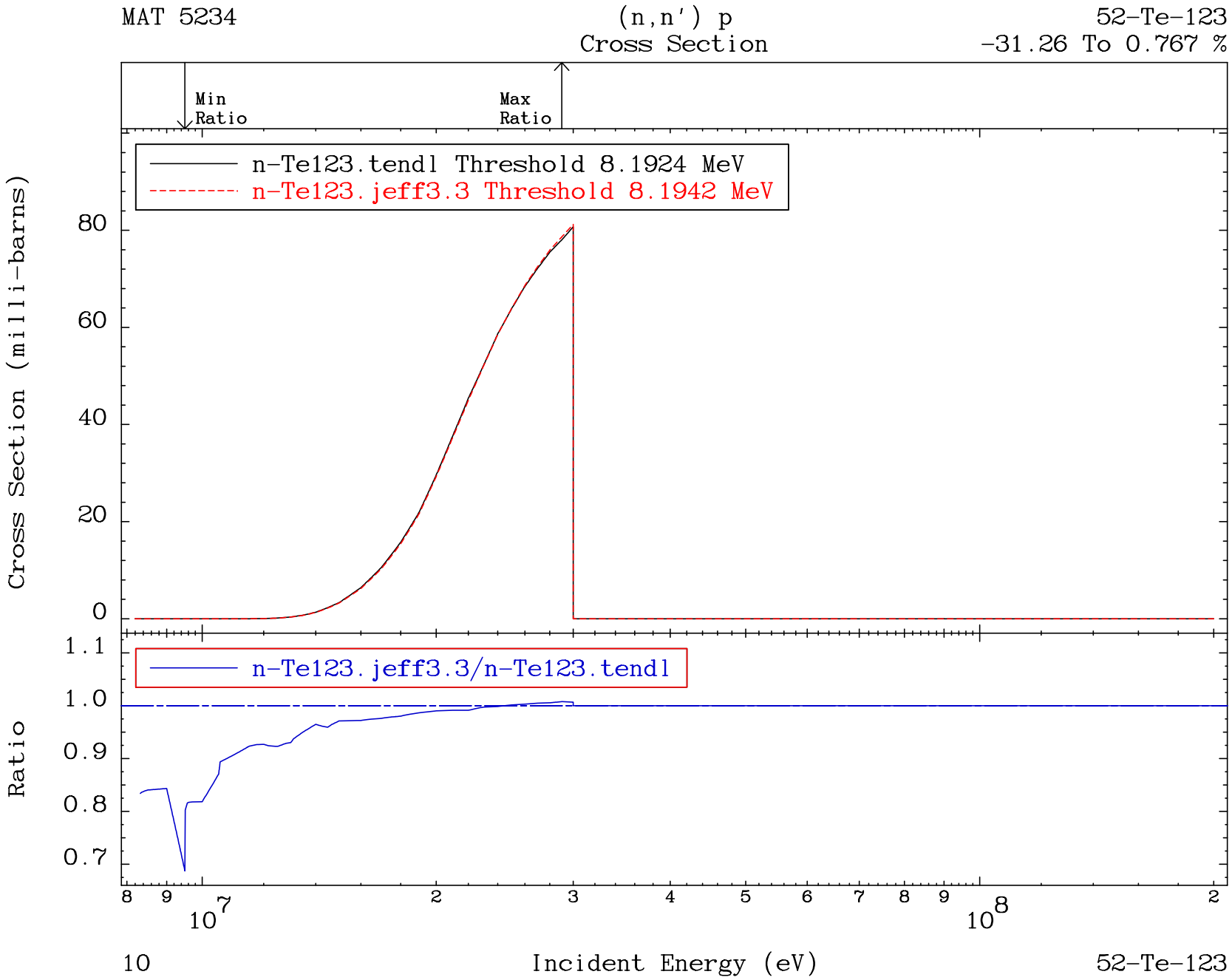

MAT 5234
(n,2n)
Cross Section
52-Te-123
-25.04 To 2.636 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 6.9859 MeV
n-Te123.jeff3.3 Threshold 6.9859 MeV
Cross Section (barns)
1.5
1.0
0.5
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.1
1.0
0.9
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
52-Te-123

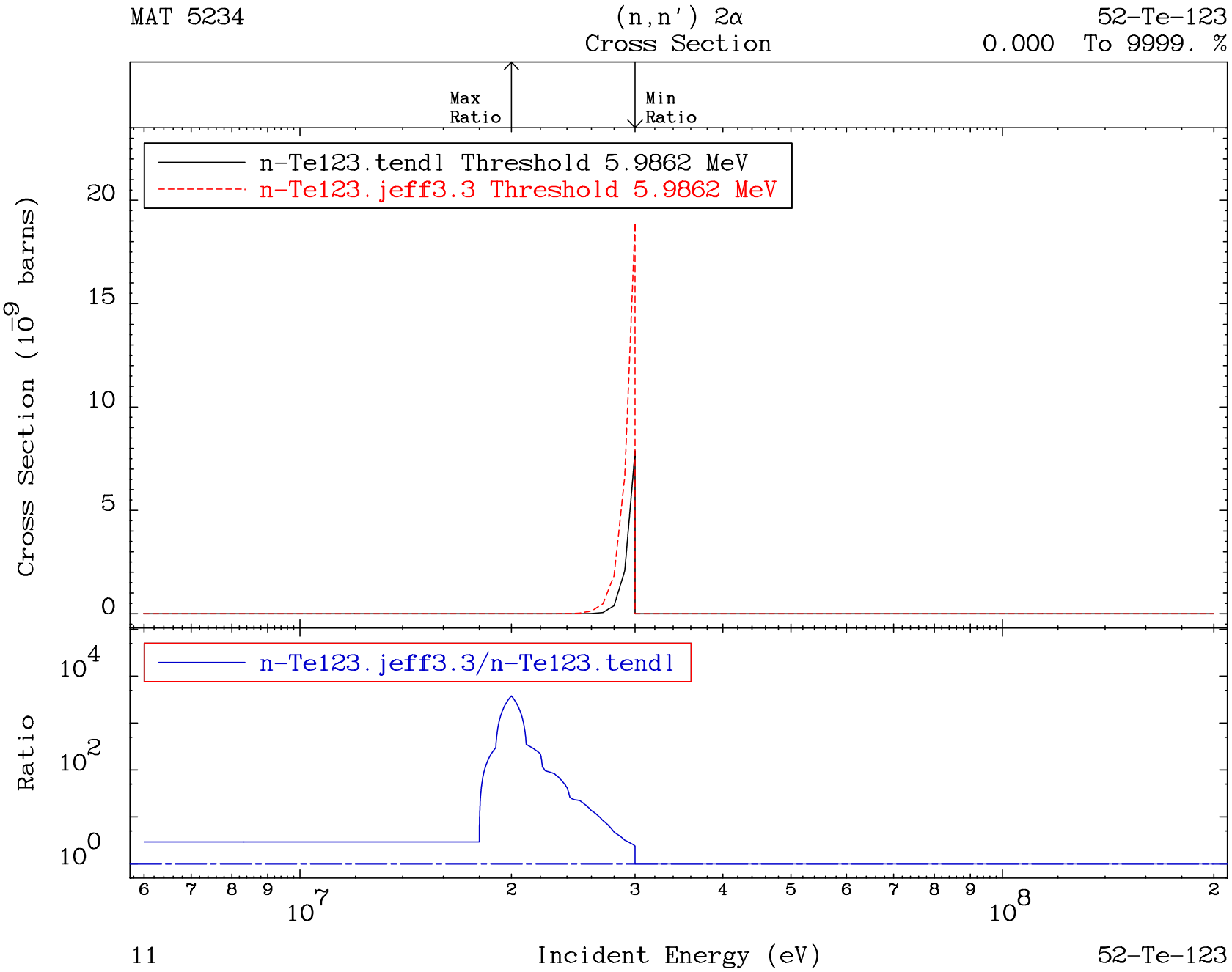

MAT 5234
(n,3n)
Cross Section
52-Te-123
-30.48 To 0.848 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 16.907 MeV
n-Te123.jeff3.3 Threshold 16.907 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.1
1.0
0.9
0.8
0.7
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
52-Te-123

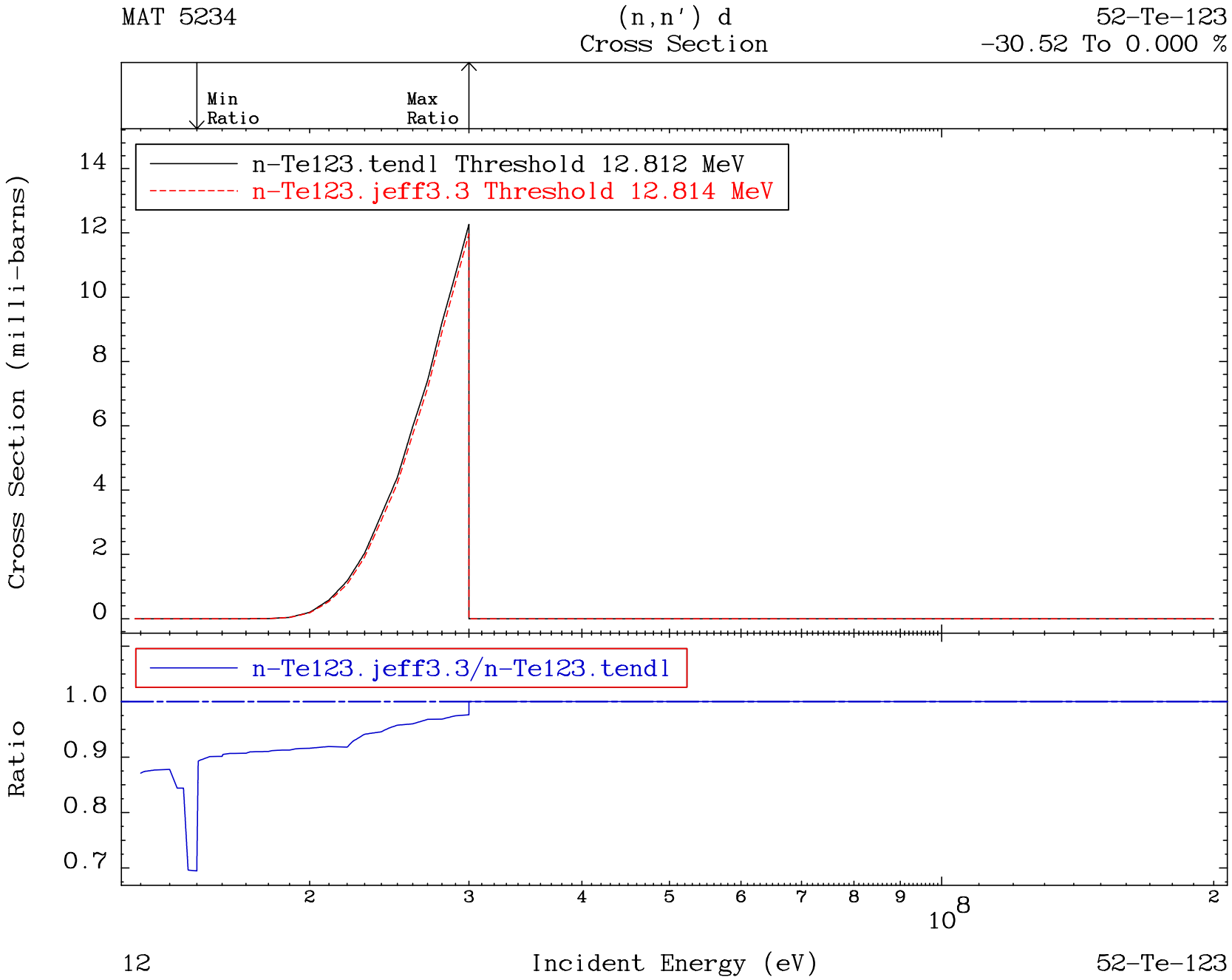

MAT 5234
(n,n') α
Cross Section
52-Te-123
-5.535 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 1.5446 MeV
n-Te123.jeff3.3 Threshold 1.5446 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^6
10^4
10^2
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
7
Incident Energy (eV)
52-Te-123

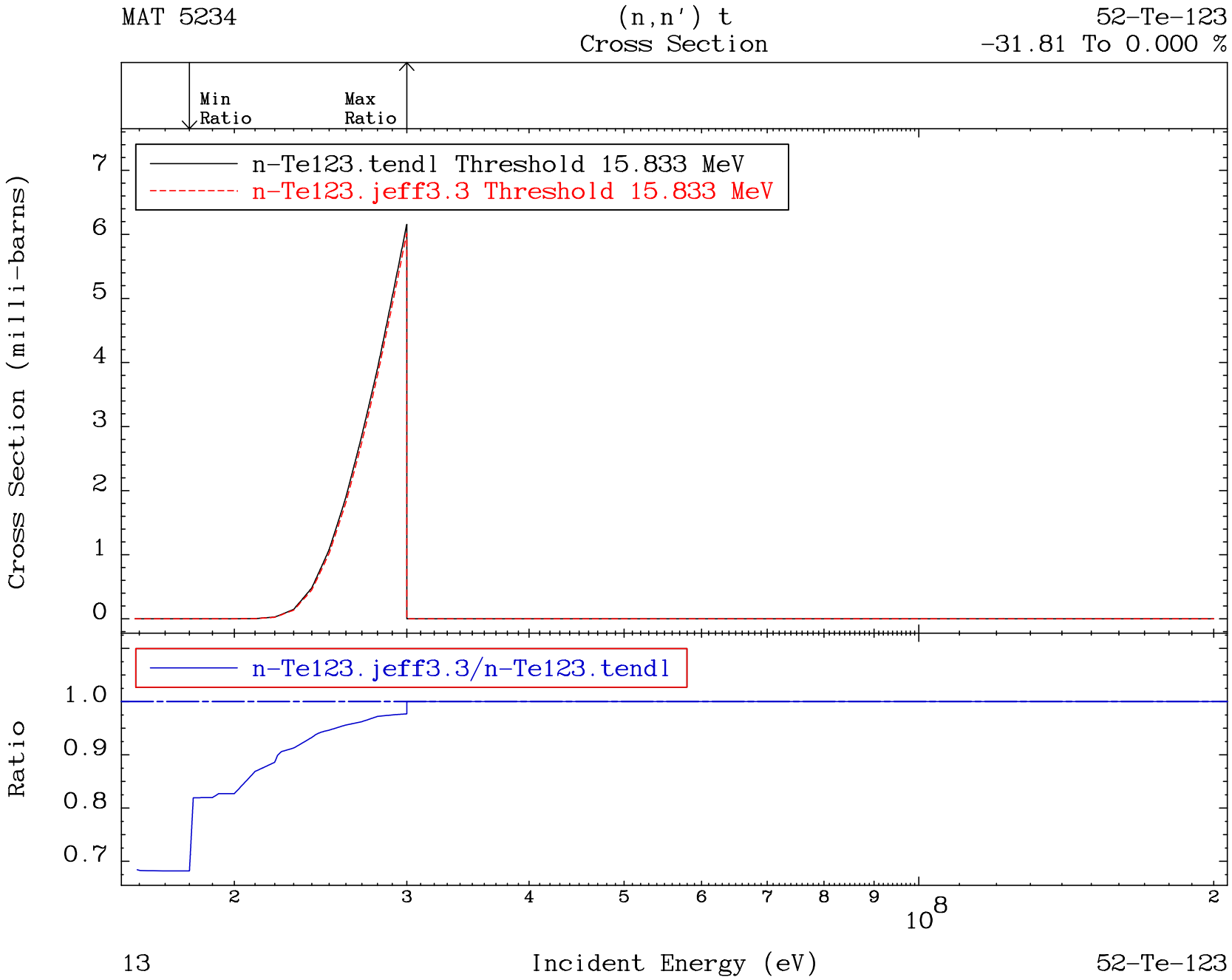

MAT 5234
(n,2n) α
Cross Section
52-Te-123
-5.681 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 8.0813 MeV
n-Te123.jeff3.3 Threshold 8.0813 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^0
10^1
10^2
10^3
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
52-Te-123

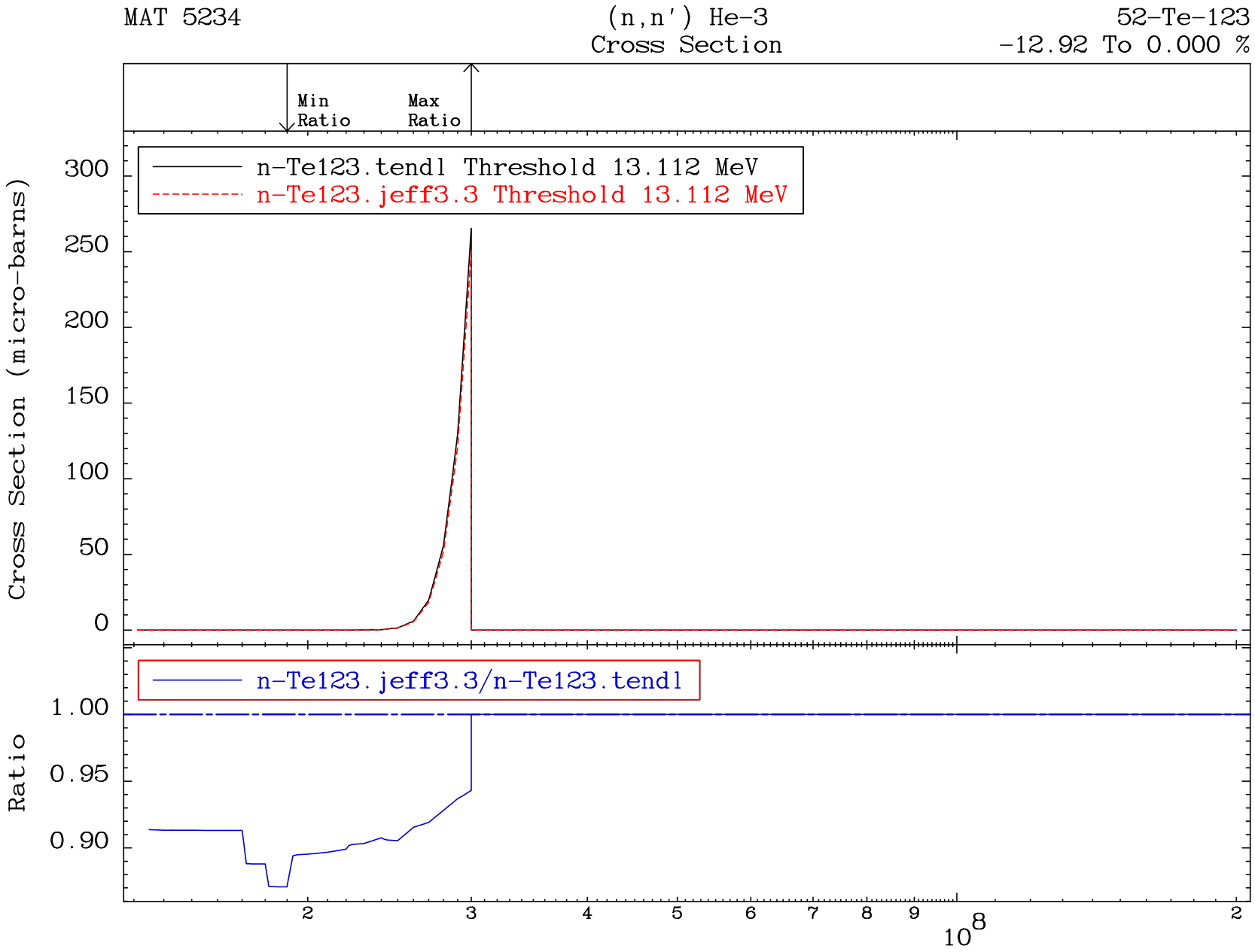

MAT 5234
(n,3n) α
Cross Section
52-Te-123
-99.31 To 9999. %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 17.484 MeV
n-Te123.jeff3.3 Threshold 17.484 MeV
Cross Section (micro-barns)
50
40
30
20
10
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
52-Te-123

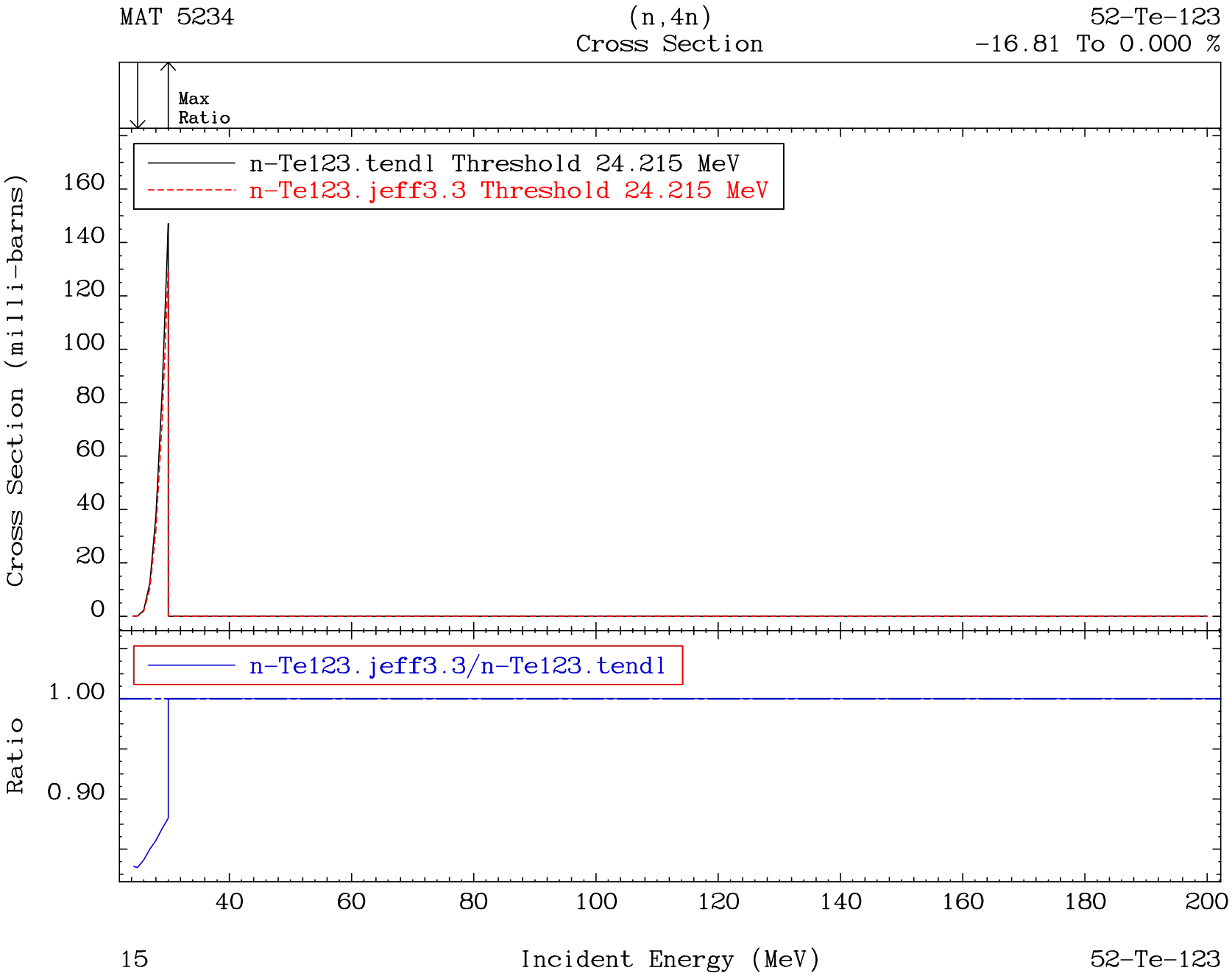

MAT 5234
(n,n') p
Cross Section
52-Te-123
-31.26 To 0.767 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 8.1924 MeV
n-Te123.jeff3.3 Threshold 8.1942 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.1
1.0
0.9
0.8
0.7
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
52-Te-123

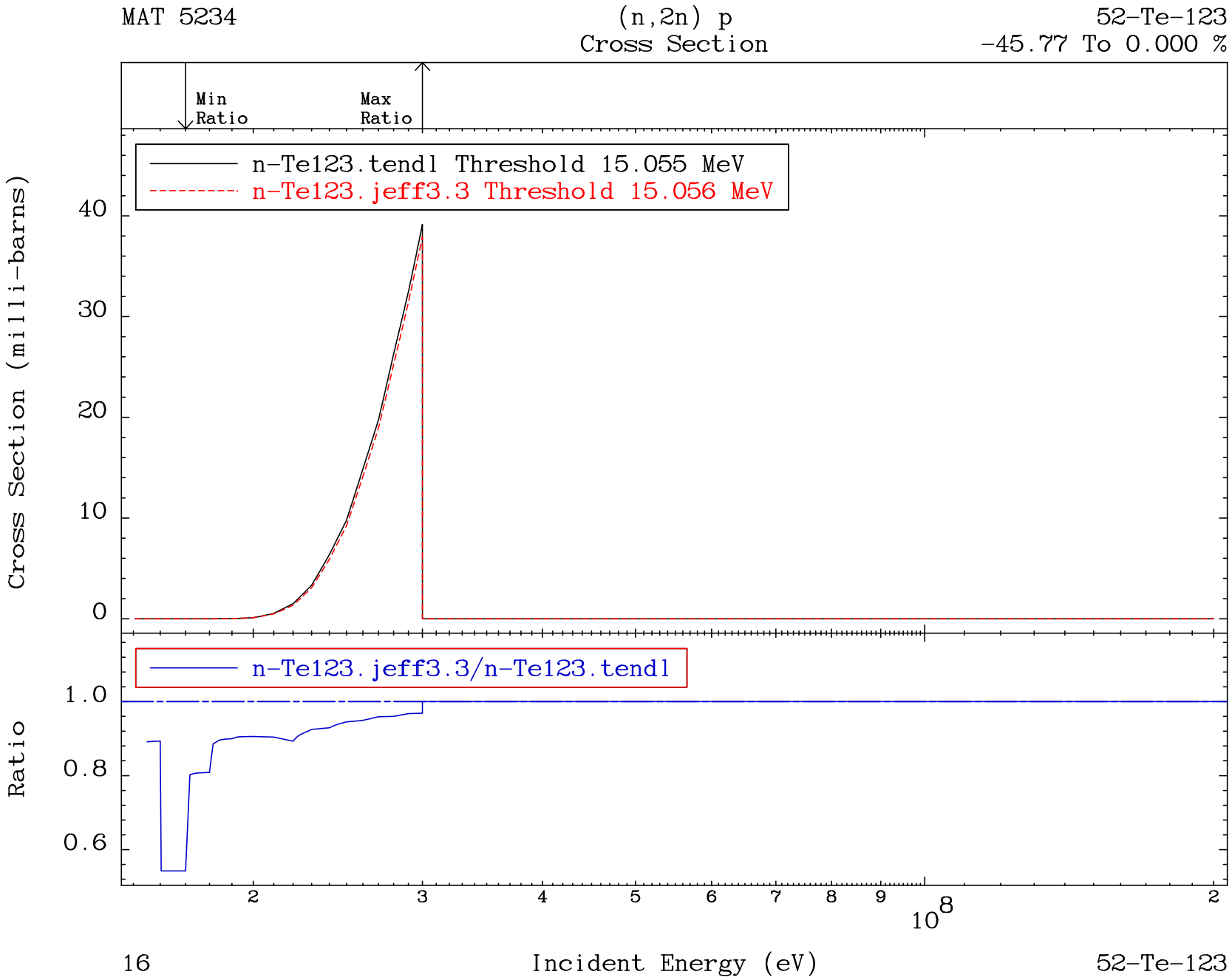

MAT 5234
(n,n') 2α
Cross Section
52-Te-123
0.000 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 5.9862 MeV
n-Te123.jeff3.3 Threshold 5.9862 MeV
Cross Section (10^-9 barns)
20
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^4
10^2
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
52-Te-123

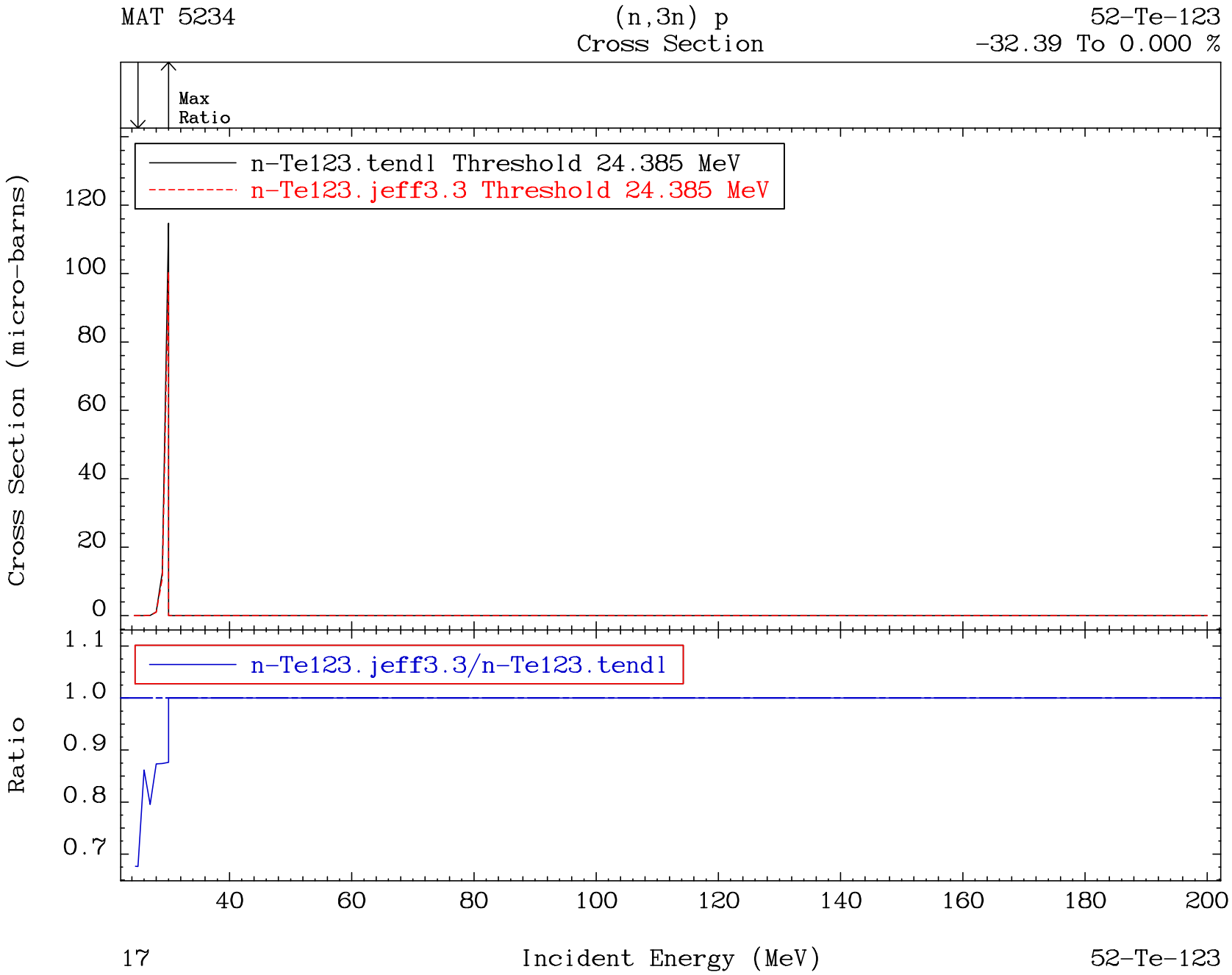

MAT 5234
(n,n') d
Cross Section
52-Te-123
-30.52 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 12.812 MeV
n-Te123.jeff3.3 Threshold 12.814 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.9
0.8
0.7
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
52-Te-123

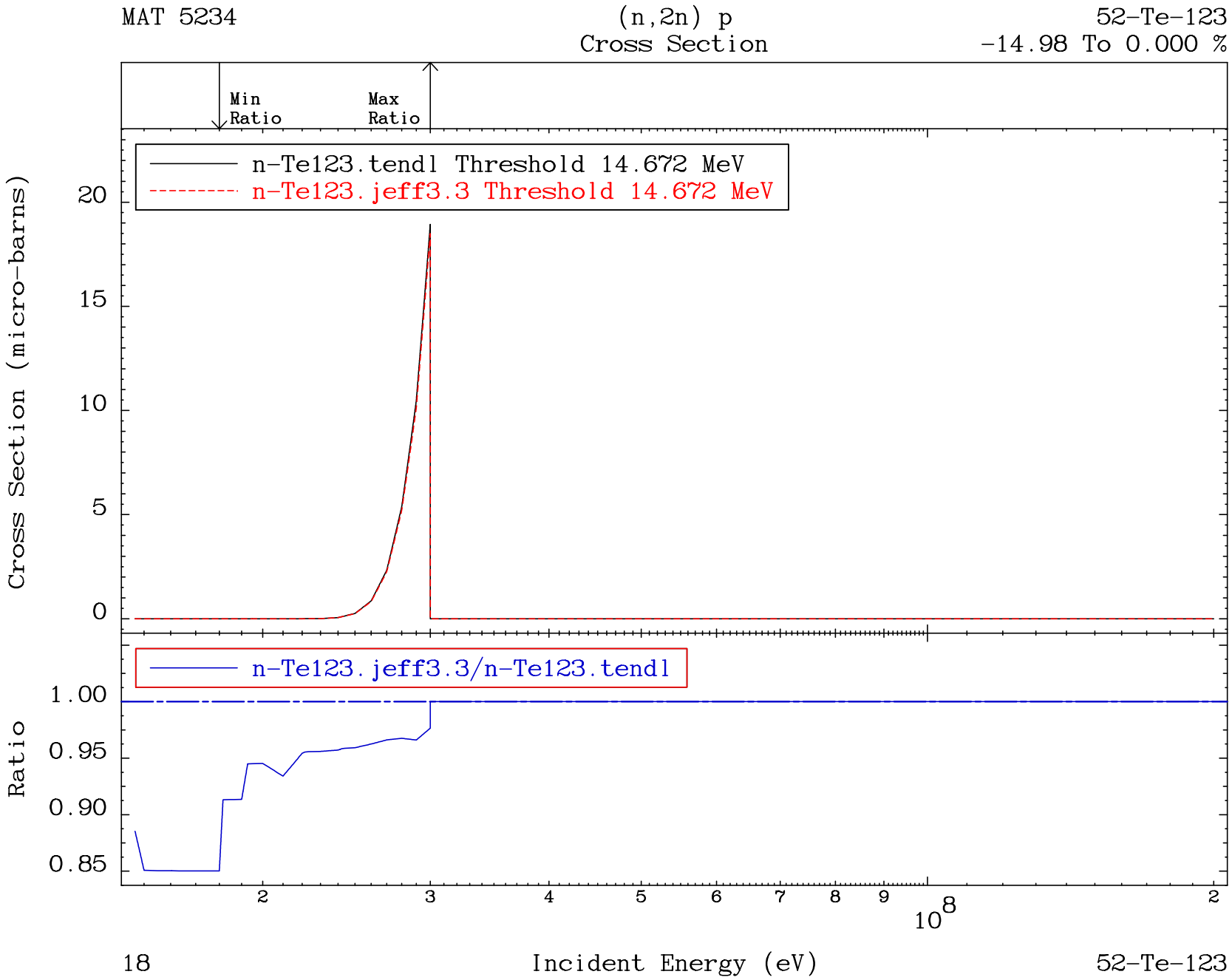

MAT 5234
(n,n') t
Cross Section
52-Te-123
-31.81 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 15.833 MeV
n-Te123.jeff3.3 Threshold 15.833 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
n-Te123.jeff3.3/n-Te123.tendl
Ratio
0.7
0.8
0.9
1.0
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
52-Te-123

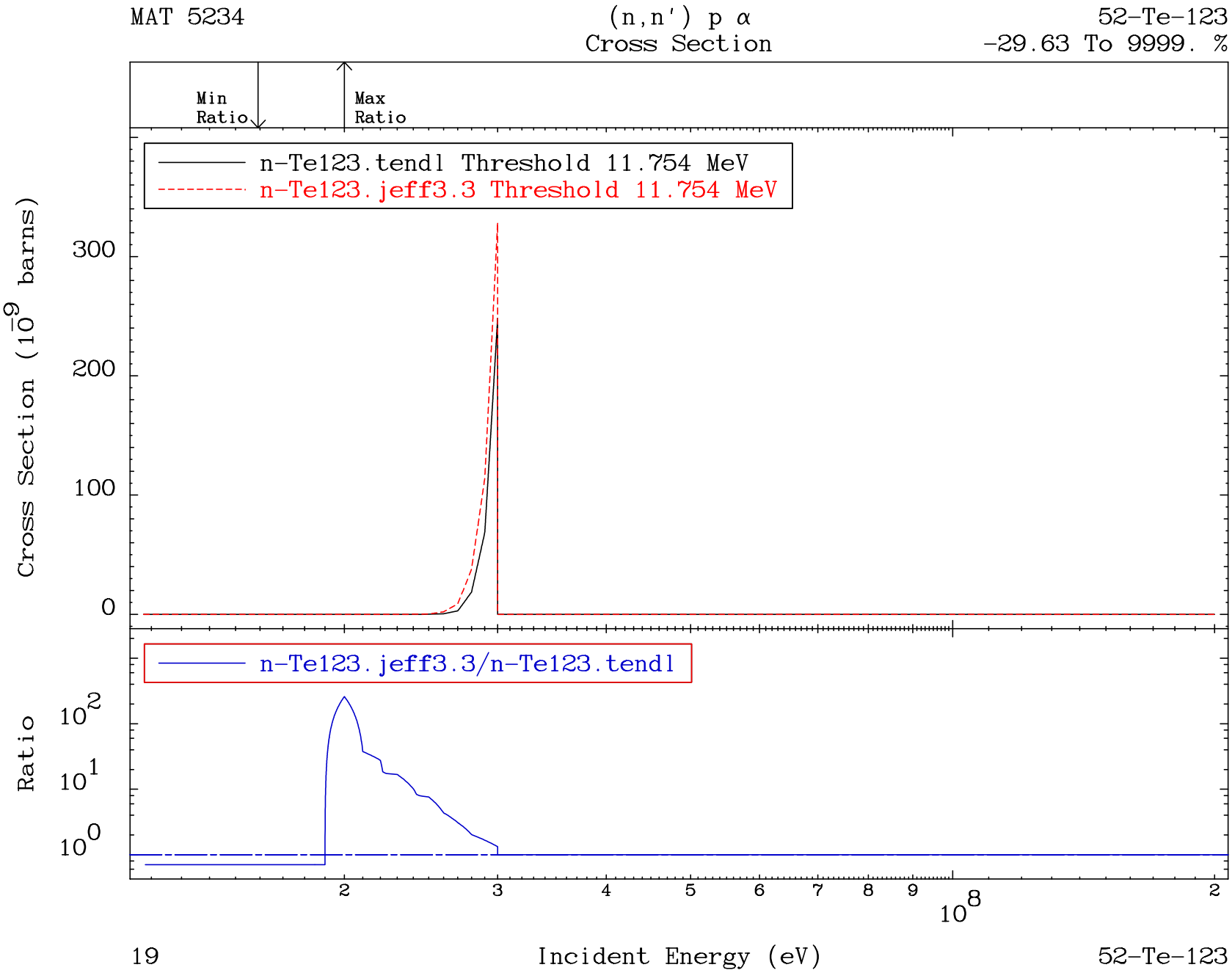

MAT 5234
(n,n') He-3
Cross Section
52-Te-123
-12.92 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 13.112 MeV
n-Te123.jeff3.3 Threshold 13.112 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.95
0.90
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
52-Te-123

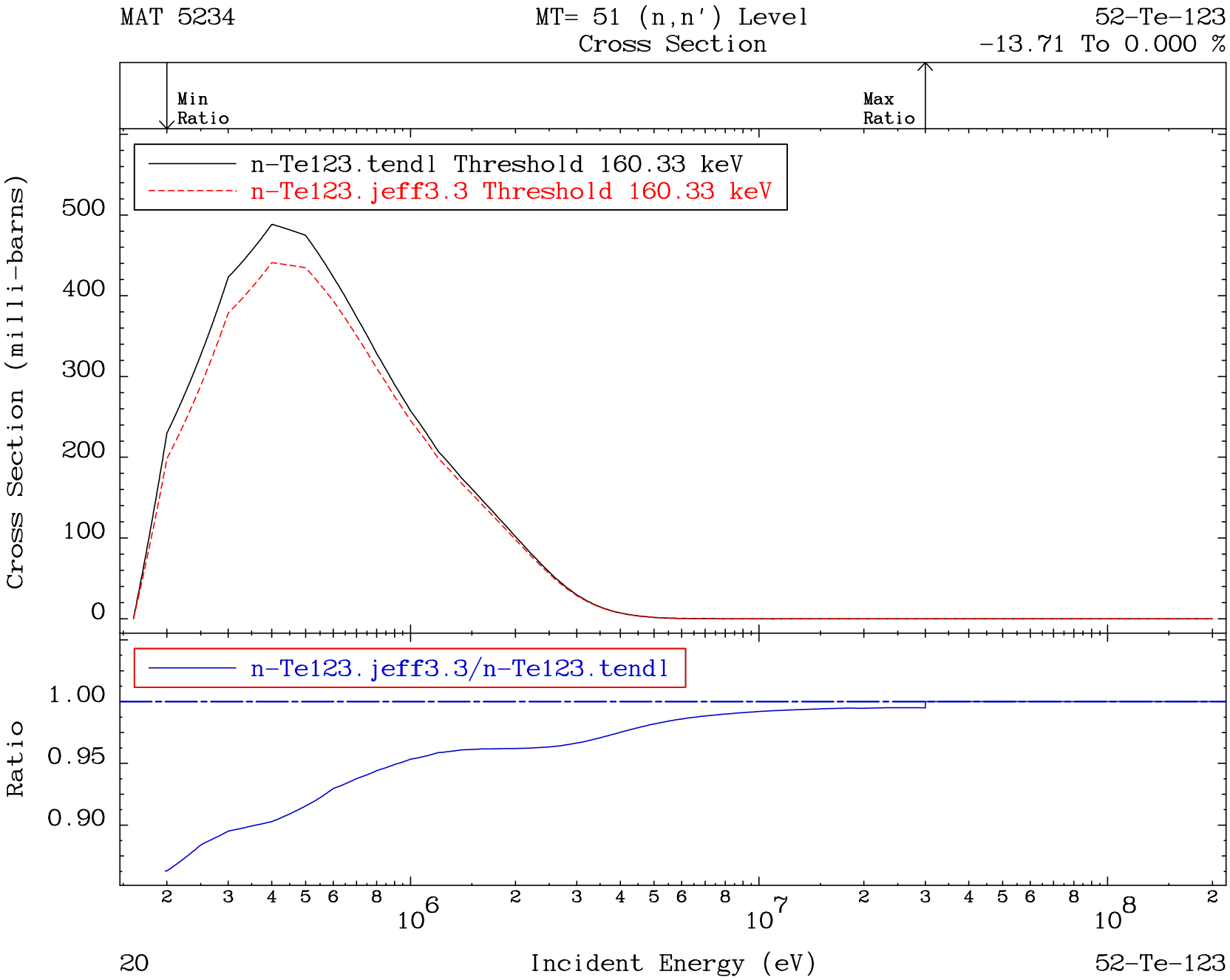

MAT 5234
(n,4n)
Cross Section
52-Te-123
-16.81 To 0.000 %
Max
Ratio
n-Te123.tendl Threshold 24.215 MeV
n-Te123.jeff3.3 Threshold 24.215 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.90
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
52-Te-123

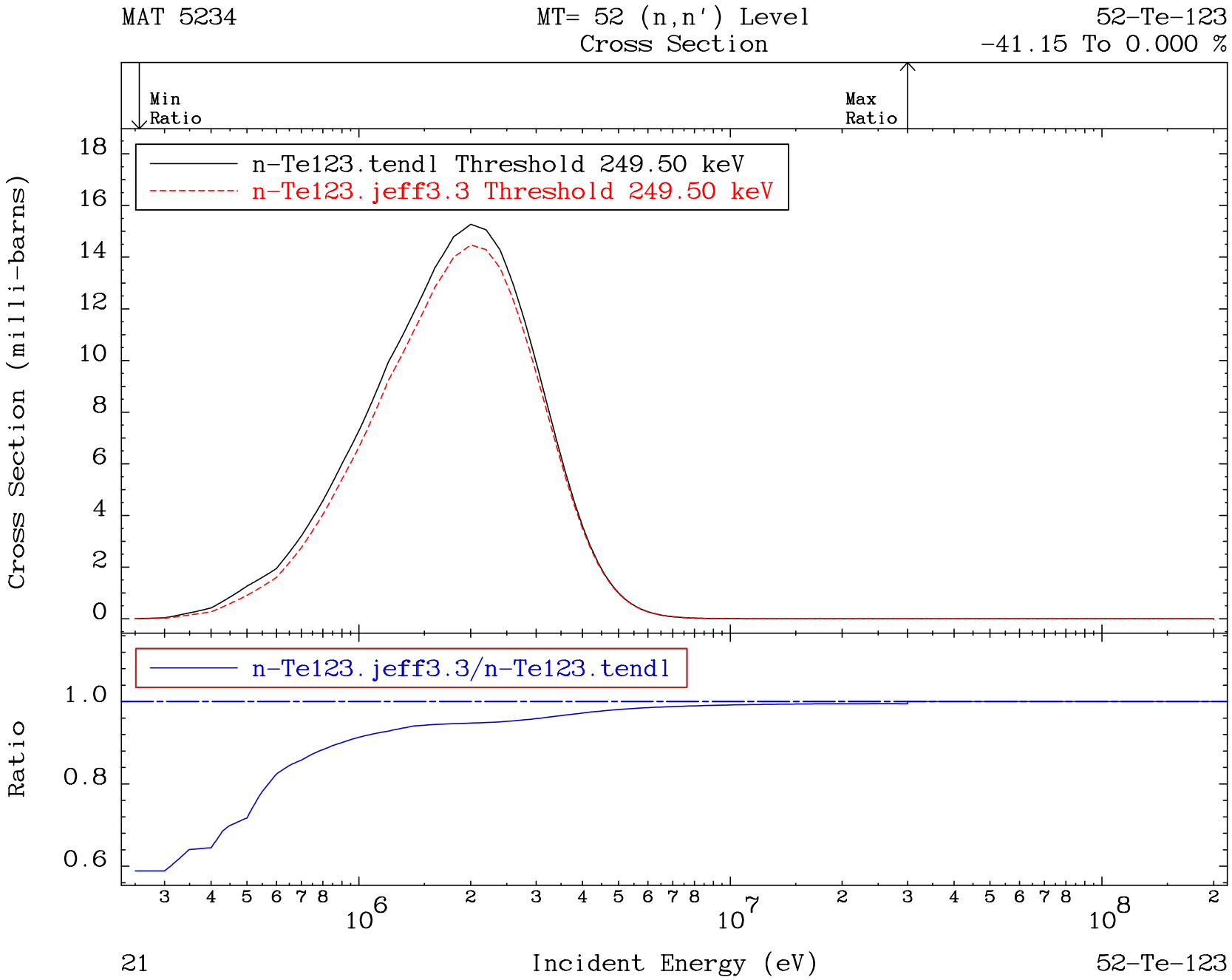

MAT 5234
(n,2n) p
Cross Section
52-Te-123
-45.77 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 15.055 MeV
n-Te123.jeff3.3 Threshold 15.056 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
52-Te-123

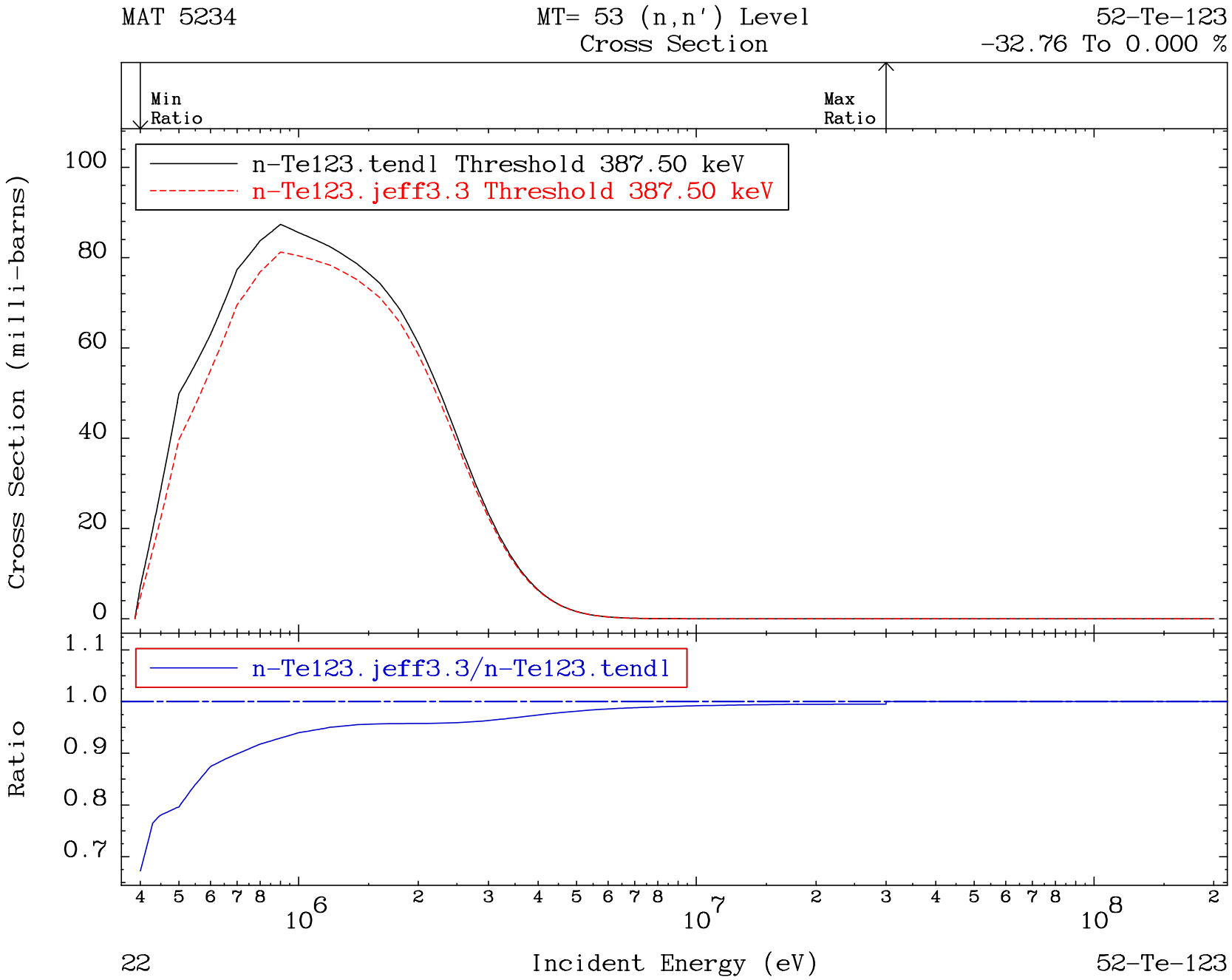

MAT 5234
(n,3n) p
Cross Section
52-Te-123
-32.39 To 0.000 %
Max
Ratio
n-Te123.tendl Threshold 24.385 MeV
n-Te123.jeff3.3 Threshold 24.385 MeV
Cross Section (micro-barns)
120
100
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.1
1.0
0.9
0.8
0.7
40
60
80
100
120
140
160
180
200
17
Incident Energy (MeV)
52-Te-123

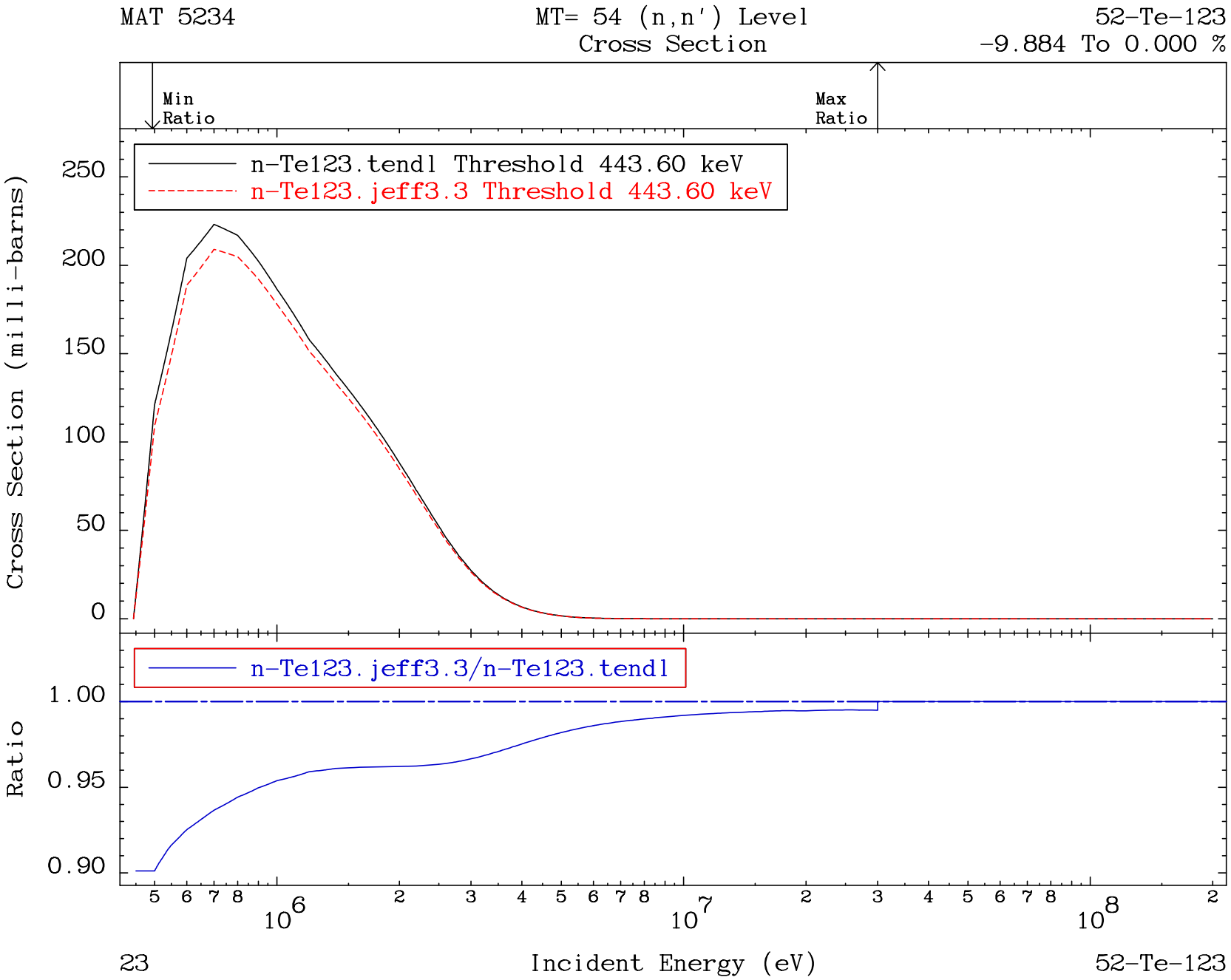

MAT 5234
(n,2n) p
Cross Section
52-Te-123
-14.98 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 14.672 MeV
n-Te123.jeff3.3 Threshold 14.672 MeV
Cross Section (micro-barns)
20
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.95
0.90
0.85
2
3
4
5
6
7
8
9
10^8
2
18
Incident Energy (eV)
52-Te-123

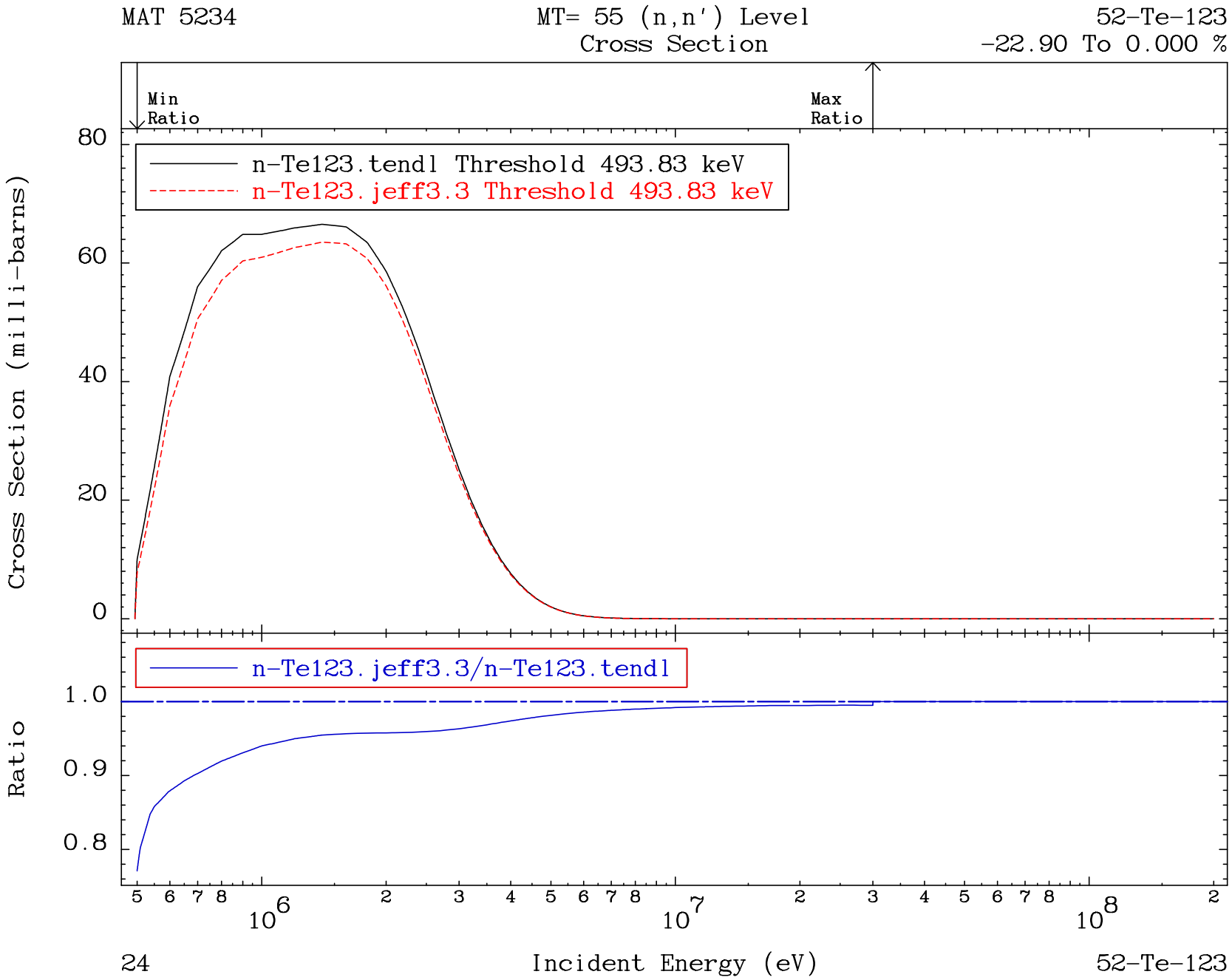

MAT 5234
(n,n') p α
Cross Section
52-Te-123
-29.63 To 9999. %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 11.754 MeV
n-Te123.jeff3.3 Threshold 11.754 MeV
Cross Section (10^{-9} barns)
300
200
100
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^{2}
10^{1}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
19
Incident Energy (eV)
52-Te-123

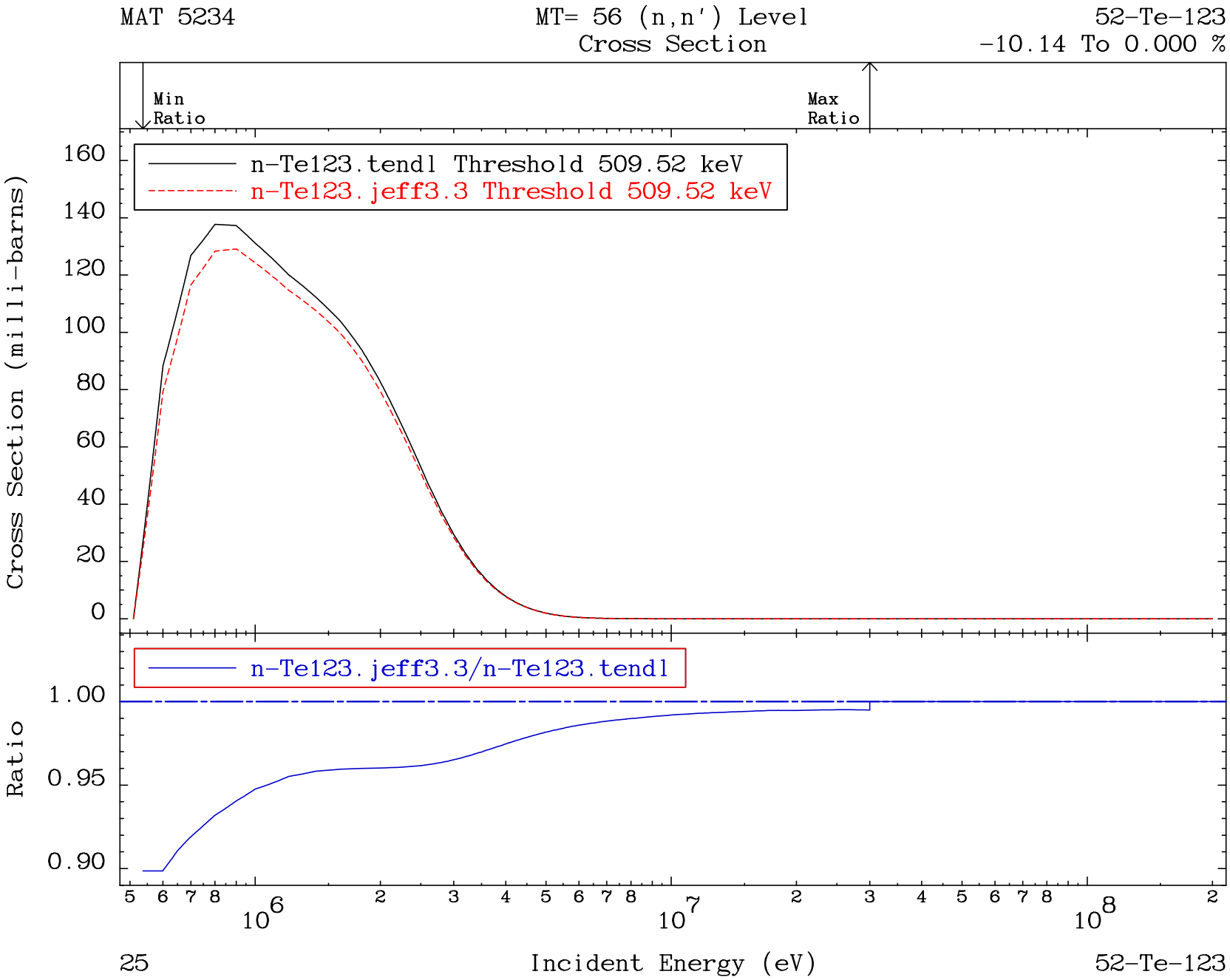

MAT 5234
MT= 51 (n,n') Level
Cross Section
52-Te-123
-13.71 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 160.33 keV
n-Te123.jeff3.3 Threshold 160.33 keV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.95
0.90
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
20
Incident Energy (eV)
52-Te-123

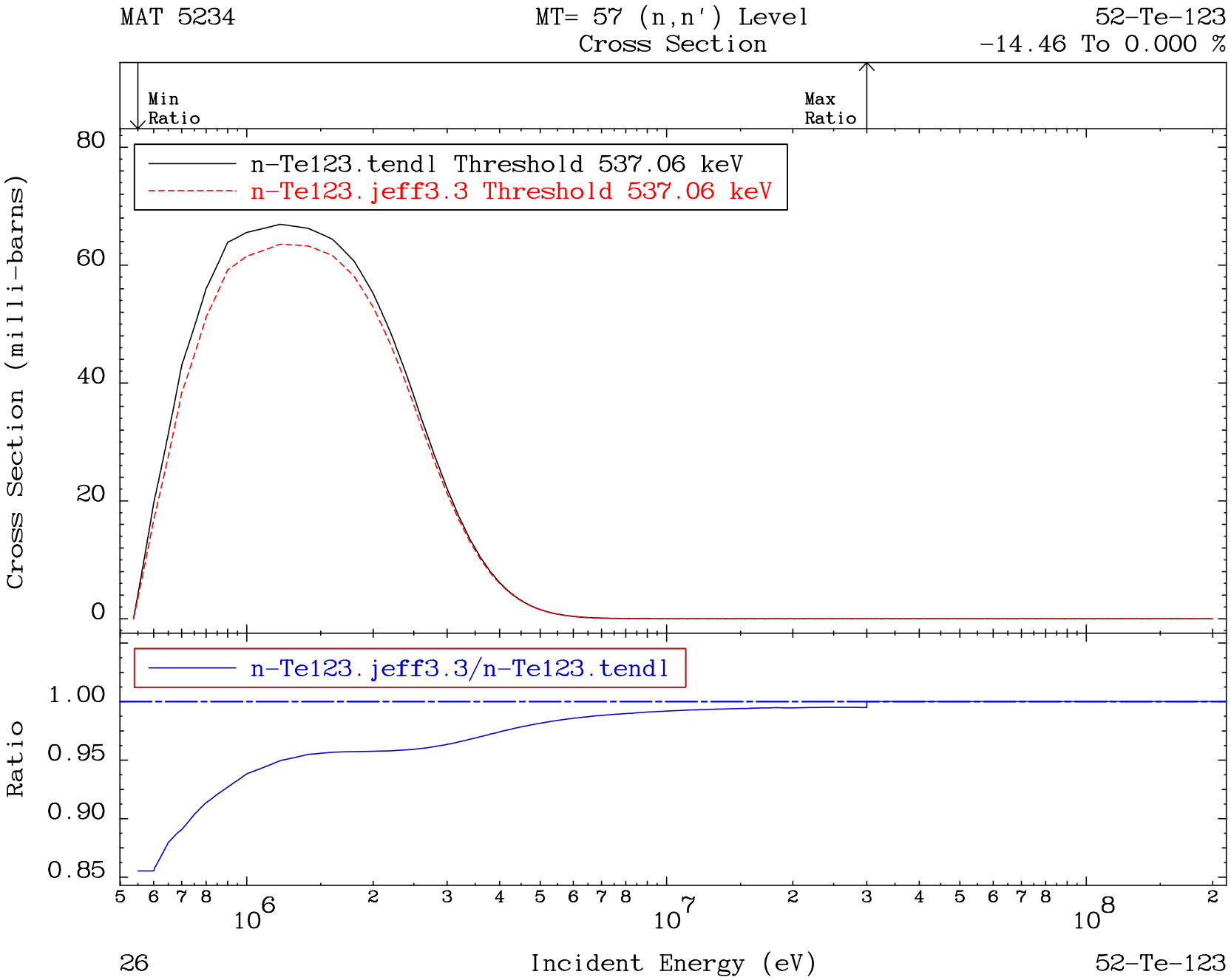

MAT 5234
MT= 52 (n,n') Level
Cross Section
52-Te-123
-41.15 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 249.50 keV
n-Te123.jeff3.3 Threshold 249.50 keV
Cross Section (milli-barns)
18
16
14
12
10
8
6
4
2
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.8
0.6
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
52-Te-123

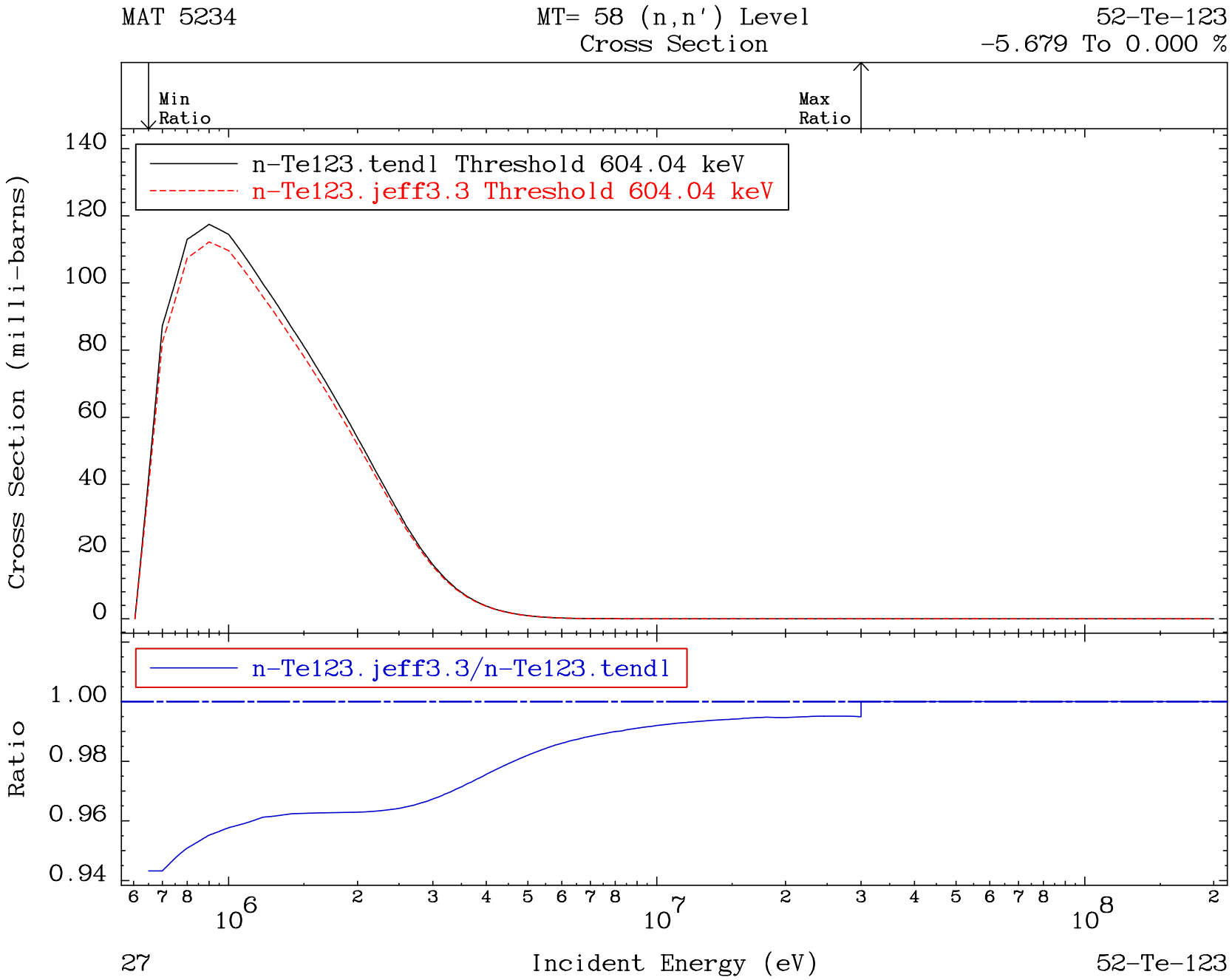

MAT 5234
MT= 53 (n,n') Level
Cross Section
52-Te-123
-32.76 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 387.50 keV
n-Te123.jeff3.3 Threshold 387.50 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.1
1.0
0.9
0.8
0.7
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
52-Te-123

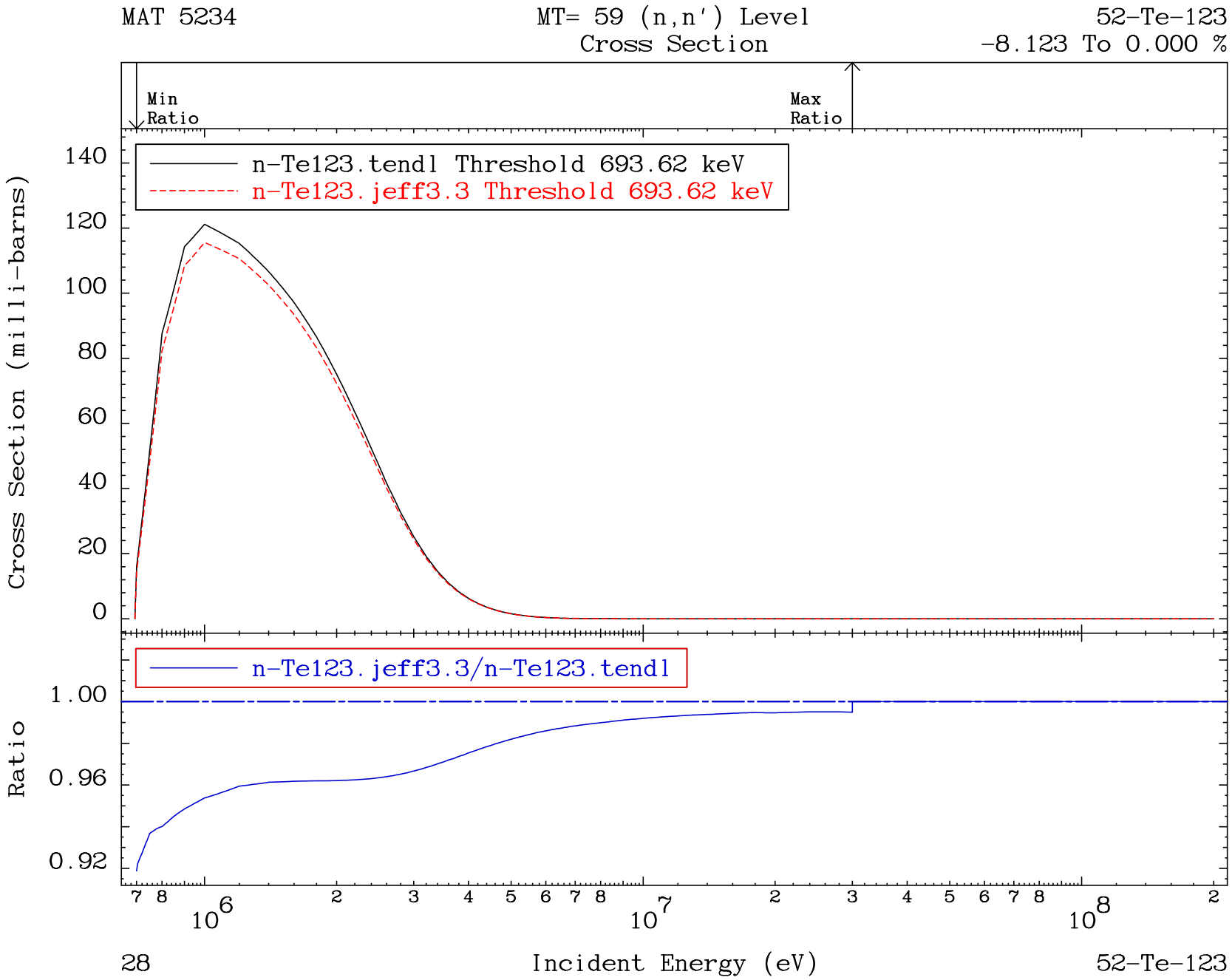

MAT 5234
MT= 54 (n,n') Level
Cross Section
52-Te-123
-9.884 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 443.60 keV
n-Te123.jeff3.3 Threshold 443.60 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.95
0.90
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
52-Te-123

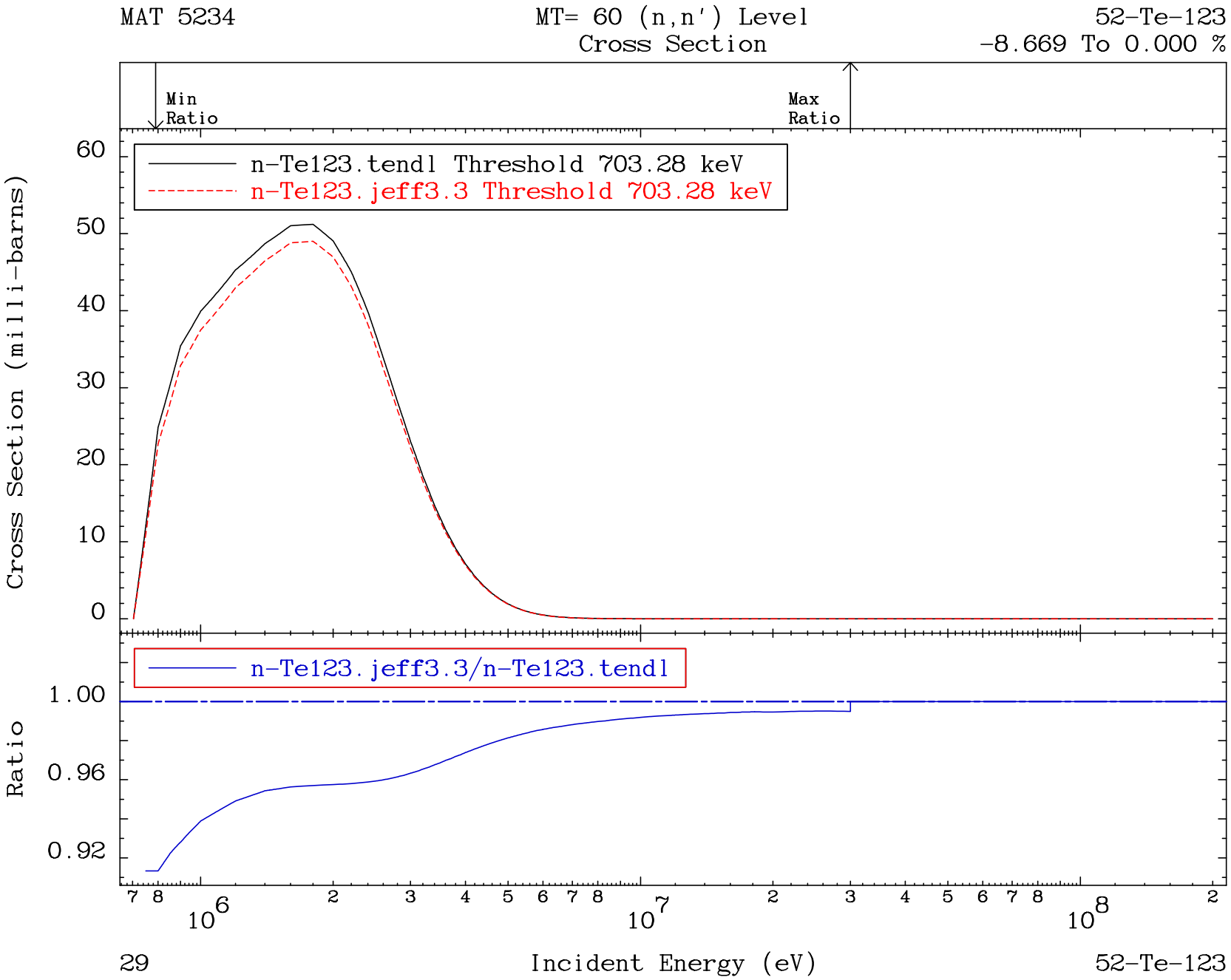

MAT 5234
MT= 55 (n,n') Level
Cross Section
52-Te-123
-22.90 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 493.83 keV
n-Te123.jeff3.3 Threshold 493.83 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.9
0.8
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
52-Te-123

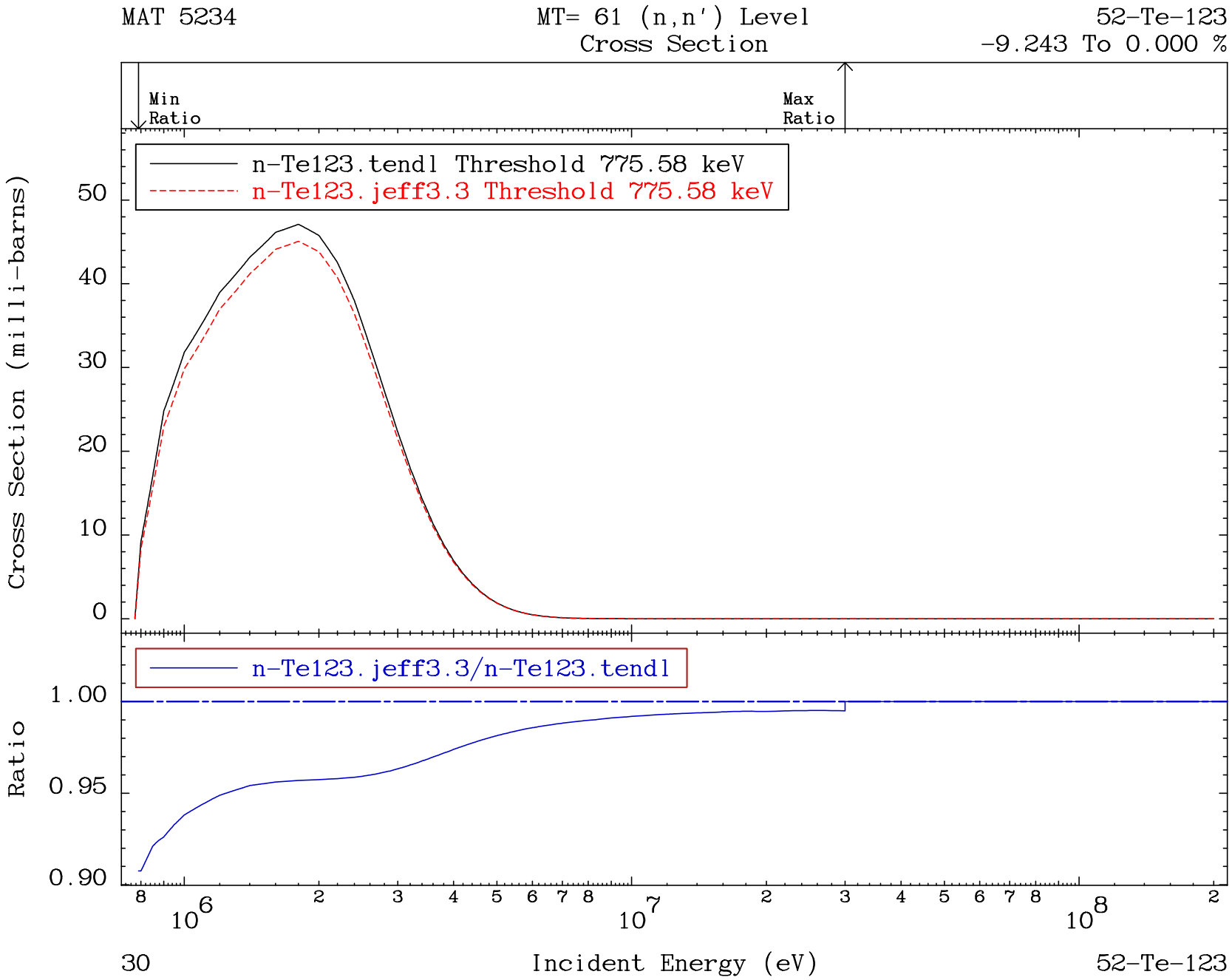

MAT 5234
MT= 56 (n,n') Level
Cross Section
52-Te-123
-10.14 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 509.52 keV
n-Te123.jeff3.3 Threshold 509.52 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.95
0.90
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
52-Te-123

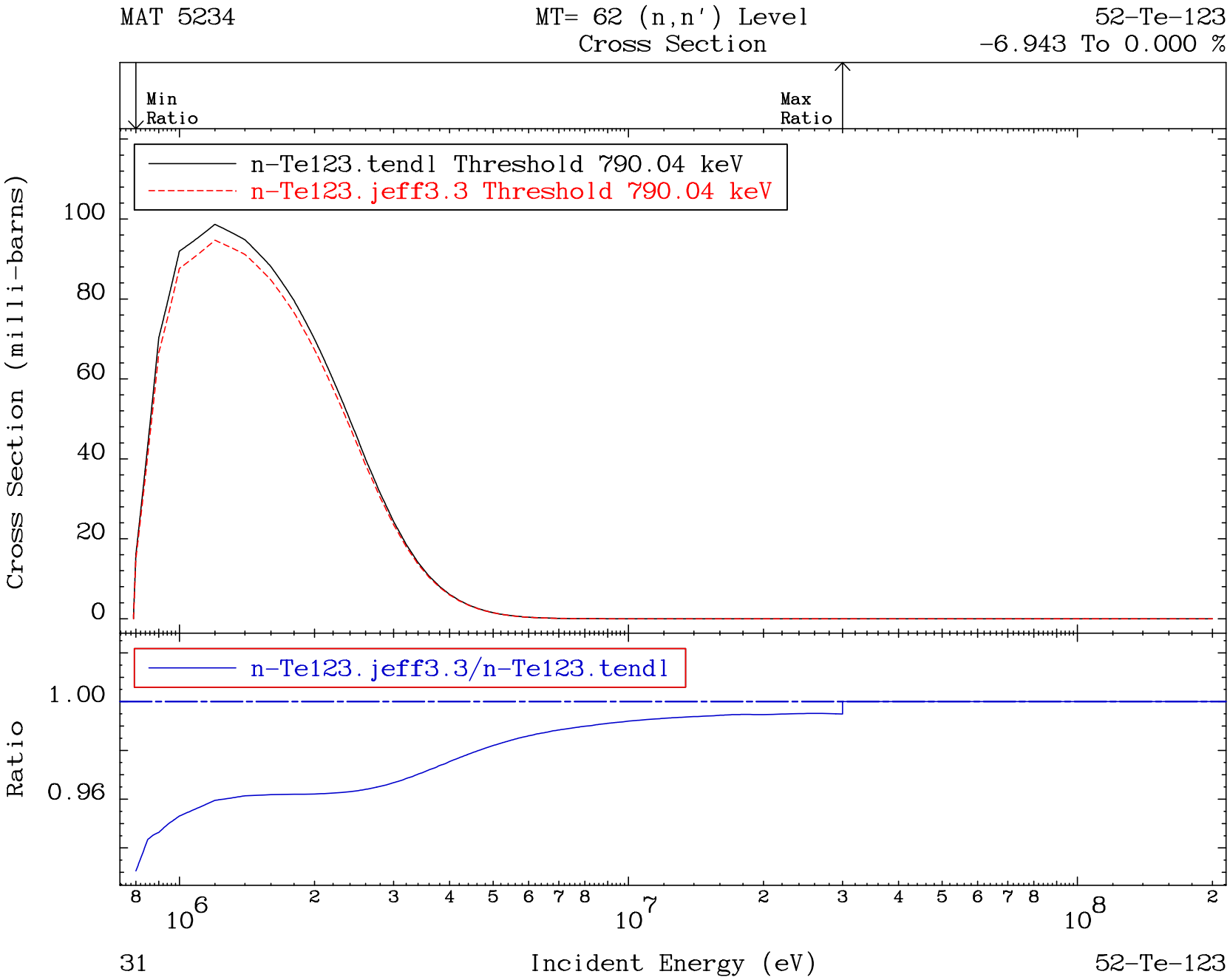

MAT 5234
MT= 57 (n,n') Level
Cross Section
52-Te-123
-14.46 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 537.06 keV
n-Te123.jeff3.3 Threshold 537.06 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.95
0.90
0.85
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
26
Incident Energy (eV)
52-Te-123

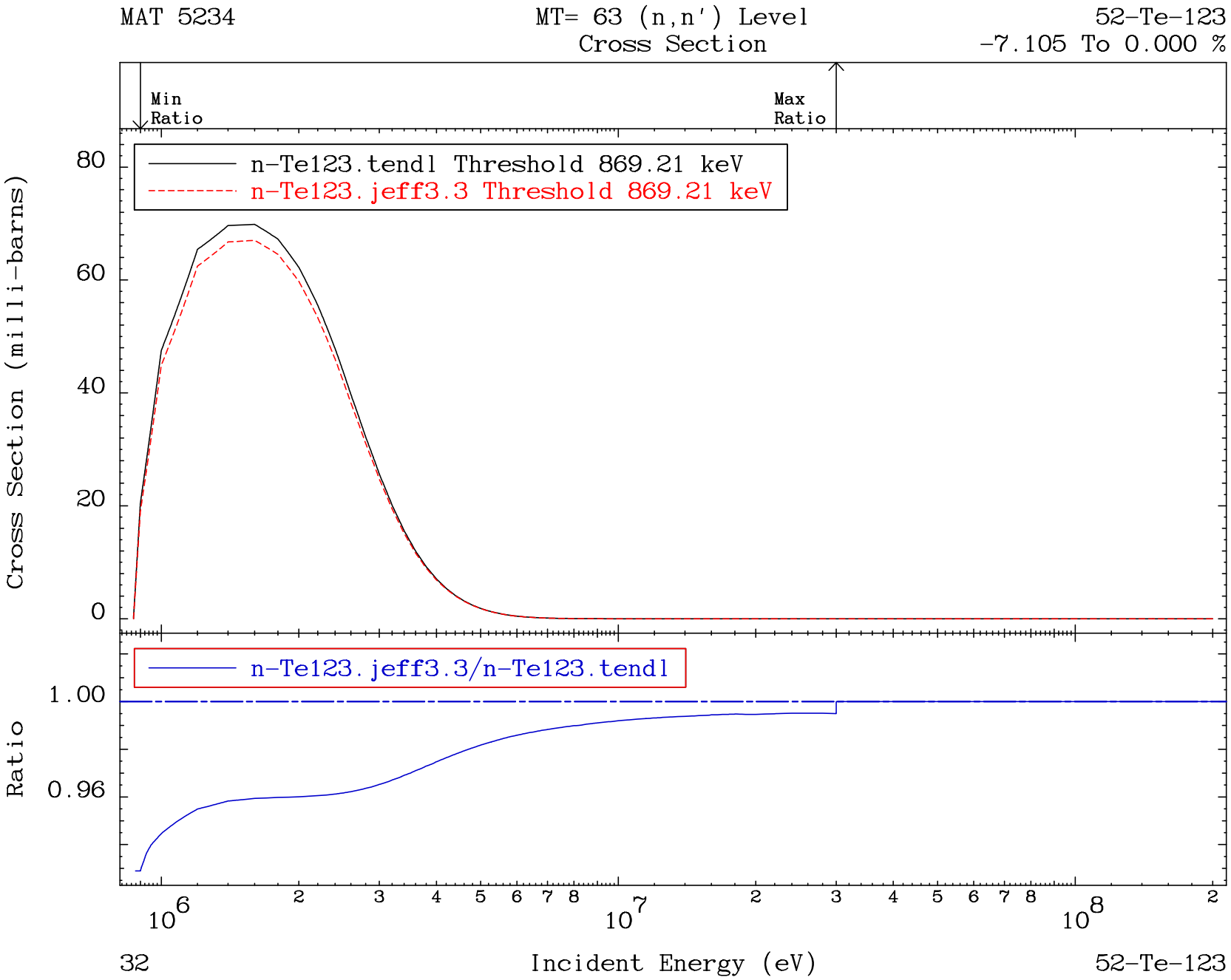

MAT 5234
MT= 58 (n,n') Level
Cross Section
52-Te-123
-5.679 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 604.04 keV
n-Te123.jeff3.3 Threshold 604.04 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
0.94
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
52-Te-123

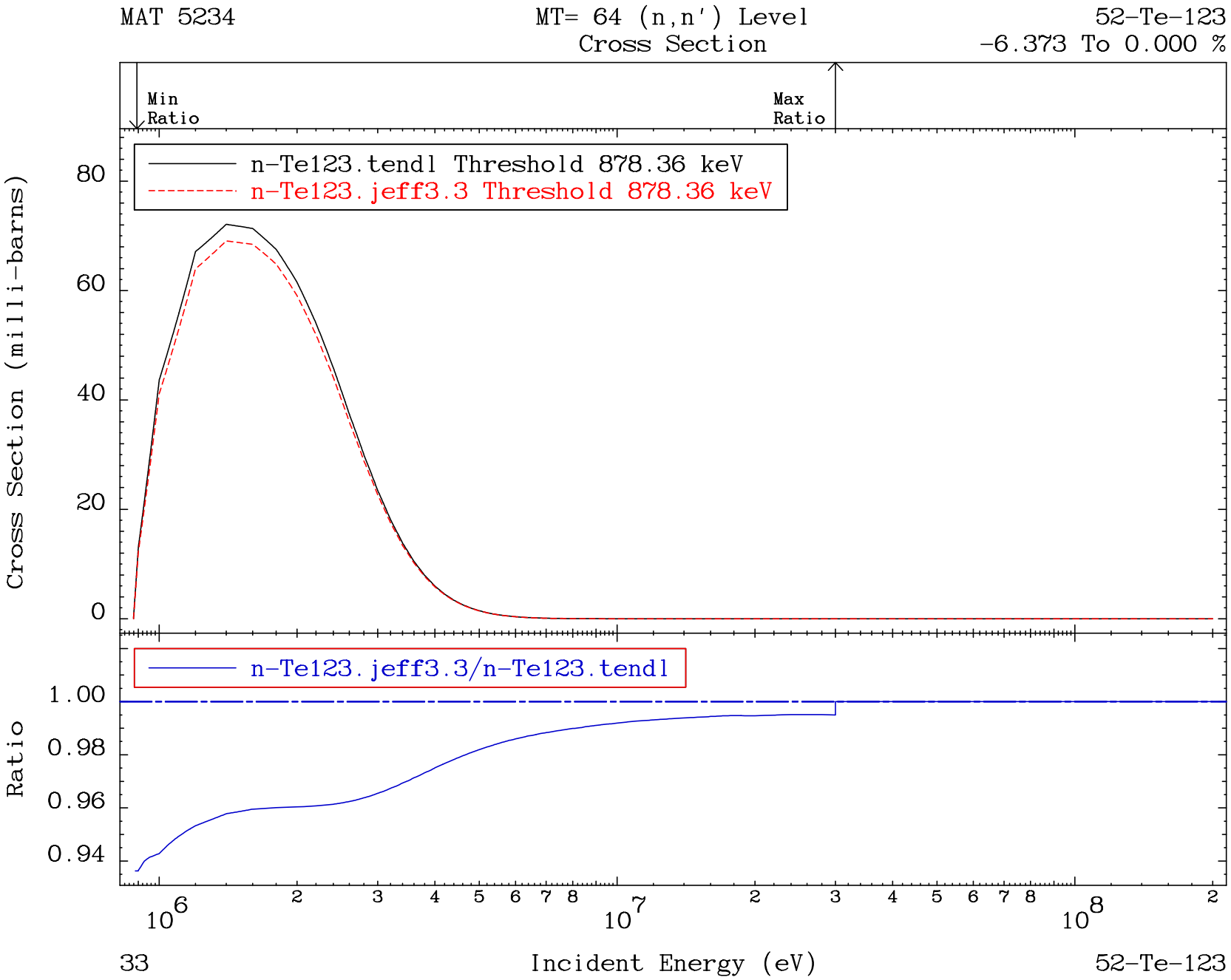

MAT 5234
MT= 59 (n,n') Level
Cross Section
52-Te-123
-8.123 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 693.62 keV
n-Te123.jeff3.3 Threshold 693.62 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.96
0.92
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
52-Te-123

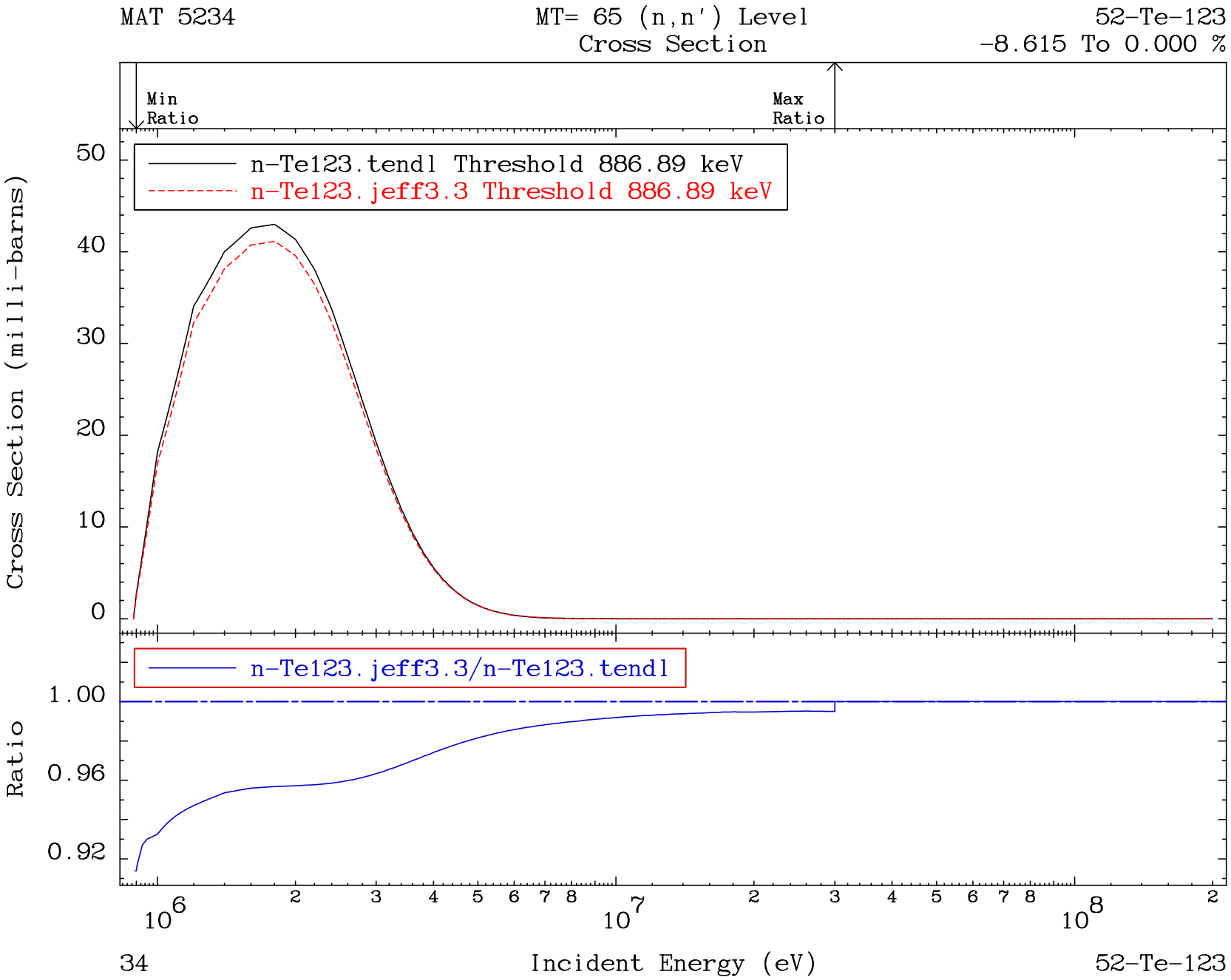

MAT 5234
MT= 60 (n,n') Level
Cross Section
52-Te-123
-8.669 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 703.28 keV
n-Te123.jeff3.3 Threshold 703.28 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.96
0.92
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
52-Te-123

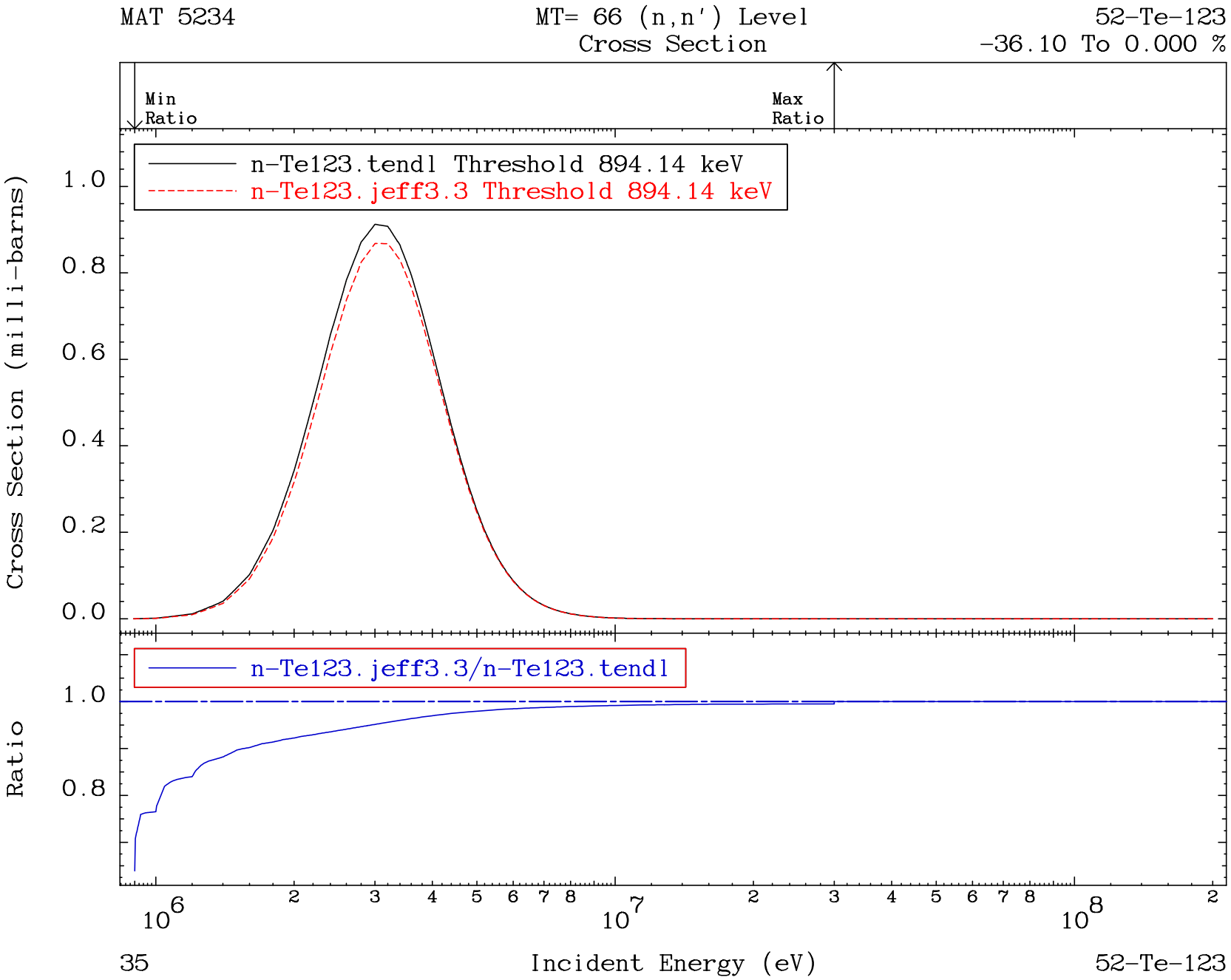

MAT 5234
MT= 61 (n,n') Level
Cross Section
52-Te-123
-9.243 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 775.58 keV
n-Te123.jeff3.3 Threshold 775.58 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.95
0.90
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
30
Incident Energy (eV)
52-Te-123

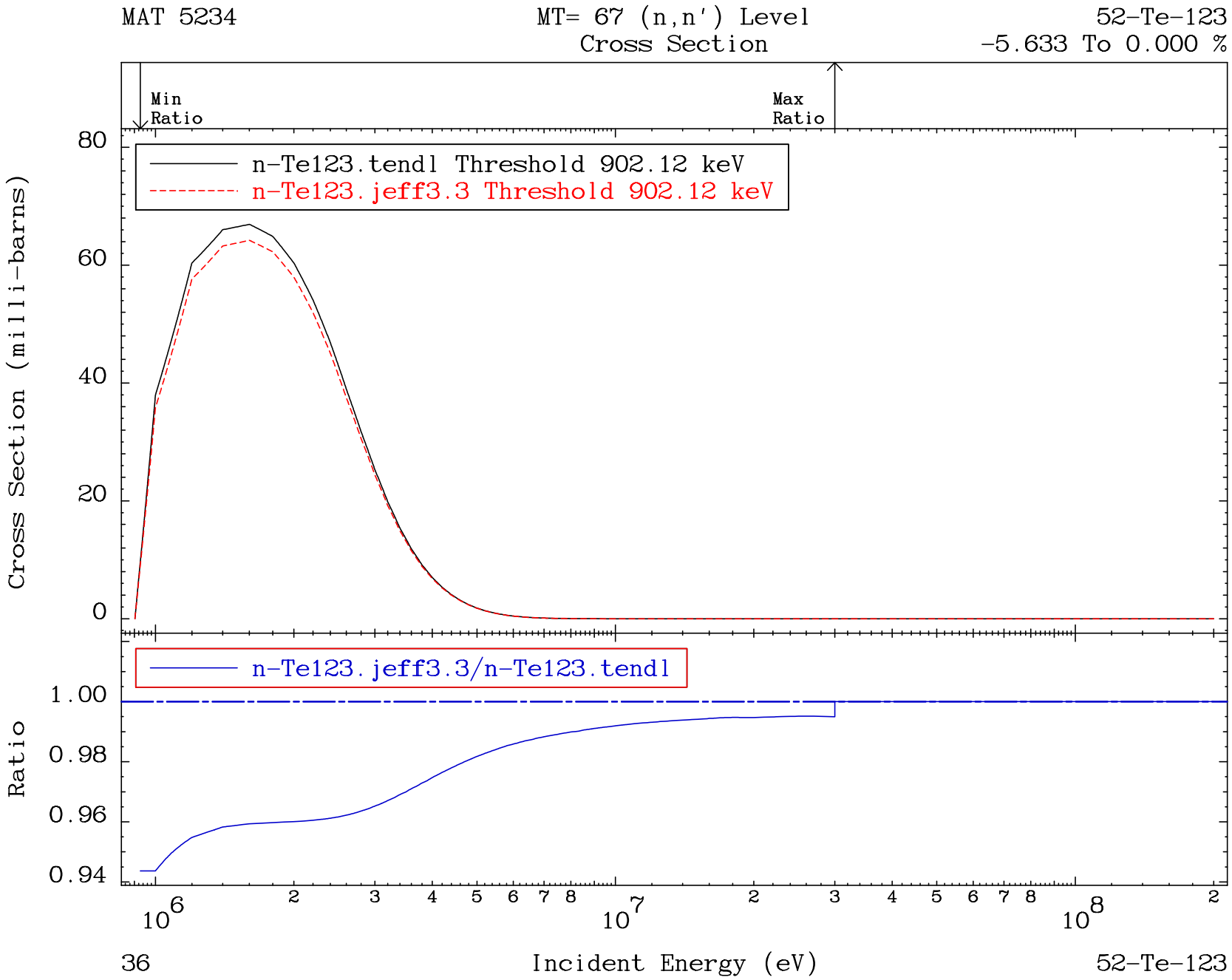

MAT 5234
MT= 62 (n,n') Level
Cross Section
52-Te-123
-6.943 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 790.04 keV
n-Te123.jeff3.3 Threshold 790.04 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.96
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
31
Incident Energy (eV)
52-Te-123

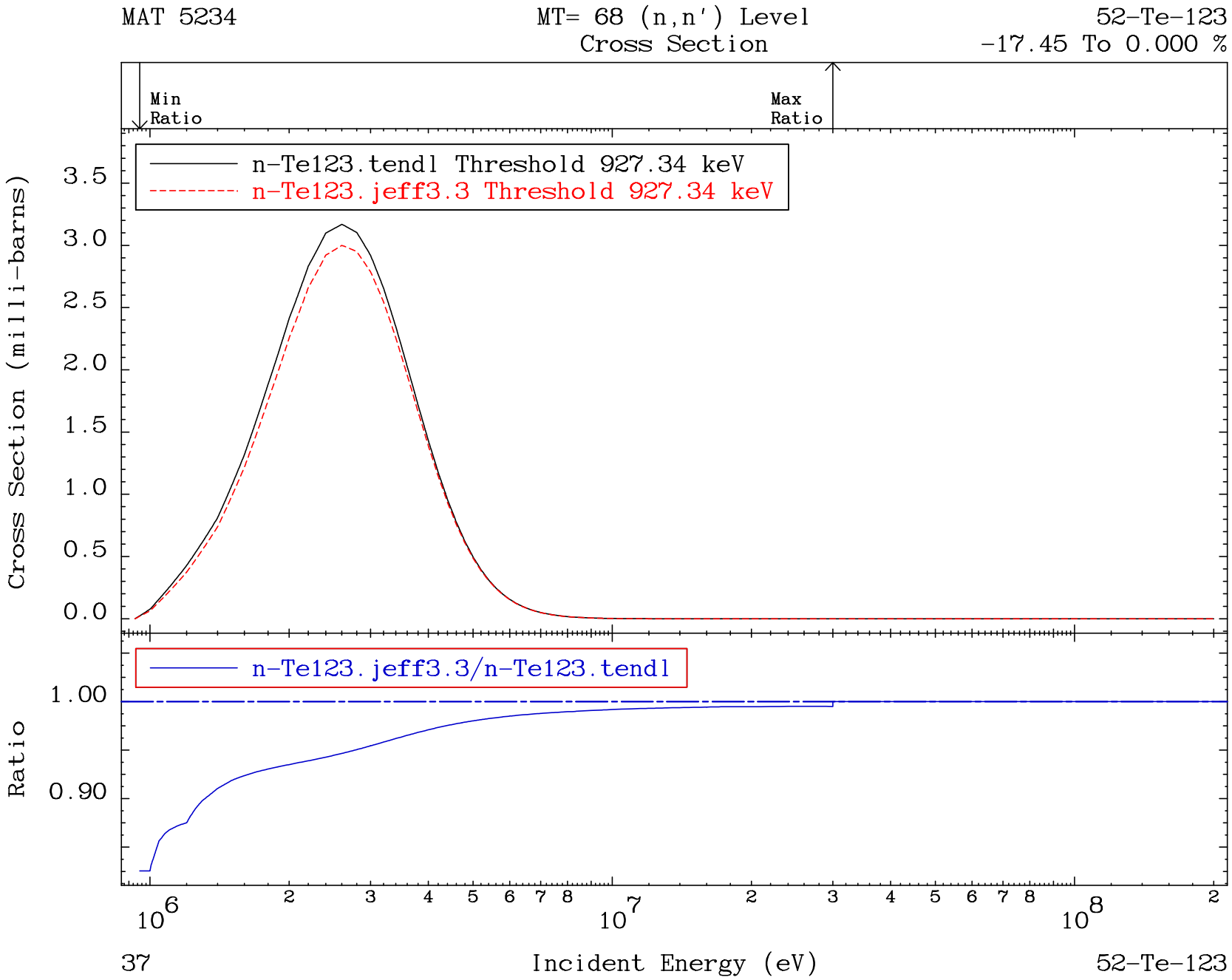

MAT 5234
MT= 63 (n,n') Level
Cross Section
52-Te-123
-7.105 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 869.21 keV
n-Te123.jeff3.3 Threshold 869.21 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.96
10^6
10^7
10^8
32
Incident Energy (eV)
52-Te-123

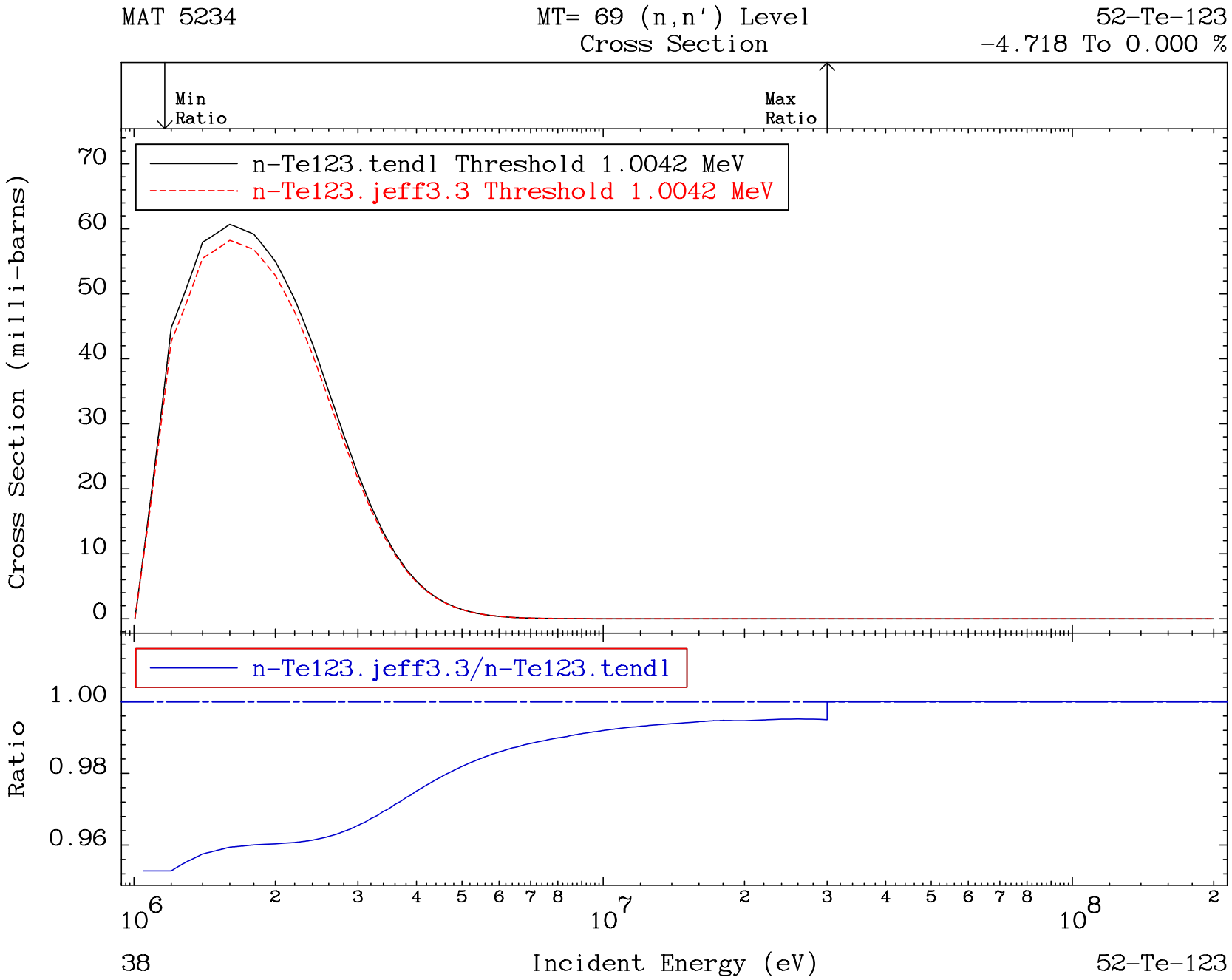

MAT 5234
MT= 64 (n,n') Level
Cross Section
52-Te-123
-6.373 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 878.36 keV
n-Te123.jeff3.3 Threshold 878.36 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
0.94
10^6
10^7
10^8
33
Incident Energy (eV)
52-Te-123

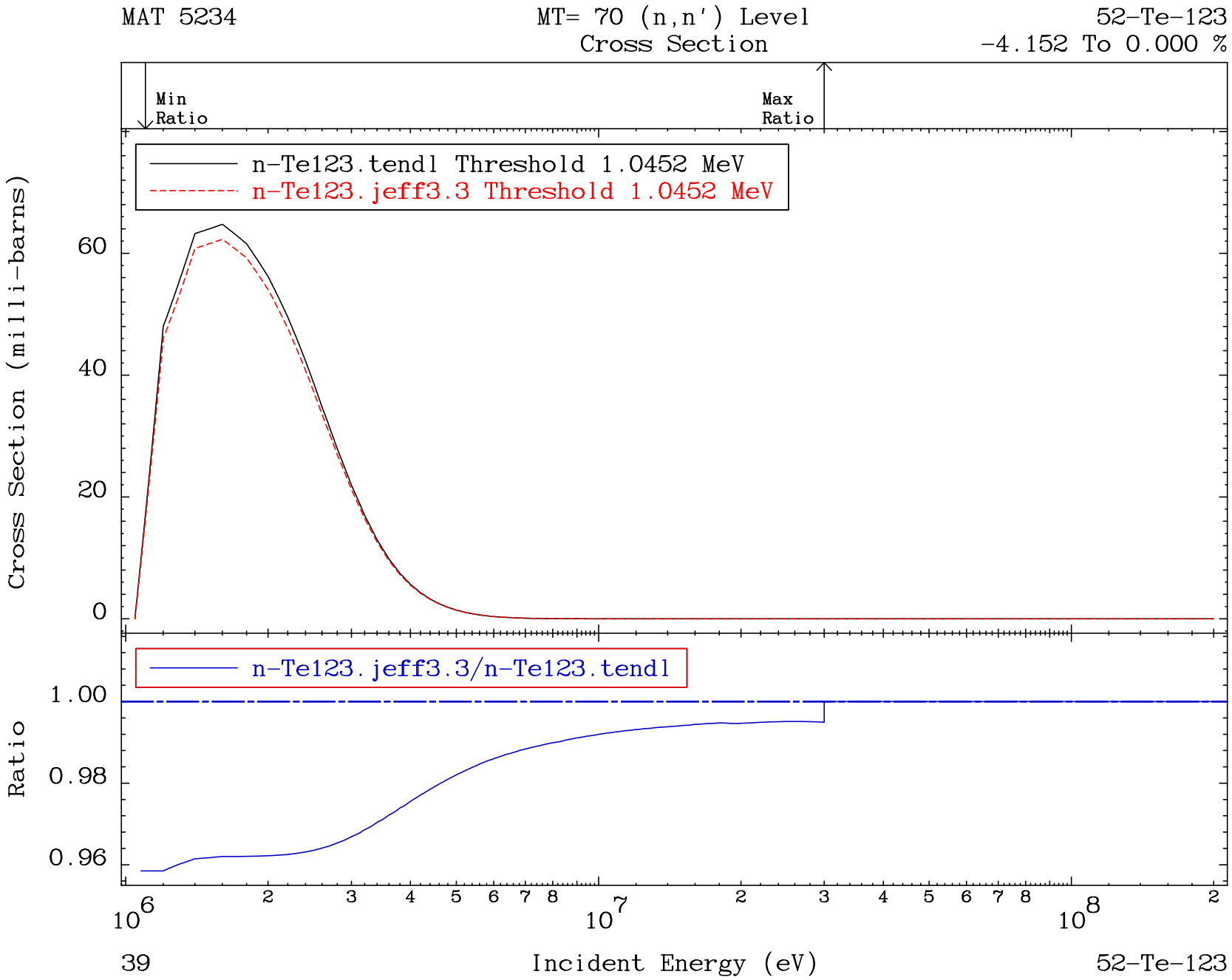

MAT 5234
MT= 65 (n,n') Level
Cross Section
52-Te-123
-8.615 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 886.89 keV
n-Te123.jeff3.3 Threshold 886.89 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.96
0.92
10^6
10^7
10^8
34
Incident Energy (eV)
52-Te-123

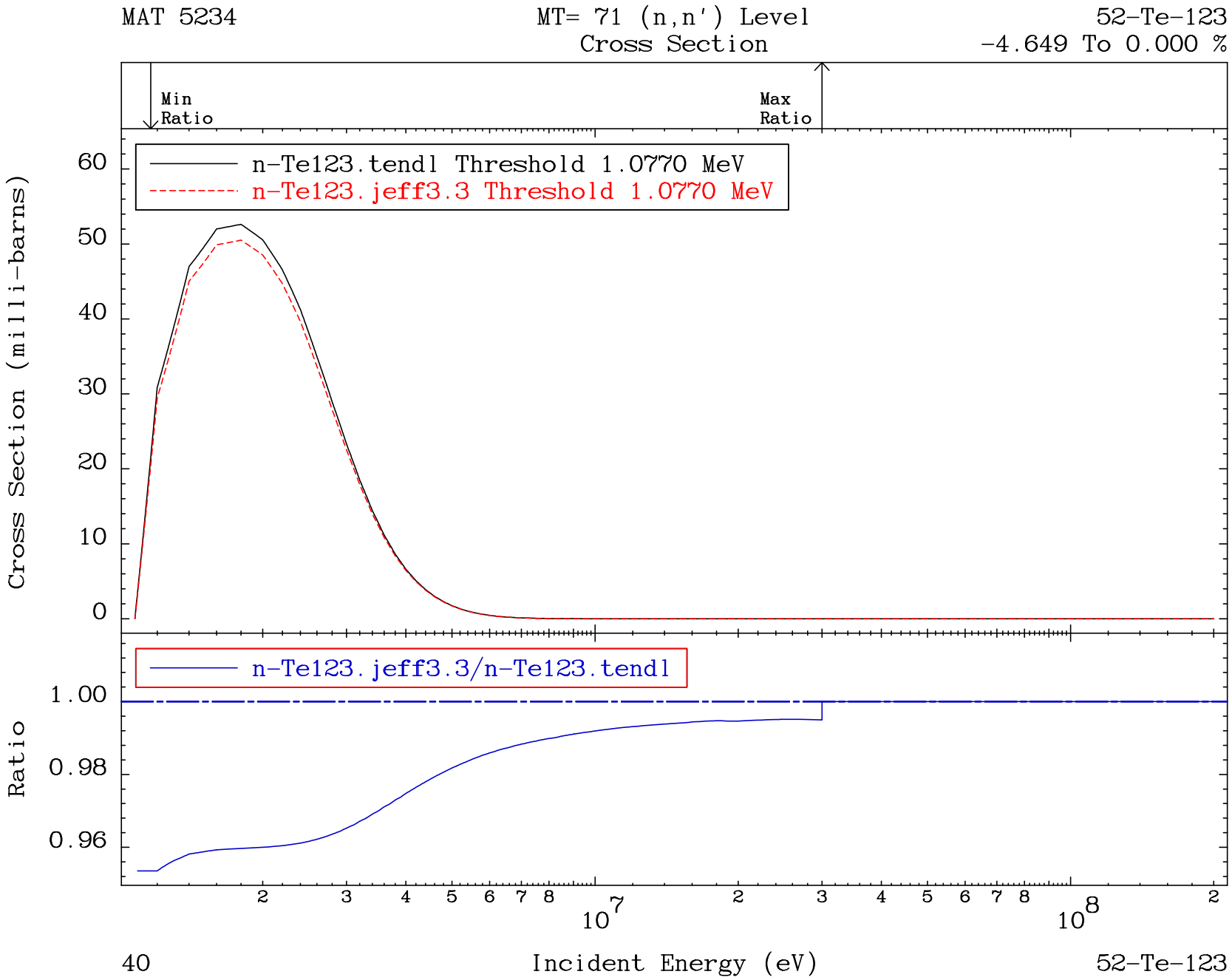

MAT 5234
MT= 66 (n,n') Level
Cross Section
52-Te-123
-36.10 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 894.14 keV
n-Te123.jeff3.3 Threshold 894.14 keV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
52-Te-123

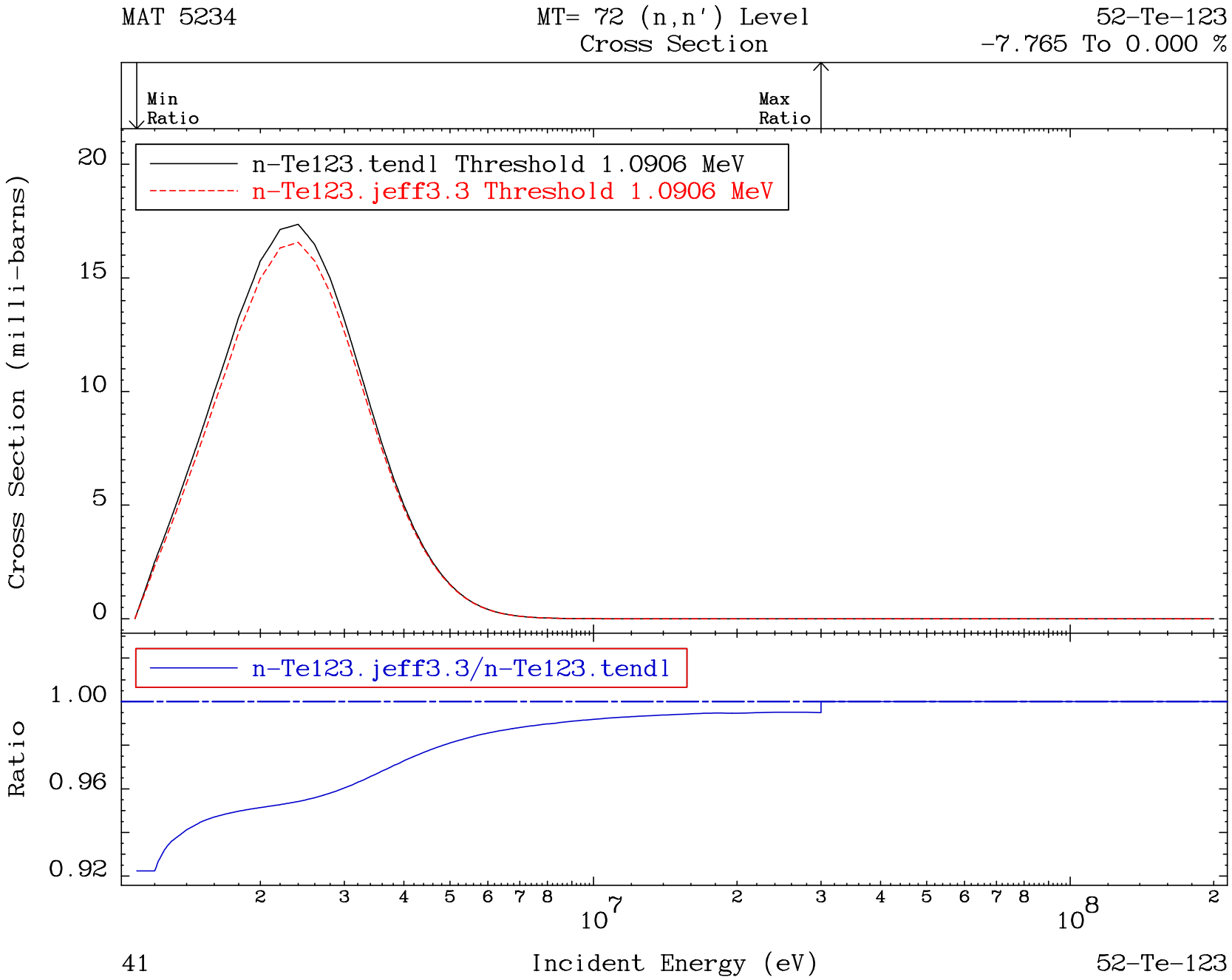

MAT 5234
MT= 67 (n,n') Level
Cross Section
52-Te-123
-5.633 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 902.12 keV
n-Te123.jeff3.3 Threshold 902.12 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
0.94
10^6
10^7
10^8
36
Incident Energy (eV)
52-Te-123

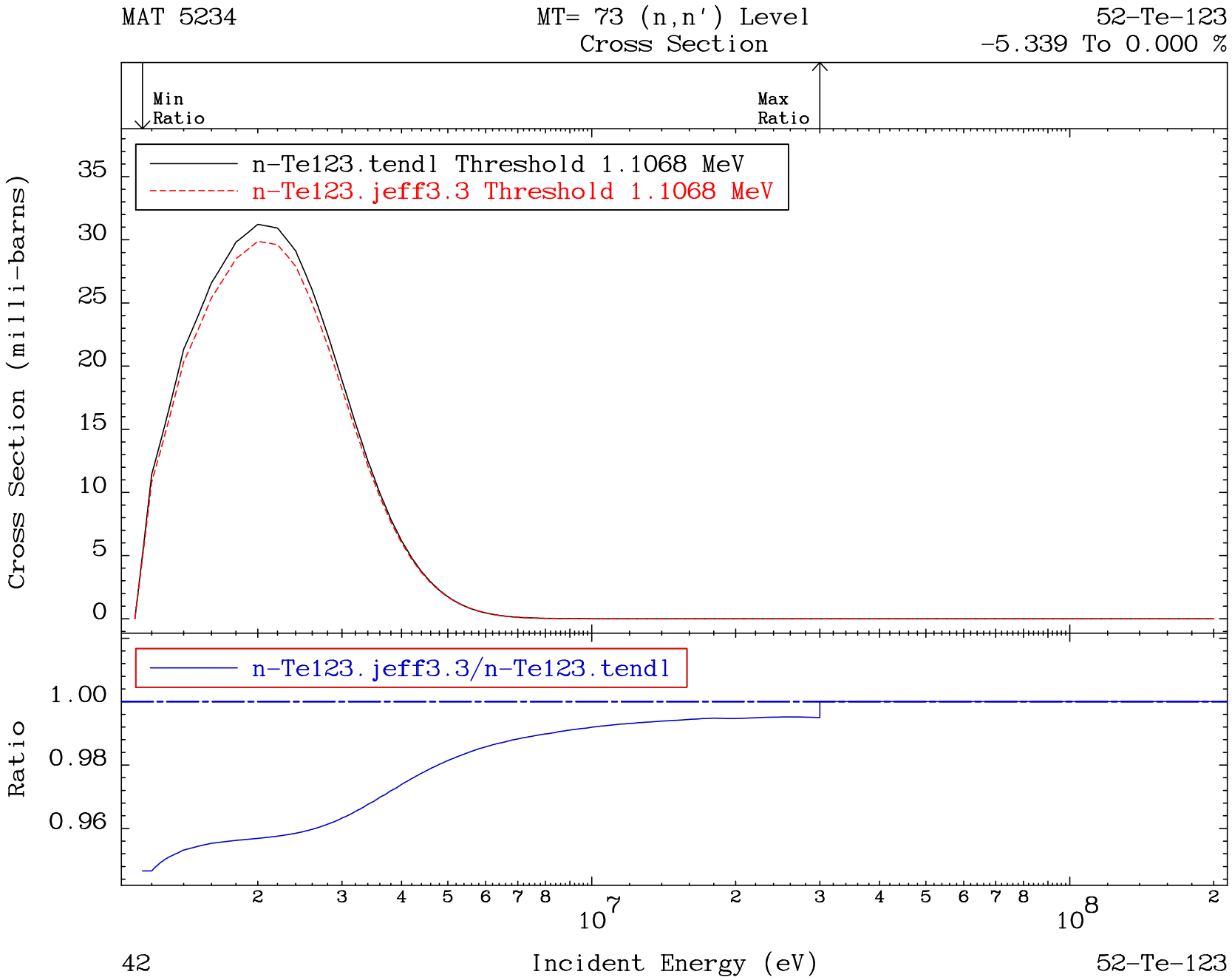

MAT 5234
MT= 68 (n,n') Level
Cross Section
52-Te-123
-17.45 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 927.34 keV
n-Te123.jeff3.3 Threshold 927.34 keV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.90
10^6
10^7
10^8
37
Incident Energy (eV)
52-Te-123

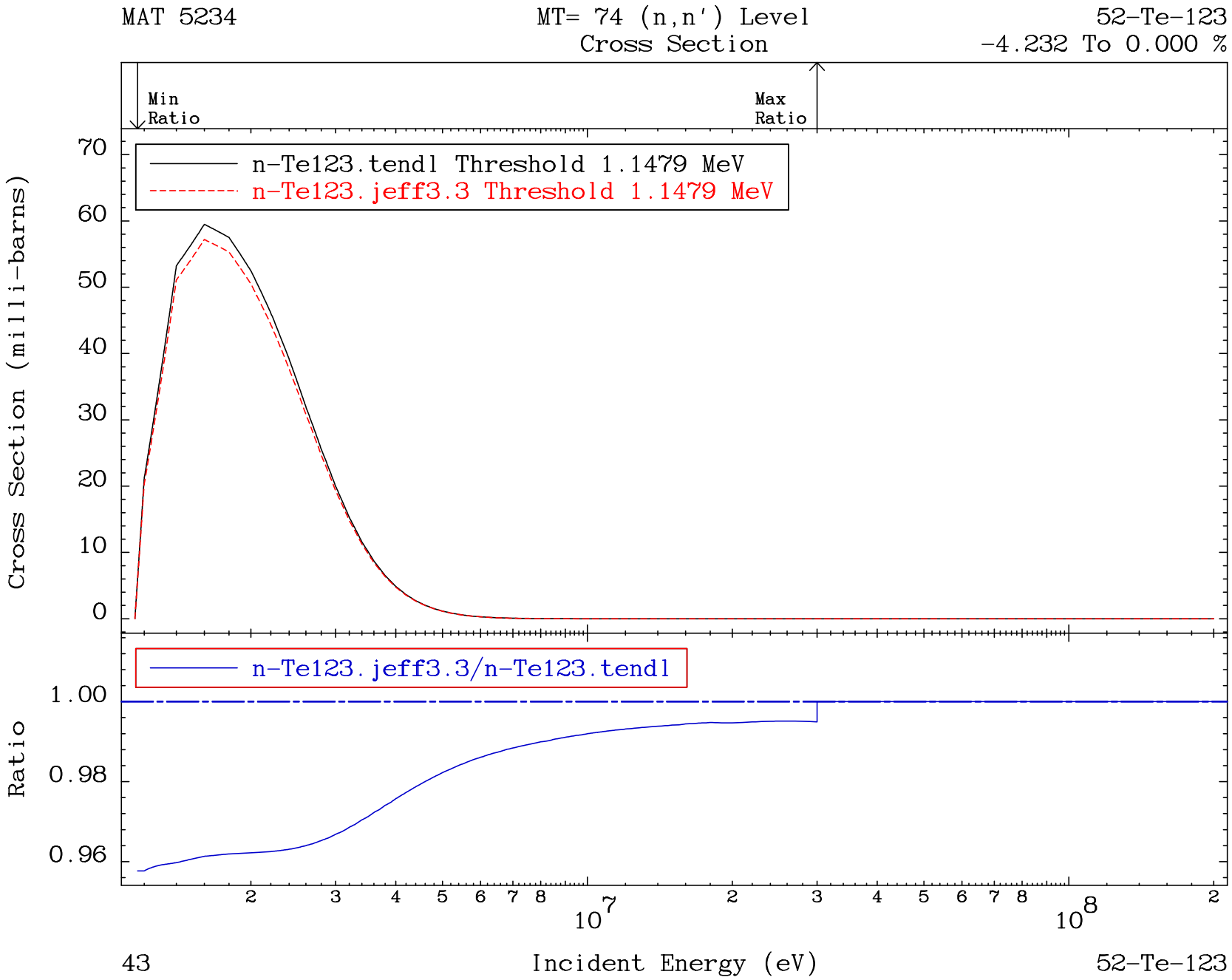

MAT 5234
MT= 69 (n,n') Level
Cross Section
52-Te-123
-4.718 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 1.0042 MeV
n-Te123.jeff3.3 Threshold 1.0042 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
10^6
10^7
10^8
38
Incident Energy (eV)
52-Te-123

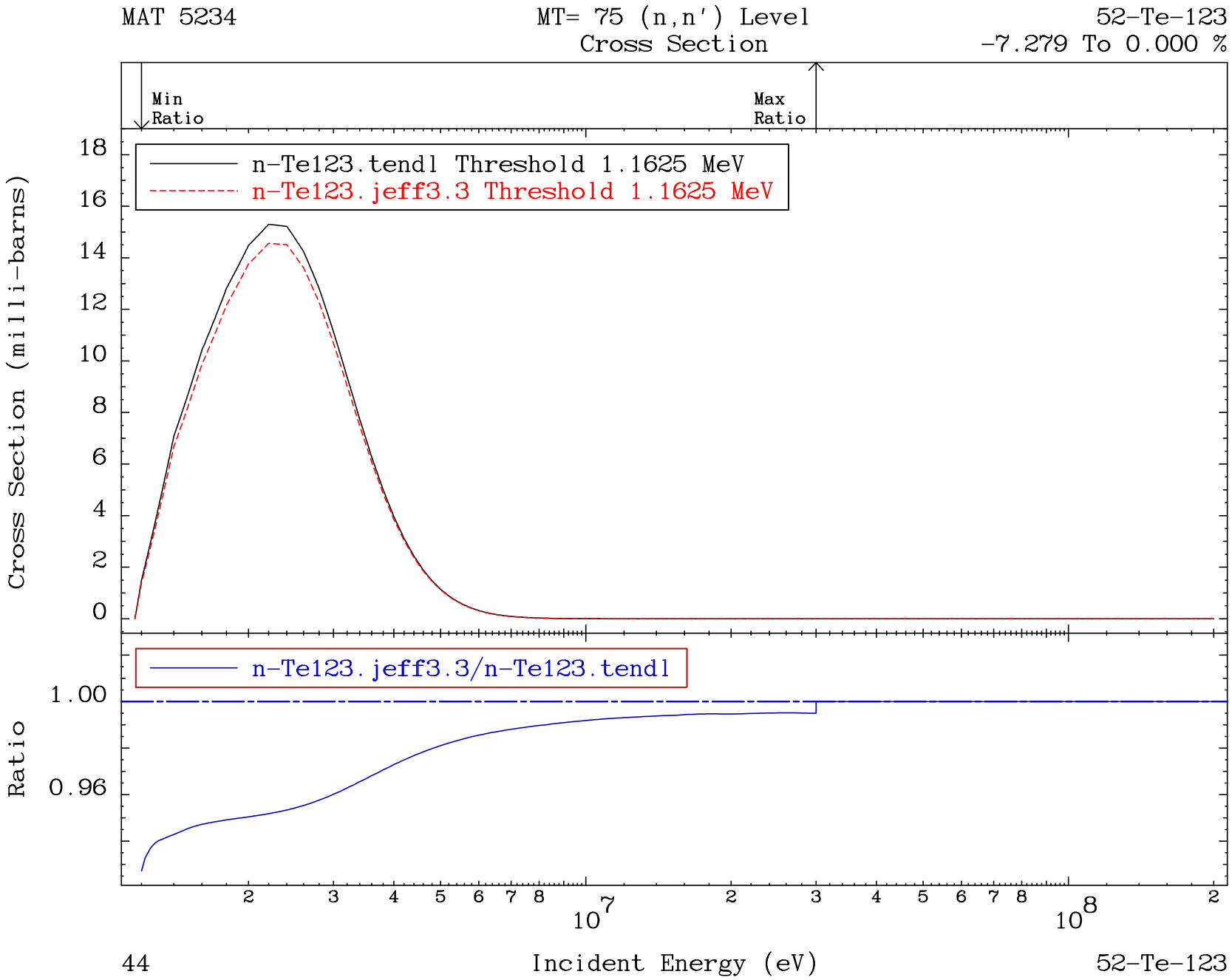

MAT 5234
MT= 70 (n,n') Level
Cross Section
52-Te-123
-4.152 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 1.0452 MeV
n-Te123.jeff3.3 Threshold 1.0452 MeV
Cross Section (milli-barns)
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
39
Incident Energy (eV)
52-Te-123

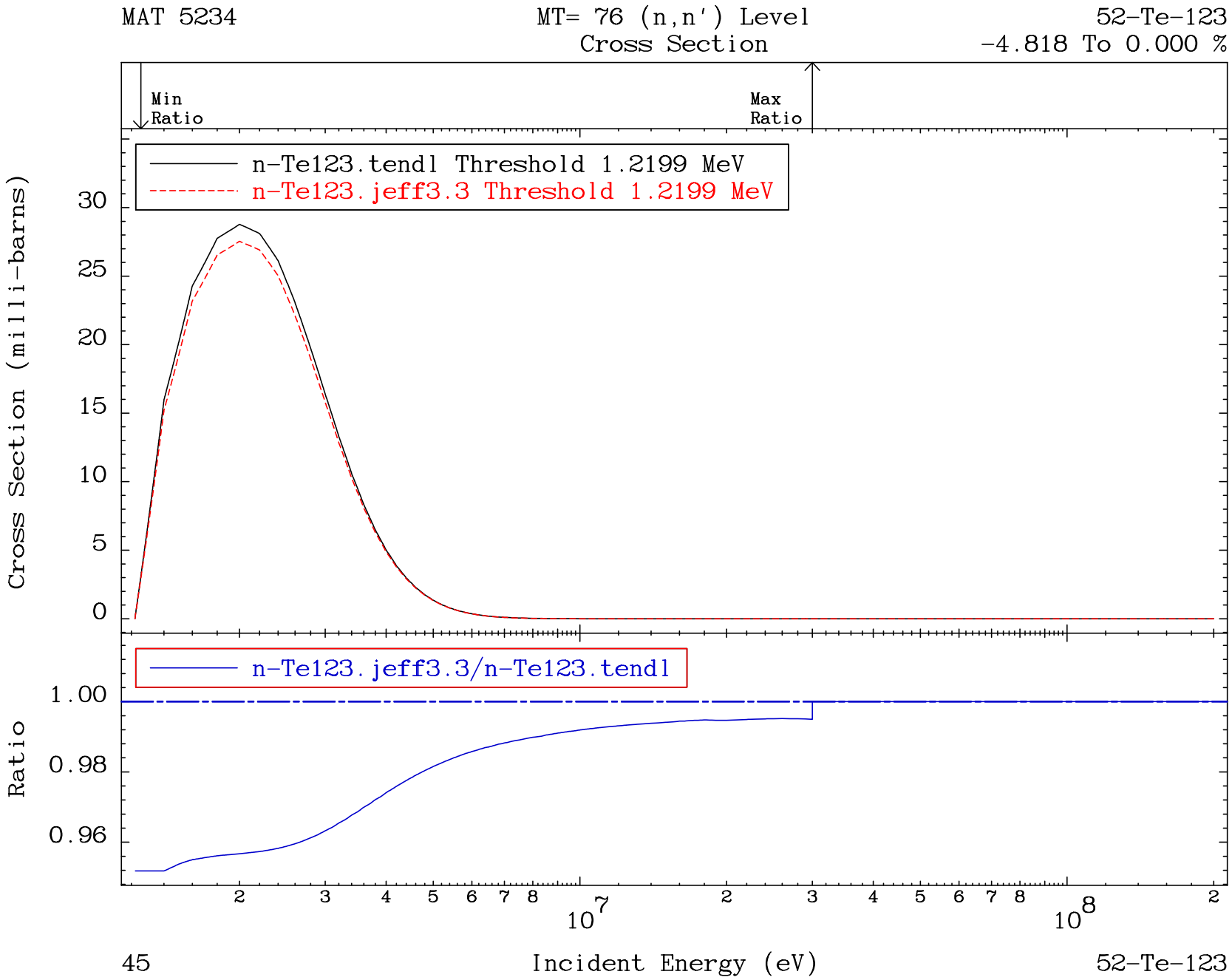

MAT 5234
MT= 71 (n,n') Level
Cross Section
52-Te-123
-4.649 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 1.0770 MeV
n-Te123.jeff3.3 Threshold 1.0770 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
40
Incident Energy (eV)
52-Te-123

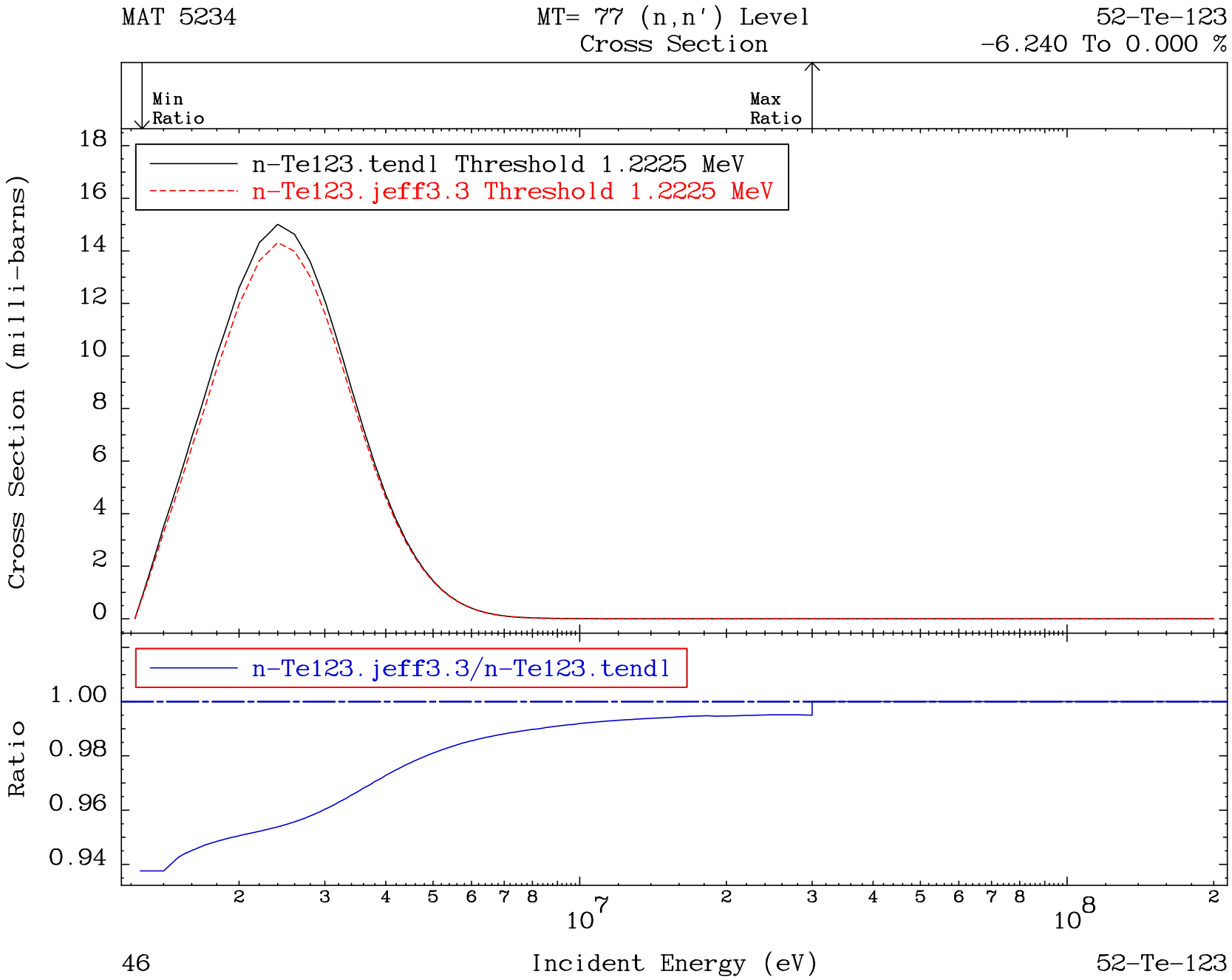

MAT 5234
MT= 72 (n,n') Level
Cross Section
52-Te-123
-7.765 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 1.0906 MeV
n-Te123.jeff3.3 Threshold 1.0906 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.96
0.92
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
52-Te-123

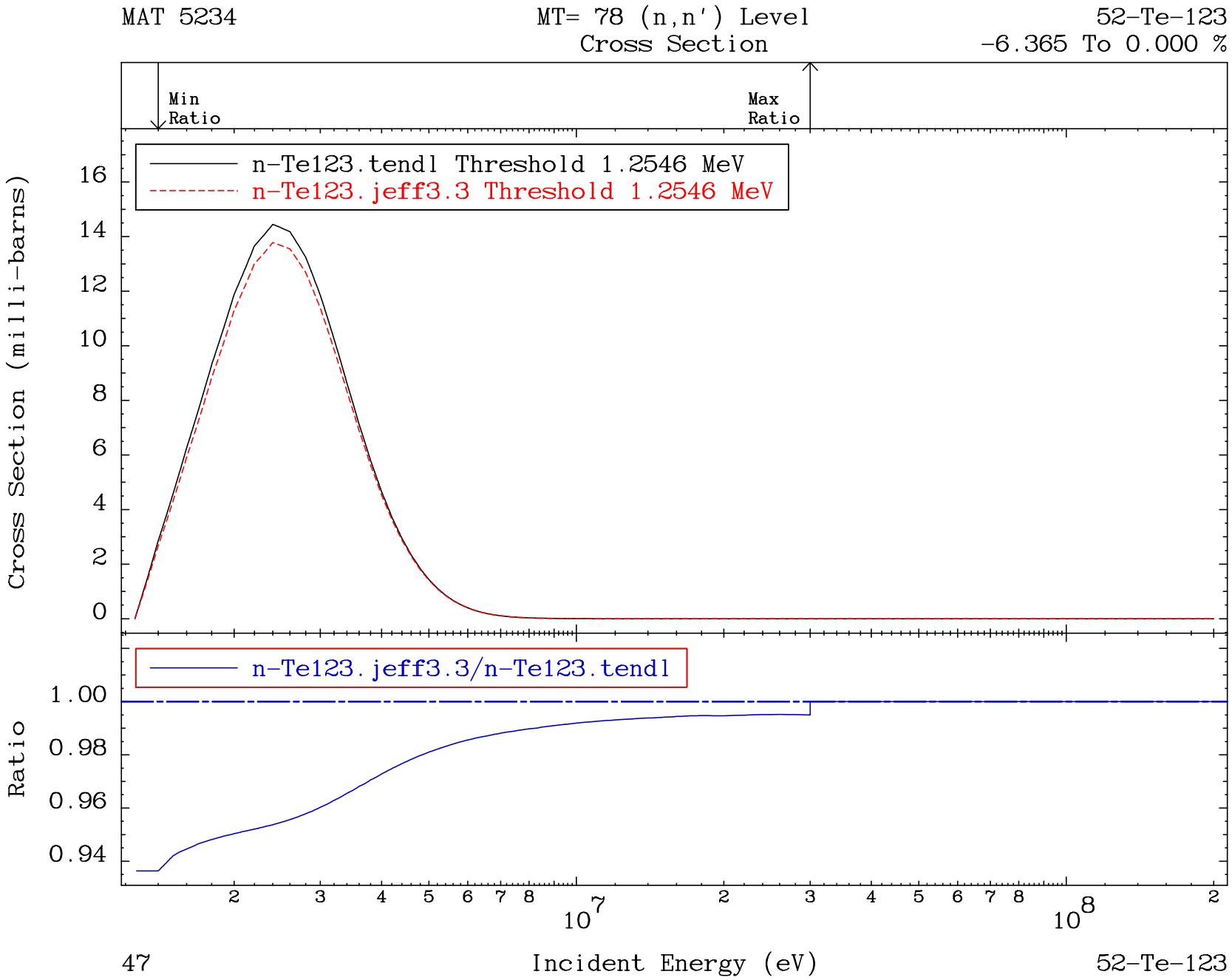

MAT 5234
MT= 73 (n,n') Level
Cross Section
52-Te-123
-5.339 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 1.1068 MeV
n-Te123.jeff3.3 Threshold 1.1068 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
42
Incident Energy (eV)
52-Te-123

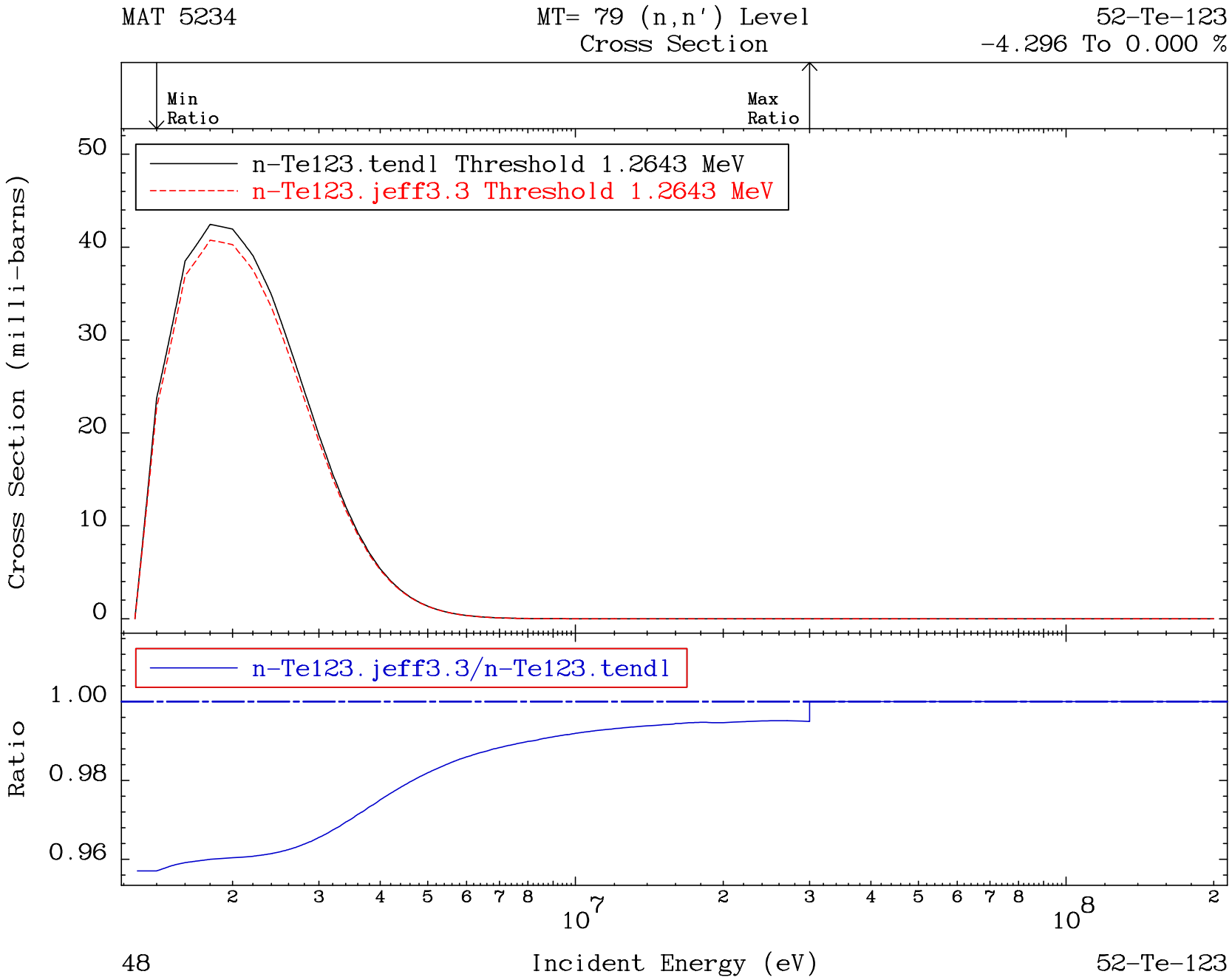

MAT 5234
MT= 74 (n,n') Level
Cross Section
52-Te-123
-4.232 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 1.1479 MeV
n-Te123.jeff3.3 Threshold 1.1479 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
43
Incident Energy (eV)
52-Te-123

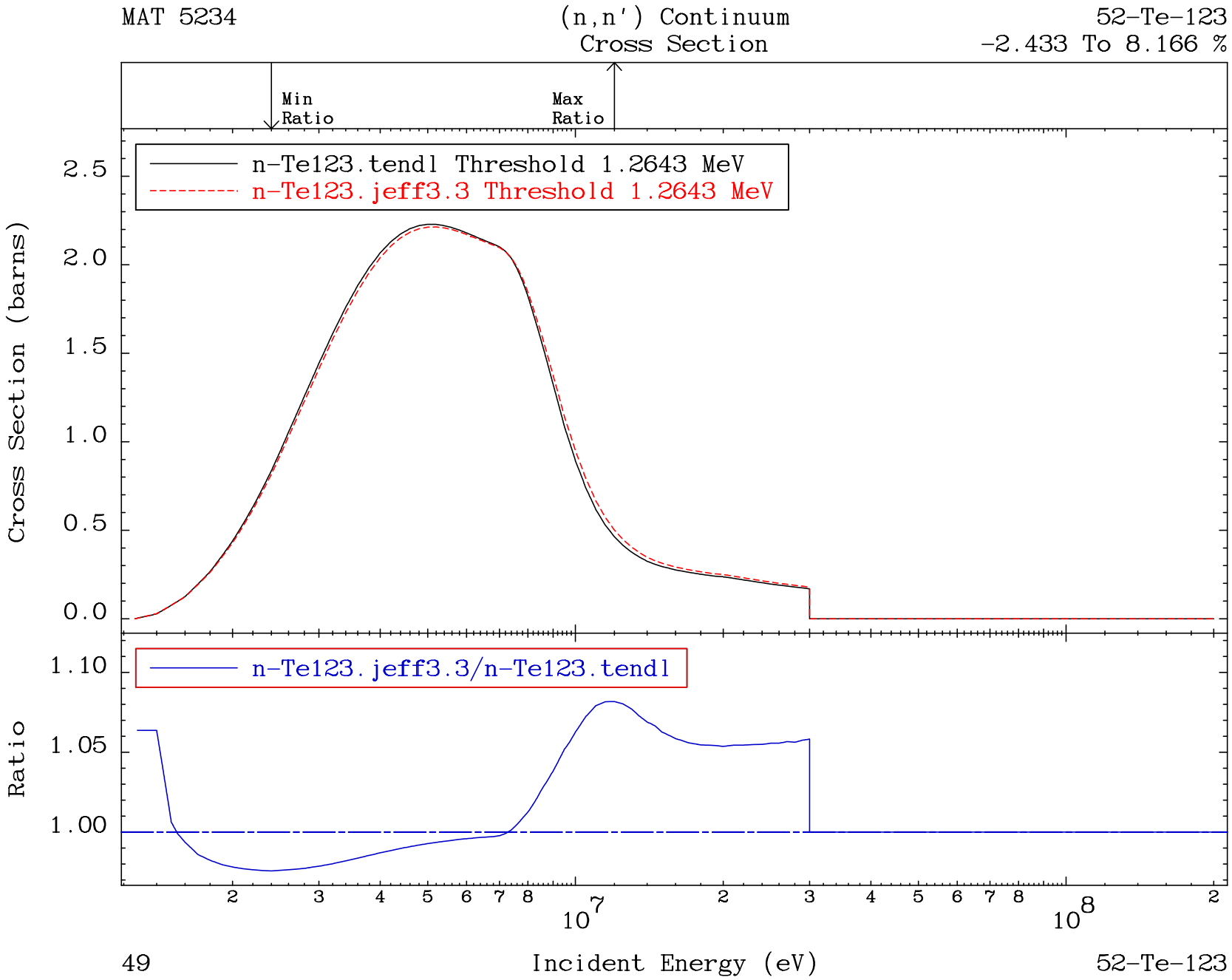

MAT 5234
MT= 75 (n,n') Level
Cross Section
52-Te-123
-7.279 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 1.1625 MeV
n-Te123.jeff3.3 Threshold 1.1625 MeV
Cross Section (milli-barns)
18
16
14
12
10
8
6
4
2
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.96
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
44
Incident Energy (eV)
52-Te-123

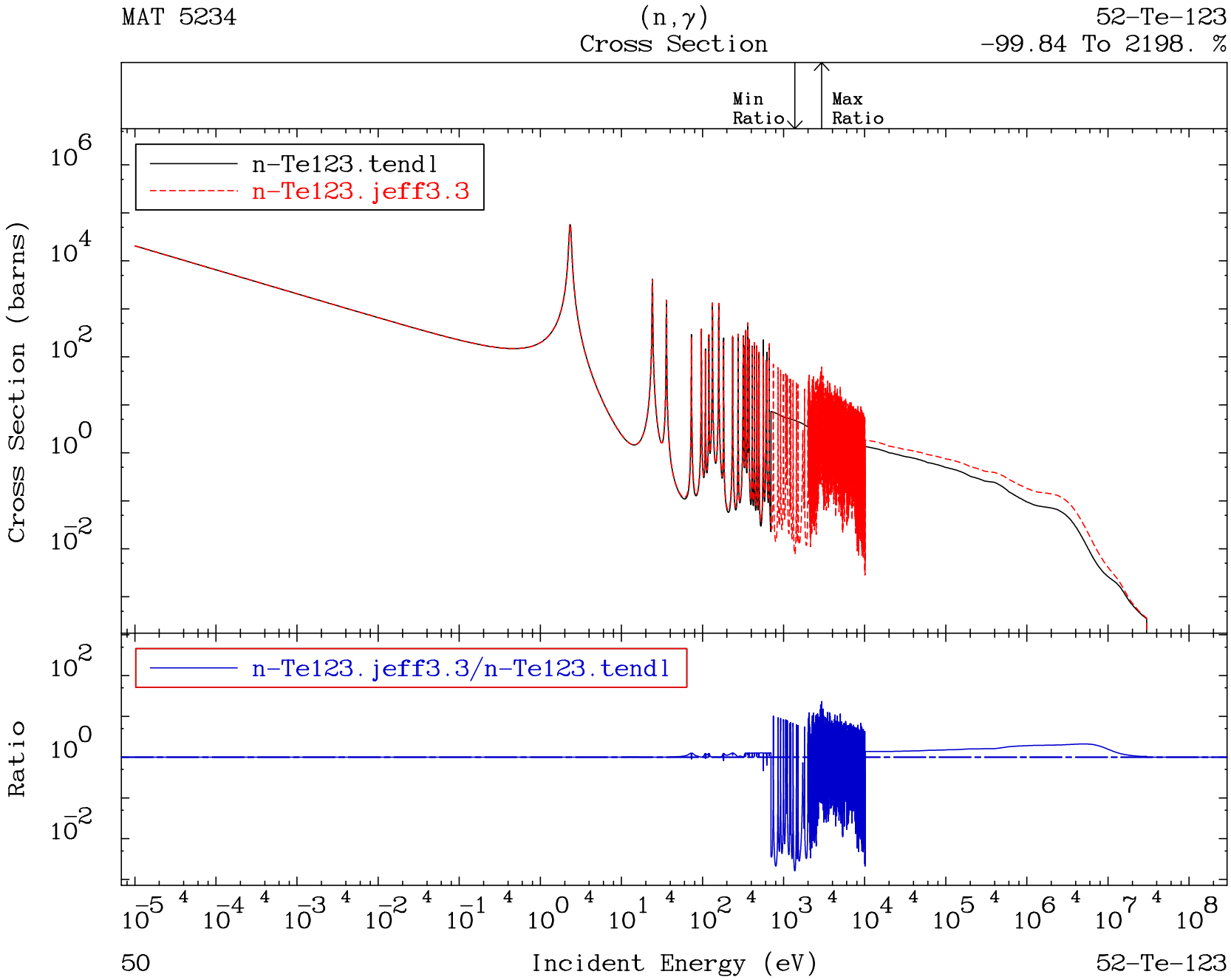

MAT 5234
MT= 76 (n,n') Level
Cross Section
52-Te-123
-4.818 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 1.2199 MeV
n-Te123.jeff3.3 Threshold 1.2199 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
45
Incident Energy (eV)
52-Te-123

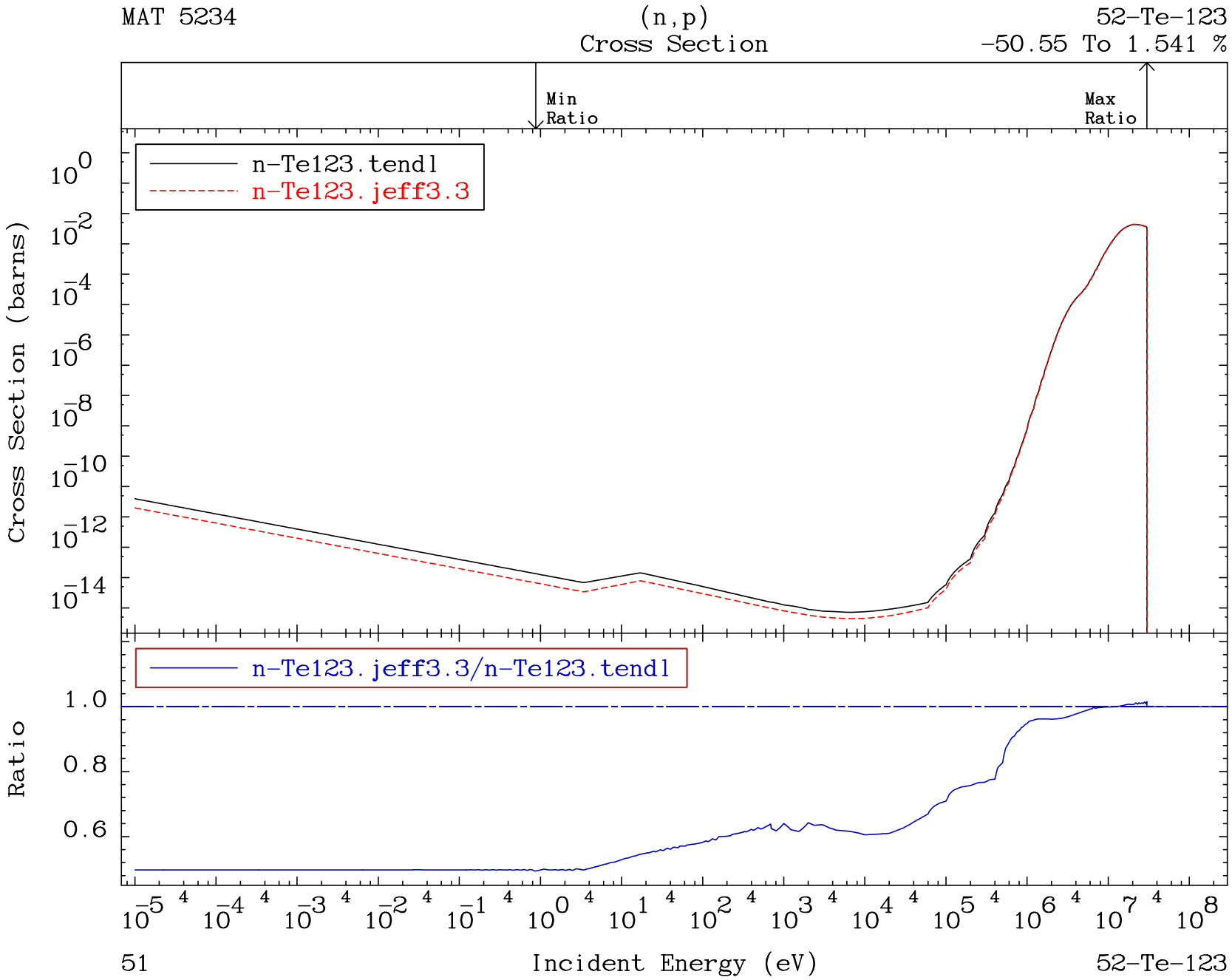

MAT 5234
MT= 77 (n,n') Level
Cross Section
52-Te-123
-6.240 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 1.2225 MeV
n-Te123.jeff3.3 Threshold 1.2225 MeV
Cross Section (milli-barns)
18
16
14
12
10
8
6
4
2
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
0.94
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
52-Te-123

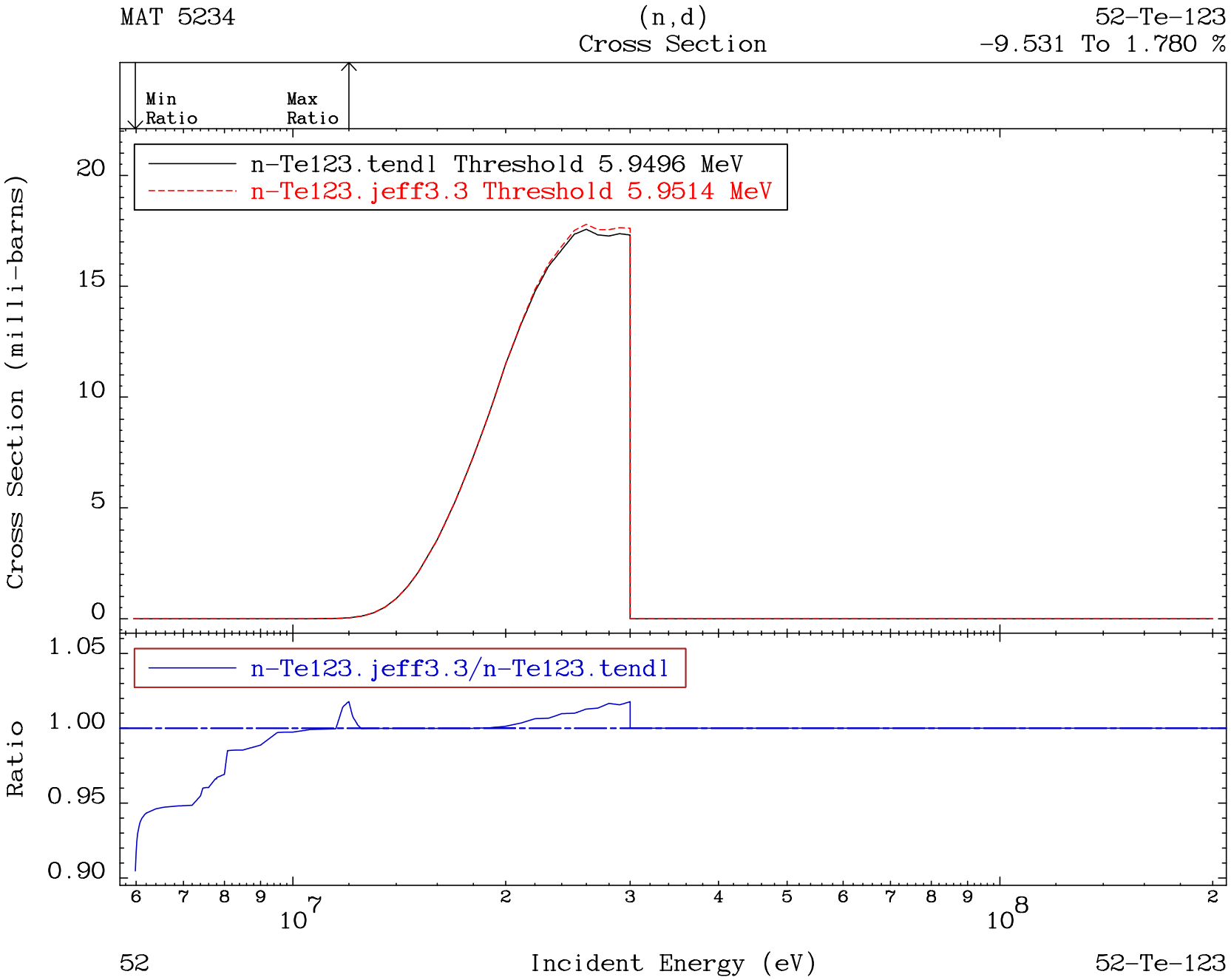

MAT 5234
MT= 78 (n,n') Level
Cross Section
52-Te-123
-6.365 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 1.2546 MeV
n-Te123.jeff3.3 Threshold 1.2546 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
0.94
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
47
Incident Energy (eV)
52-Te-123

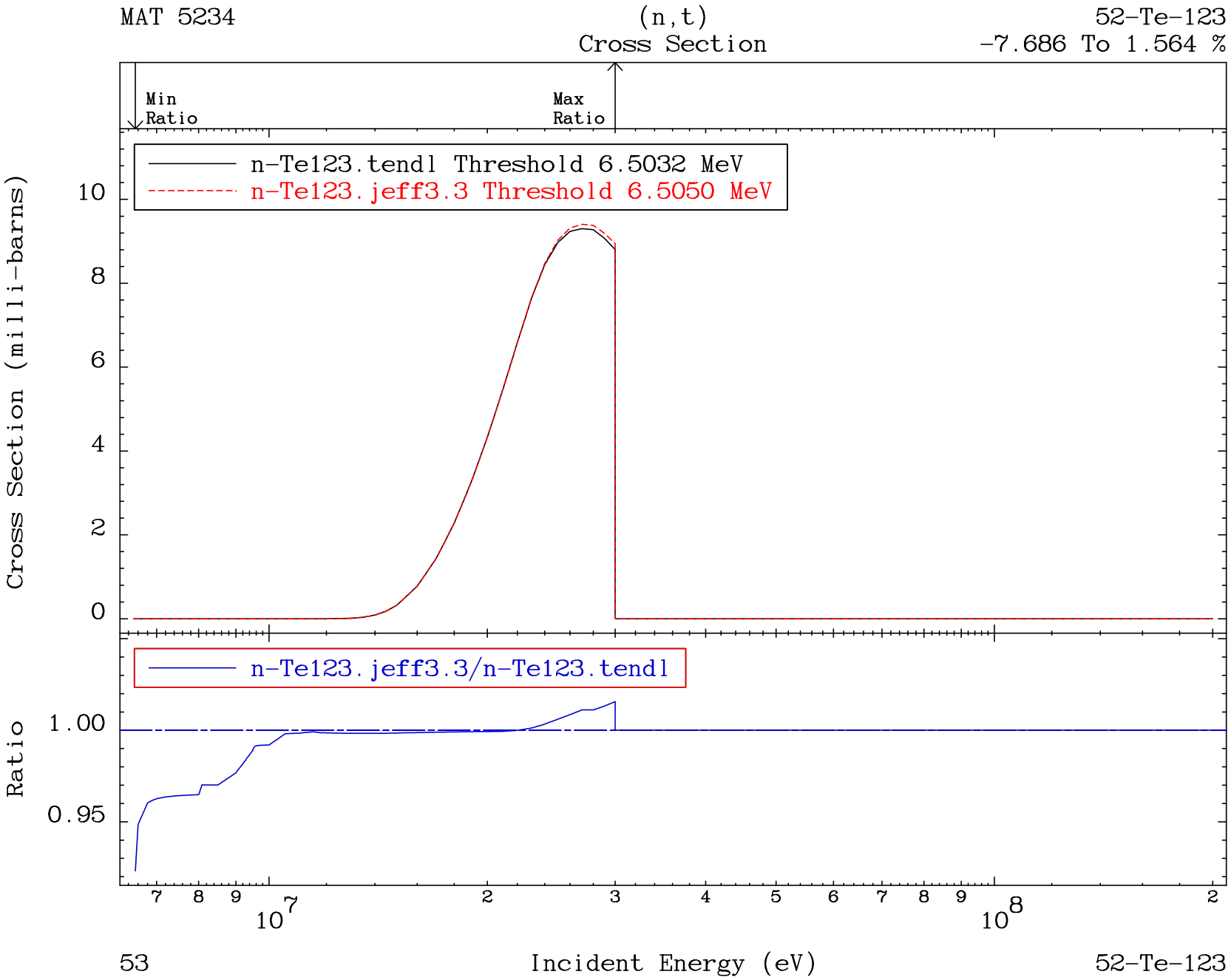

MAT 5234
MT= 79 (n,n') Level
Cross Section
52-Te-123
-4.296 To 0.000 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 1.2643 MeV
n-Te123.jeff3.3 Threshold 1.2643 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
48
Incident Energy (eV)
52-Te-123

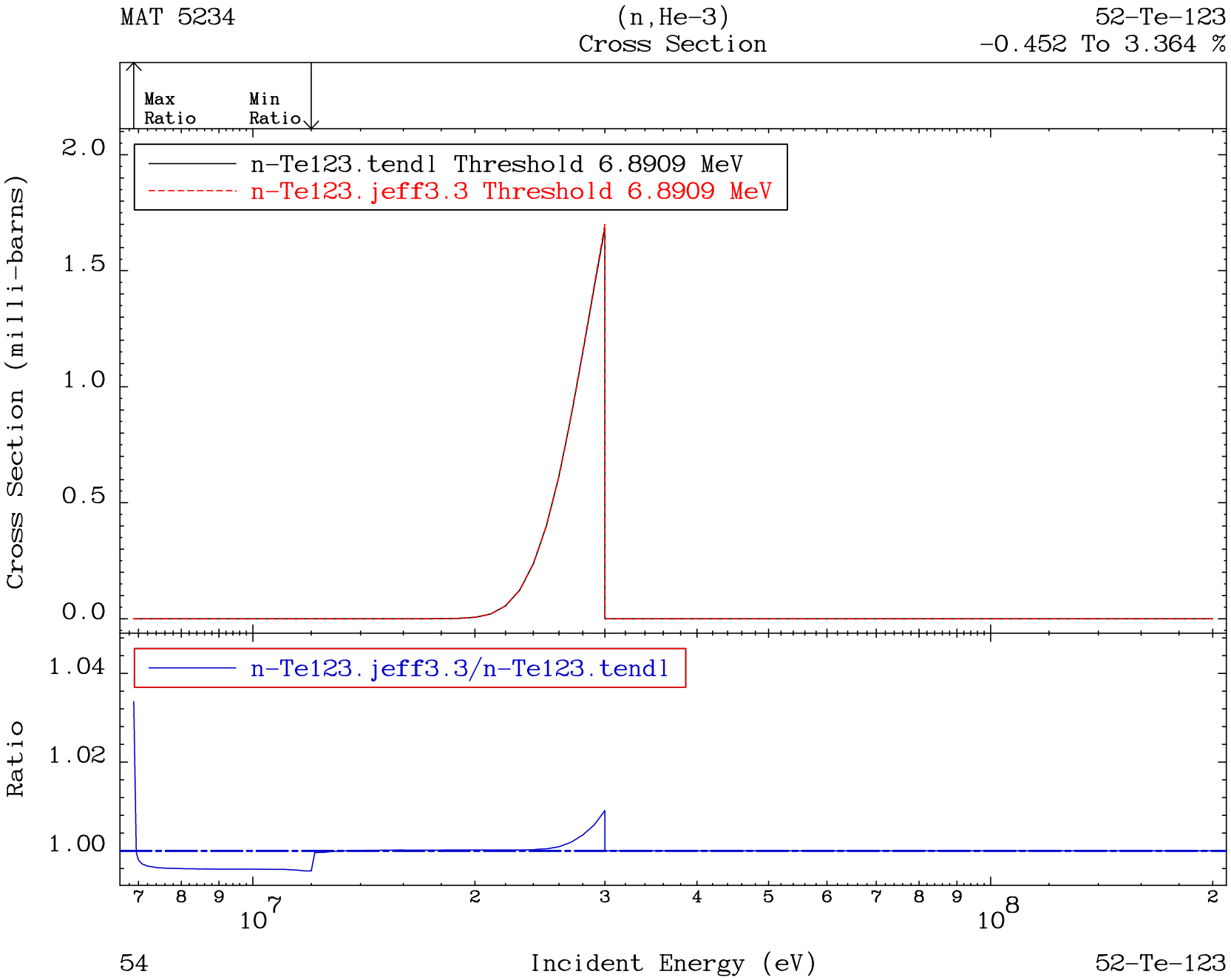

MAT 5234
(n,n') Continuum
Cross Section
52-Te-123
-2.433 To 8.166 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 1.2643 MeV
n-Te123.jeff3.3 Threshold 1.2643 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
49
Incident Energy (eV)
52-Te-123

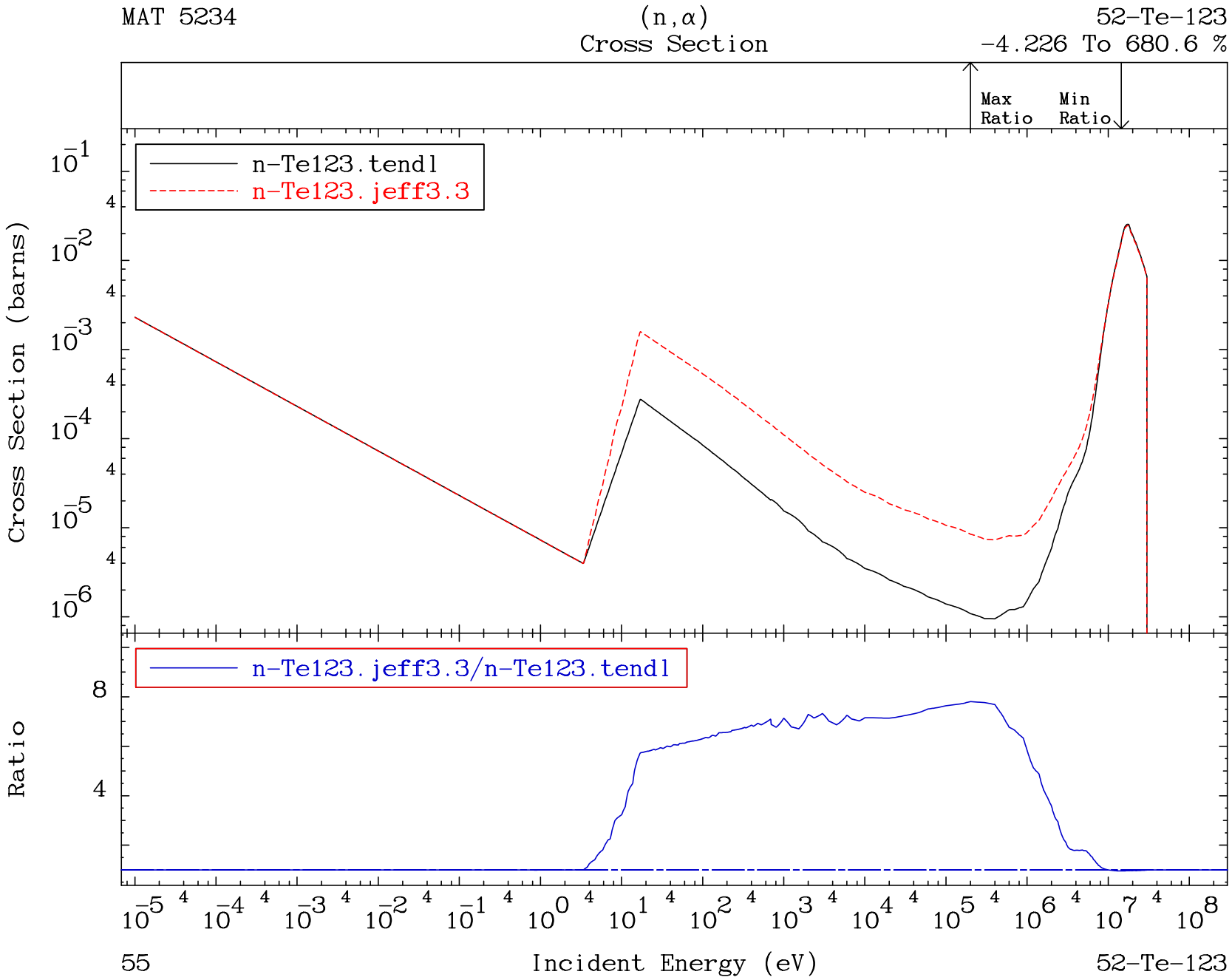

MAT 5234
(n,γ)
Cross Section
52-Te-123
-99.84 To 2198. %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
50
52-Te-123

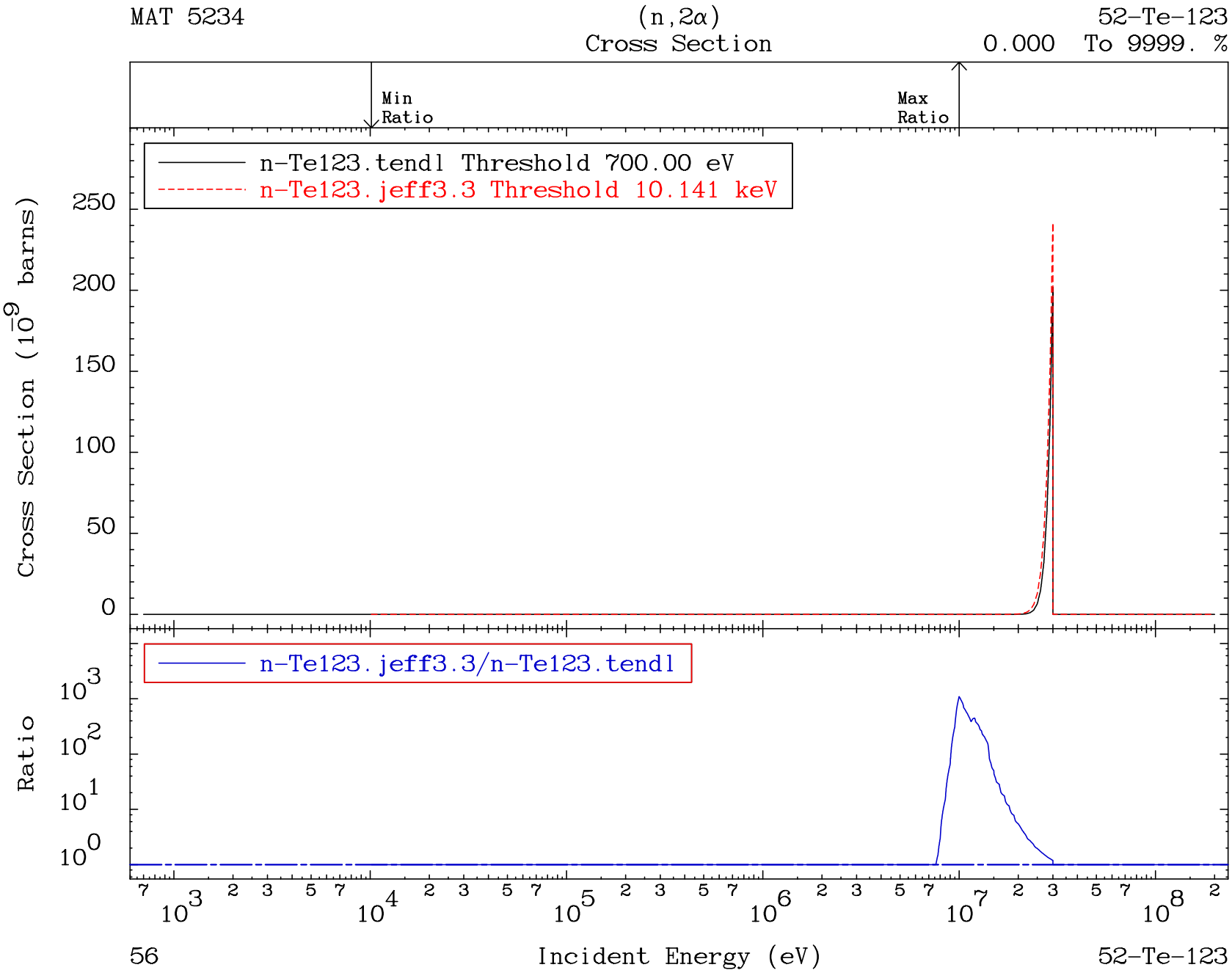

MAT 5234
(n,p)
Cross Section
52-Te-123
-50.55 To 1.541 %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
51
52-Te-123

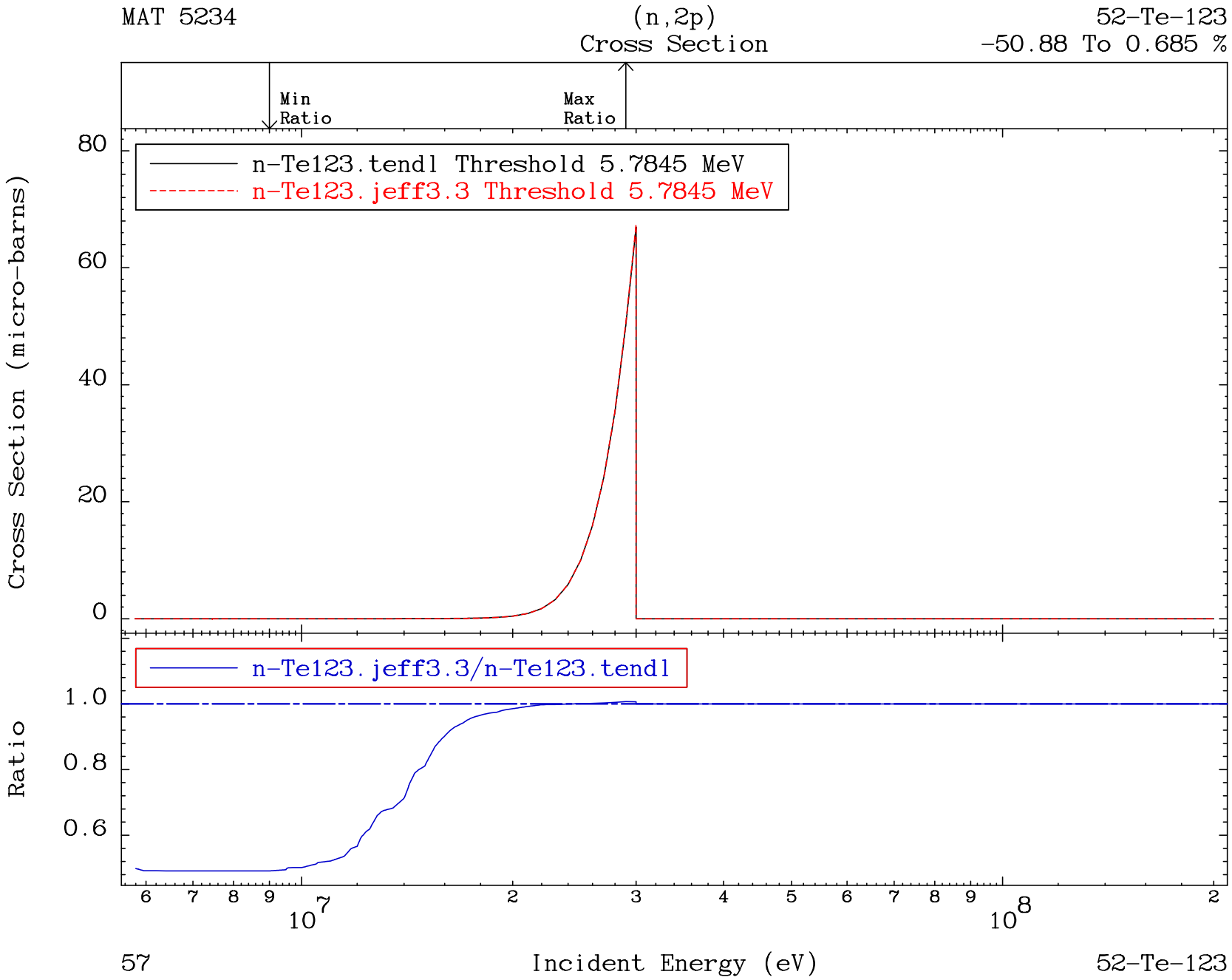

MAT 5234
(n,d)
Cross Section
52-Te-123
-9.531 To 1.780 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 5.9496 MeV
n-Te123.jeff3.3 Threshold 5.9514 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.05
1.00
0.95
0.90
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
52-Te-123

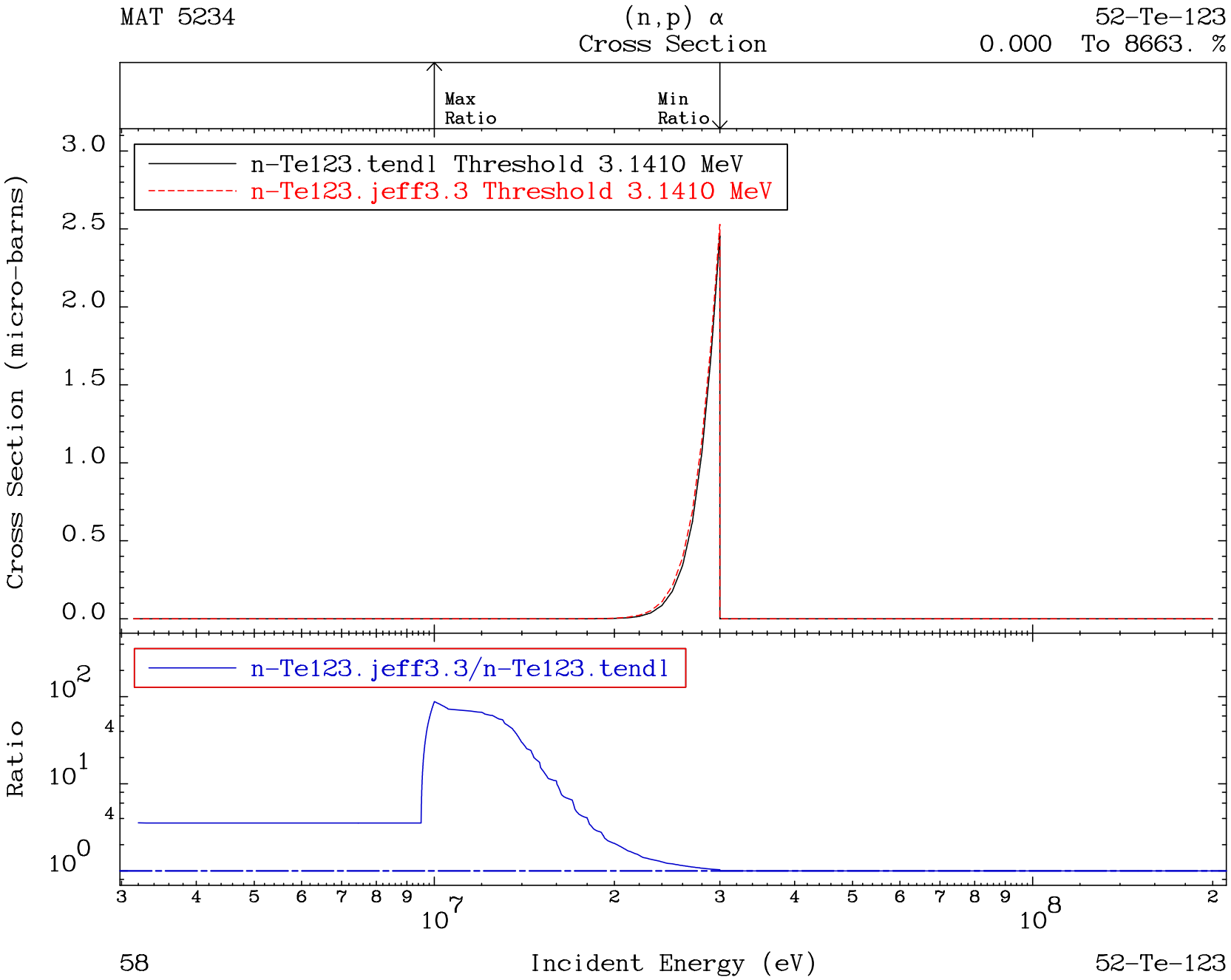

MAT 5234
(n,t)
Cross Section
52-Te-123
-7.686 To 1.564 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 6.5032 MeV
n-Te123.jeff3.3 Threshold 6.5050 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.95
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
53
Incident Energy (eV)
52-Te-123

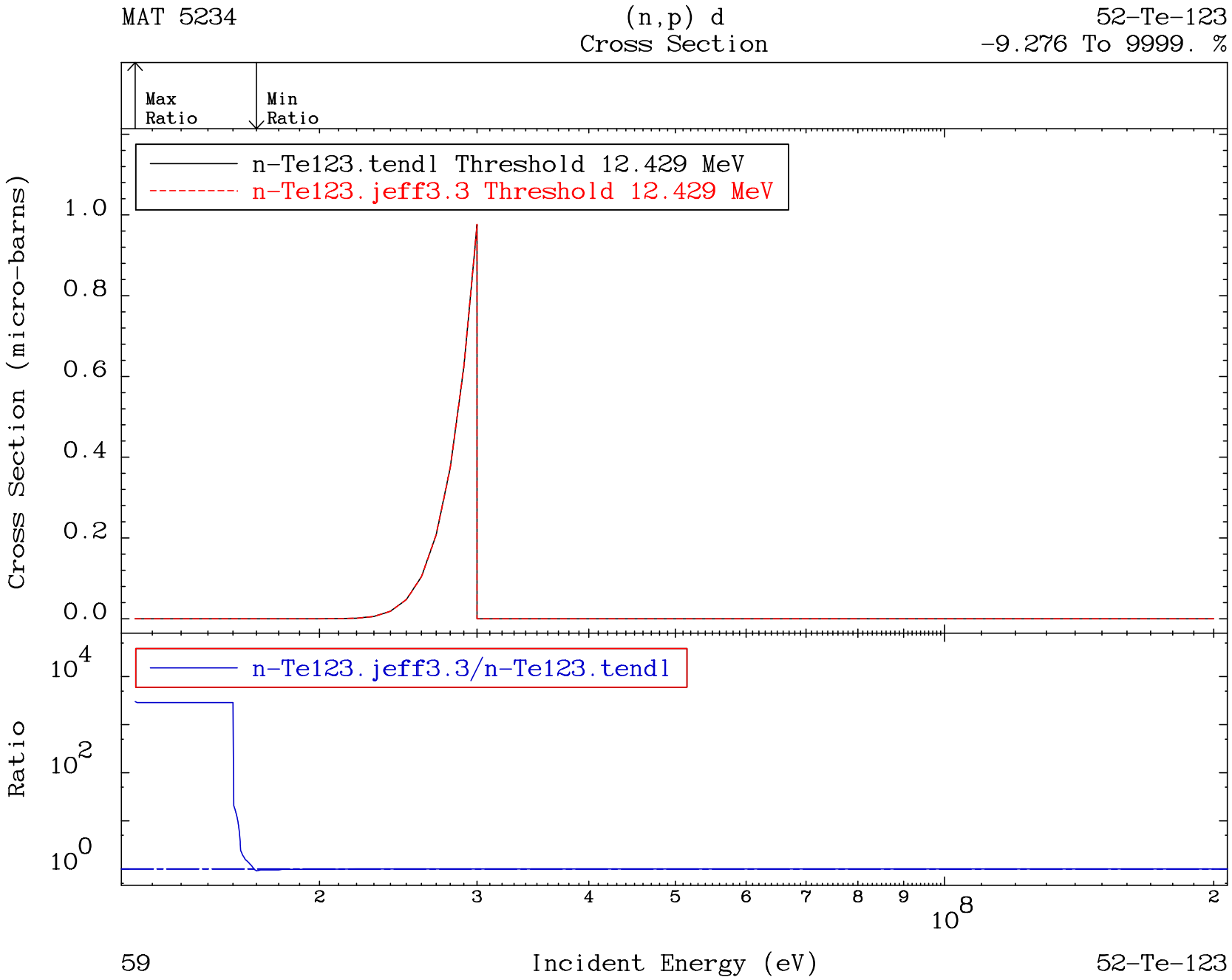

MAT 5234
(n,He-3)
Cross Section
52-Te-123
-0.452 To 3.364 %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 6.8909 MeV
n-Te123.jeff3.3 Threshold 6.8909 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.04
1.02
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
54
Incident Energy (eV)
52-Te-123

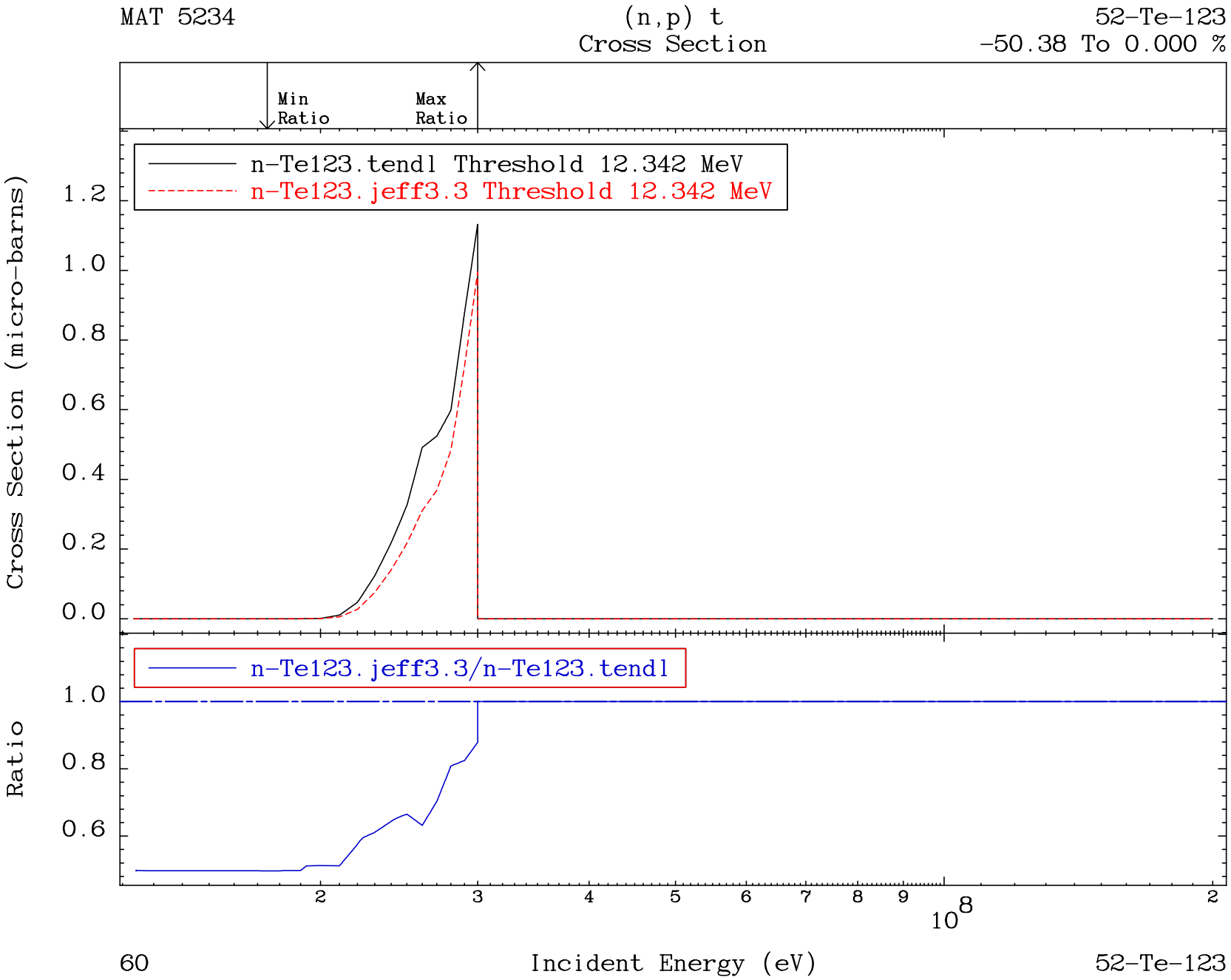

MAT 5234
(n,α)
Cross Section
52-Te-123
-4.226 To 680.6 %
Max Ratio
Min Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
55
52-Te-123

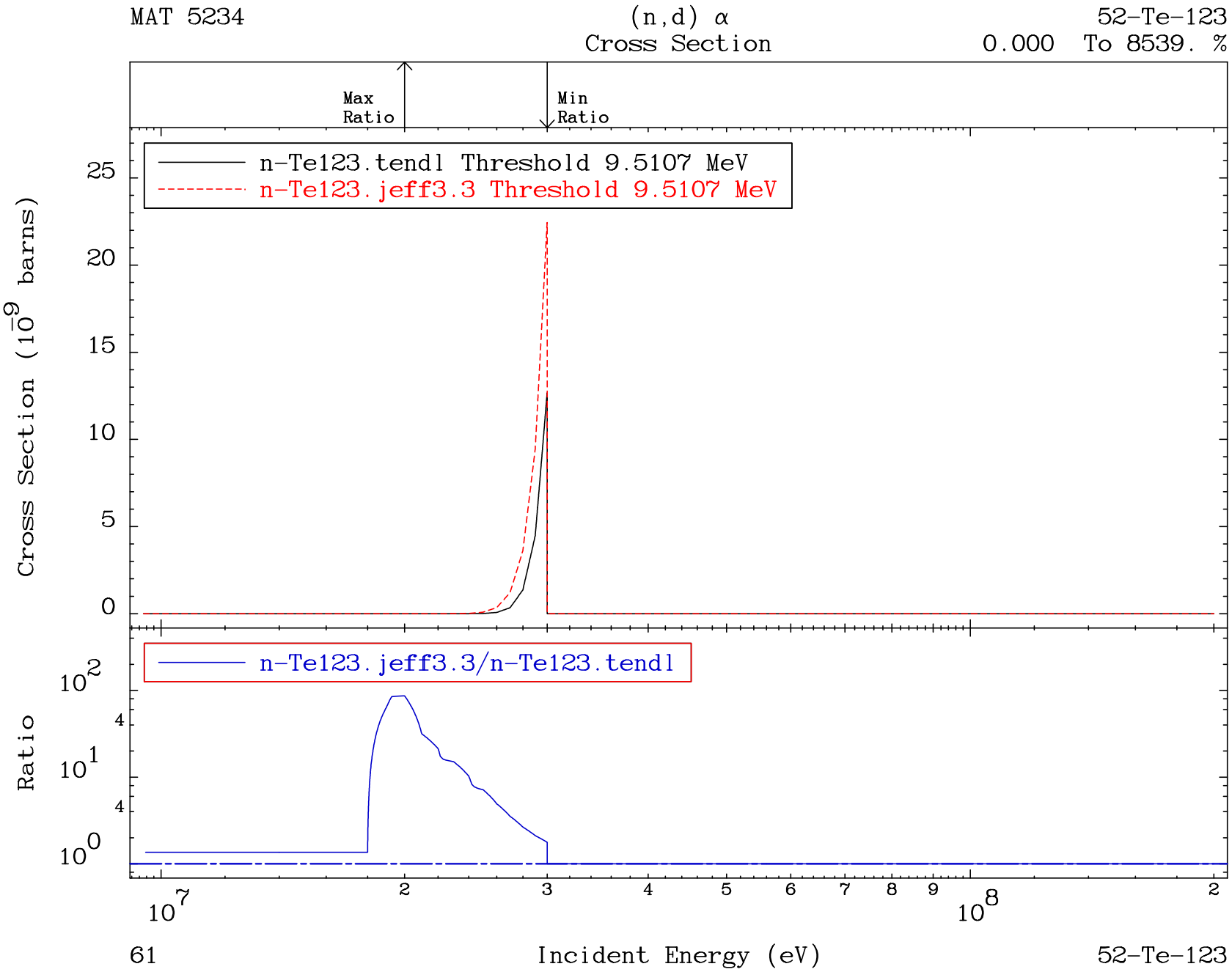

MAT 5234
(n,2α)
Cross Section
52-Te-123
0.000 To 9999. %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 700.00 eV
n-Te123.jeff3.3 Threshold 10.141 keV
Cross Section (10^{-9} barns)
250
200
150
100
50
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^3
10^2
10^1
10^0
7 10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
56
Incident Energy (eV)
52-Te-123

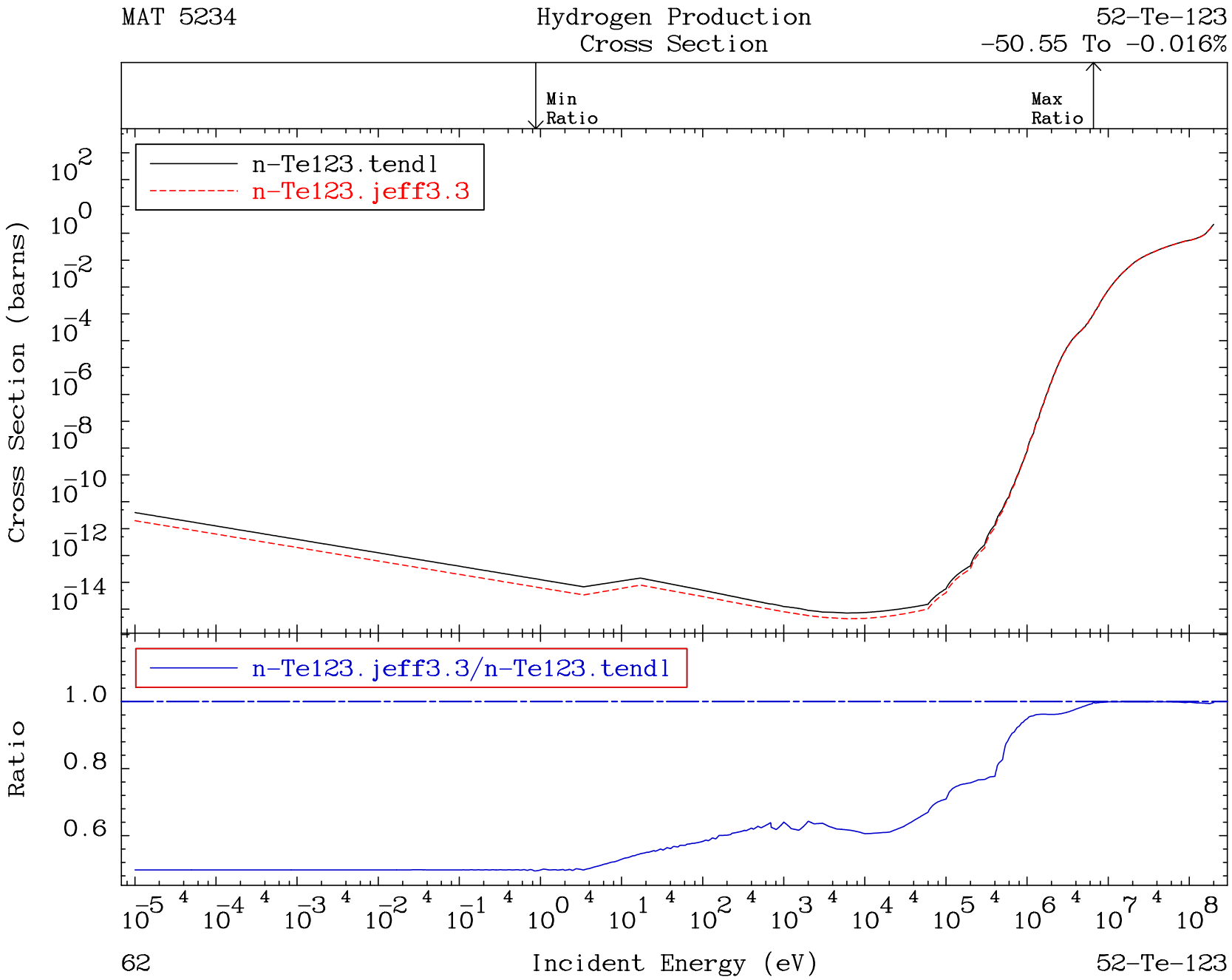

MAT 5234
(n,2p)
Cross Section
52-Te-123
-50.88 To 0.685 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 5.7845 MeV
n-Te123.jeff3.3 Threshold 5.7845 MeV
Cross Section (micro-barns)
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.8
0.6
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
57
Incident Energy (eV)
52-Te-123

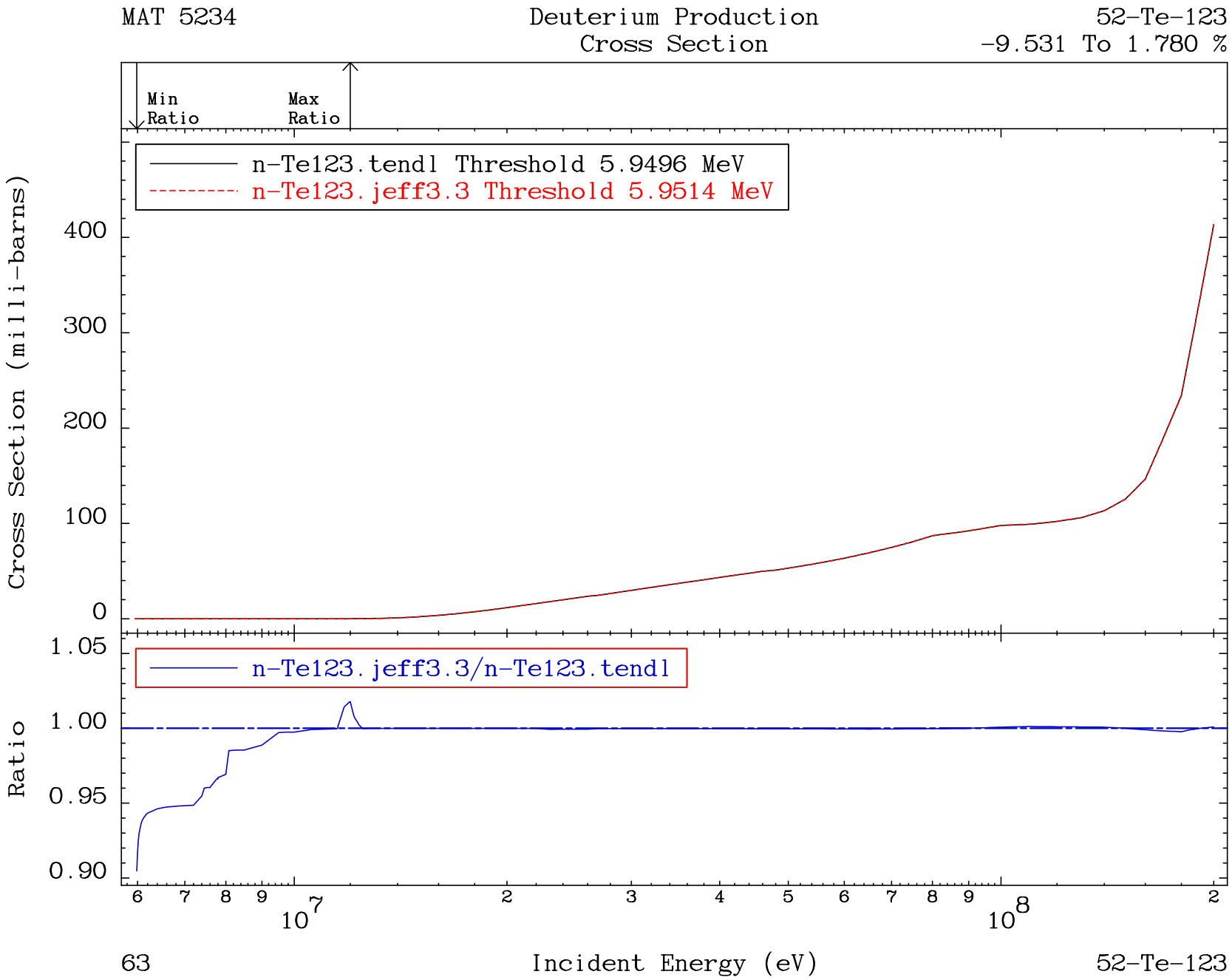

MAT 5234
(n,p) α
Cross Section
52-Te-123
0.000 To 8663. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 3.1410 MeV
n-Te123.jeff3.3 Threshold 3.1410 MeV
Cross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^2
10^1
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
58
Incident Energy (eV)
52-Te-123

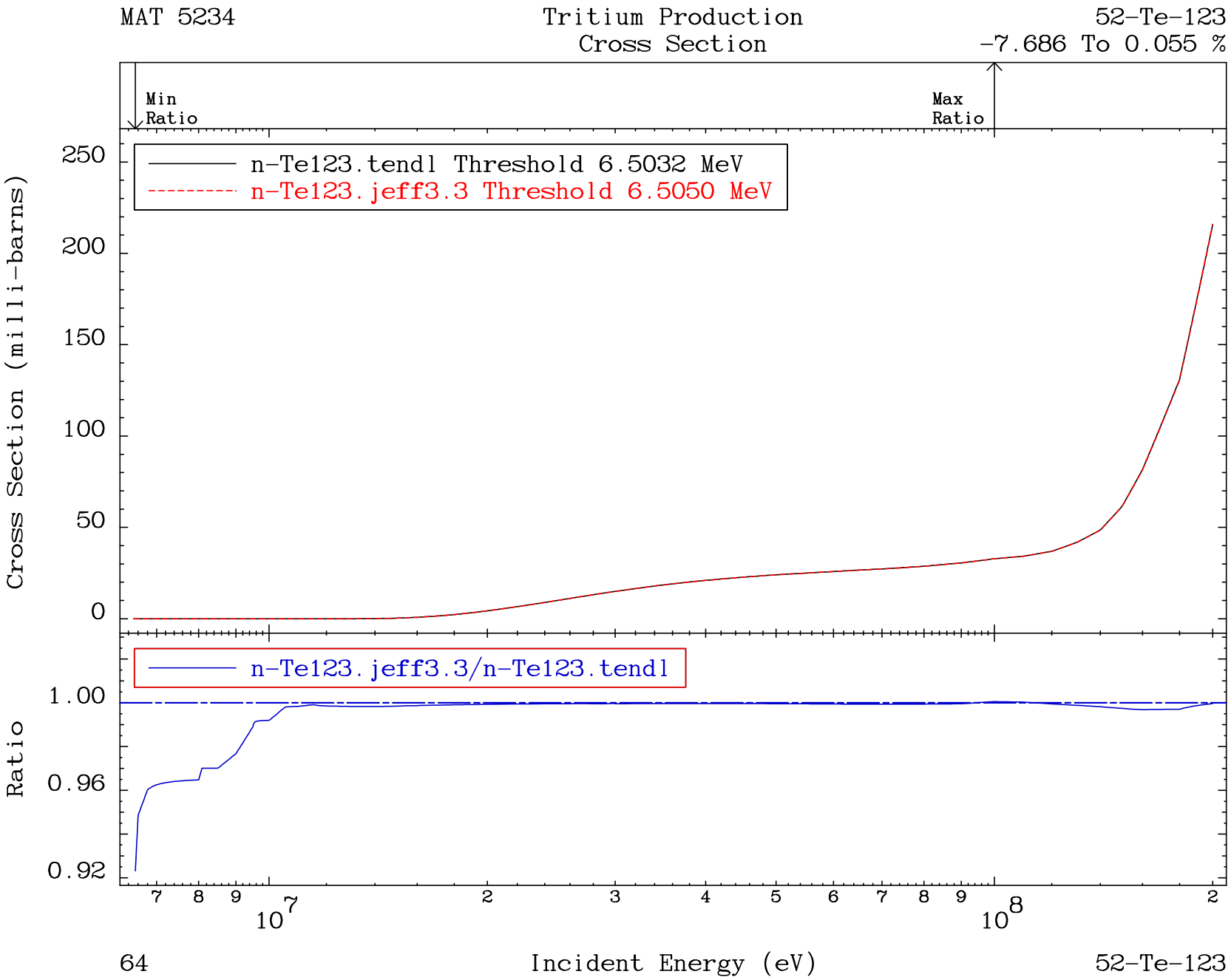

MAT 5234
(n,p) d
Cross Section
52-Te-123
-9.276 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 12.429 MeV
n-Te123.jeff3.3 Threshold 12.429 MeV
Cross Section (micro-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
52-Te-123

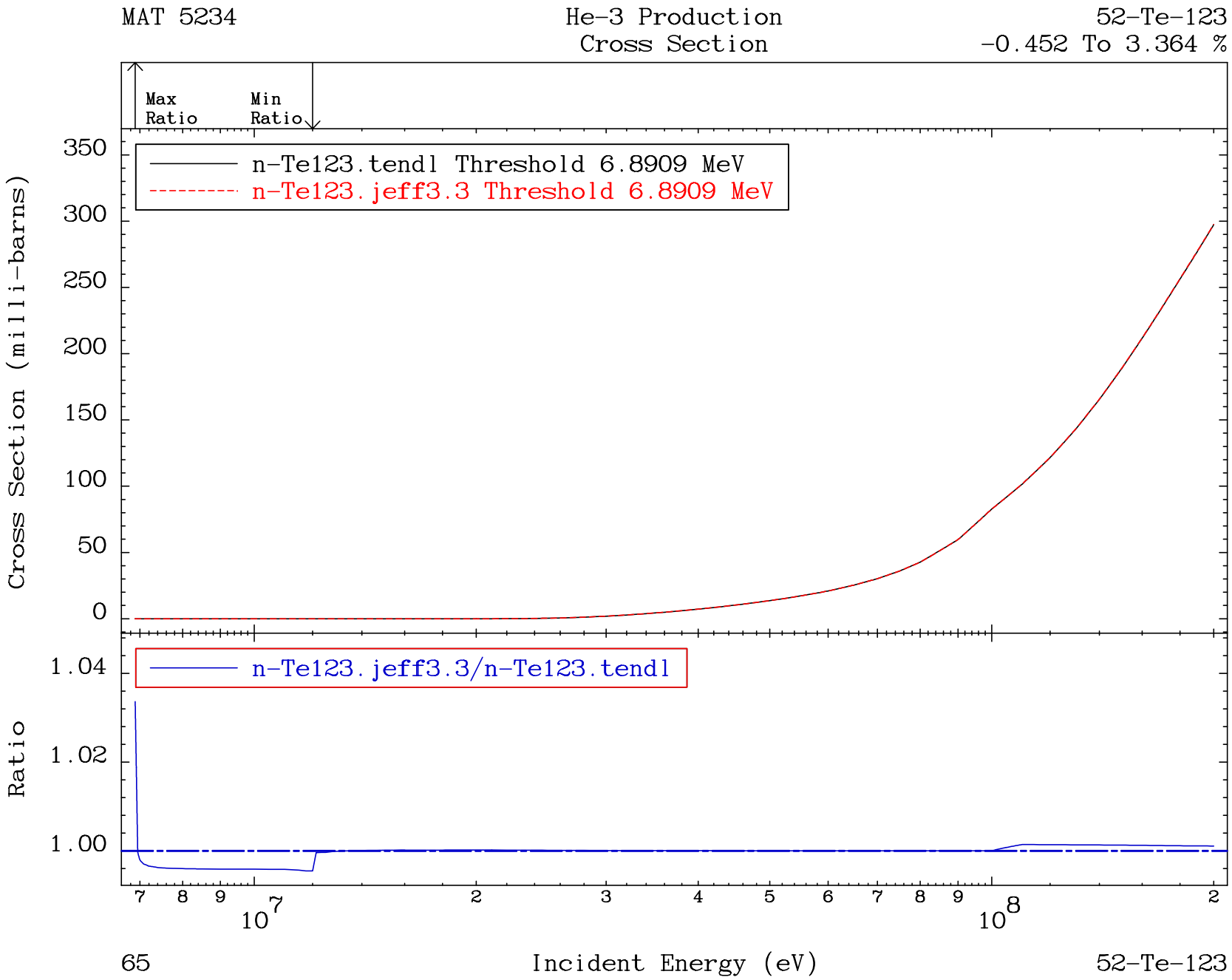

MAT 5234
(n,p) t
Cross Section
52-Te-123
-50.38 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 12.342 MeV
n-Te123.jeff3.3 Threshold 12.342 MeV
Cross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
52-Te-123

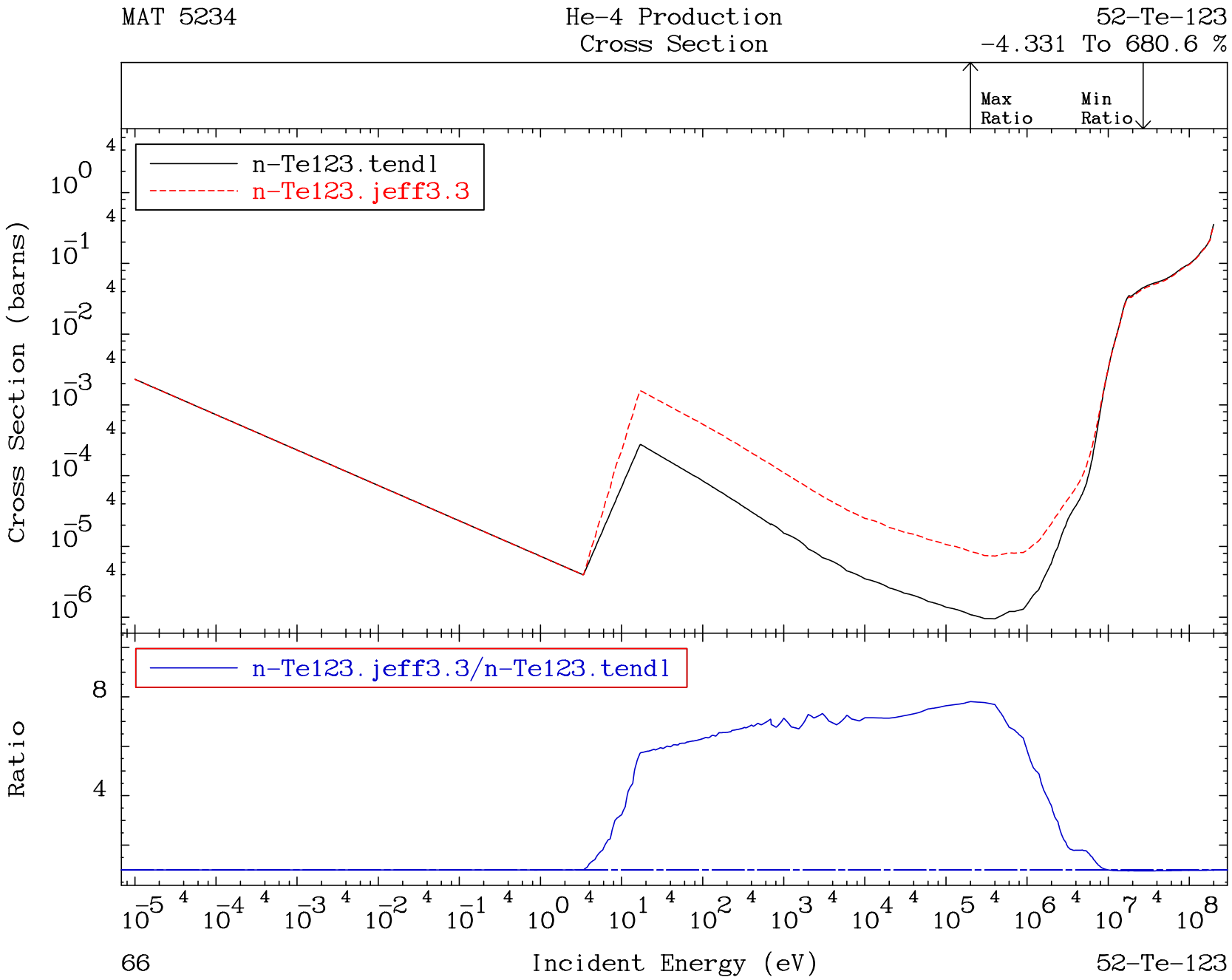

MAT 5234
(n,d) α
Cross Section
52-Te-123
0.000 To 8539. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 9.5107 MeV
n-Te123.jeff3.3 Threshold 9.5107 MeV
Cross Section (10^{-9} barns)
25
20
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^{2}
10^{1}
10^{0}
10^{7}
2
3
4
5
6
7
8
9
10^{8}
2
61
Incident Energy (eV)
52-Te-123

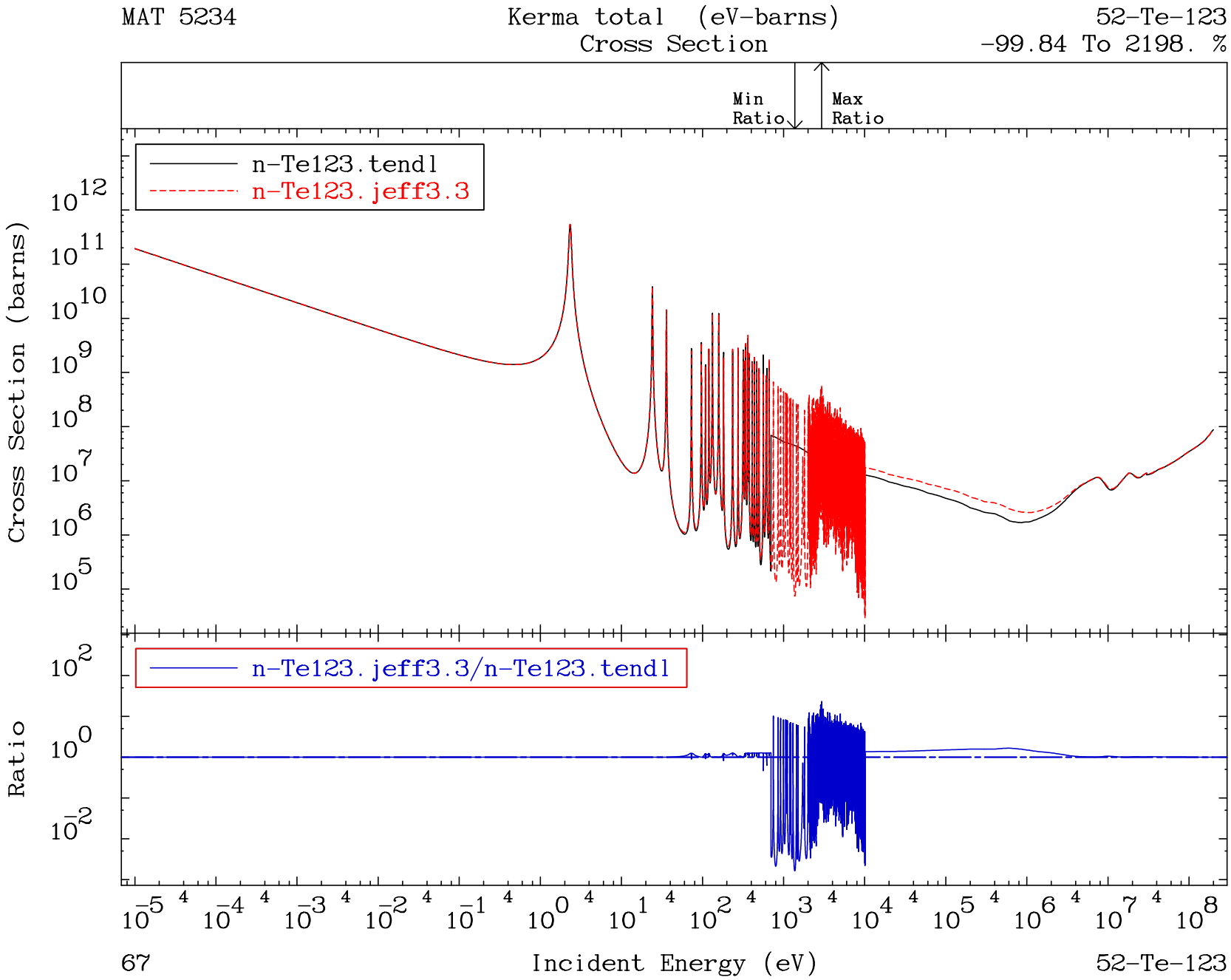

MAT 5234
Hydrogen Production
Cross Section
52-Te-123
-50.55 To -0.016%
Min
Ratio
Max
Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
62
52-Te-123

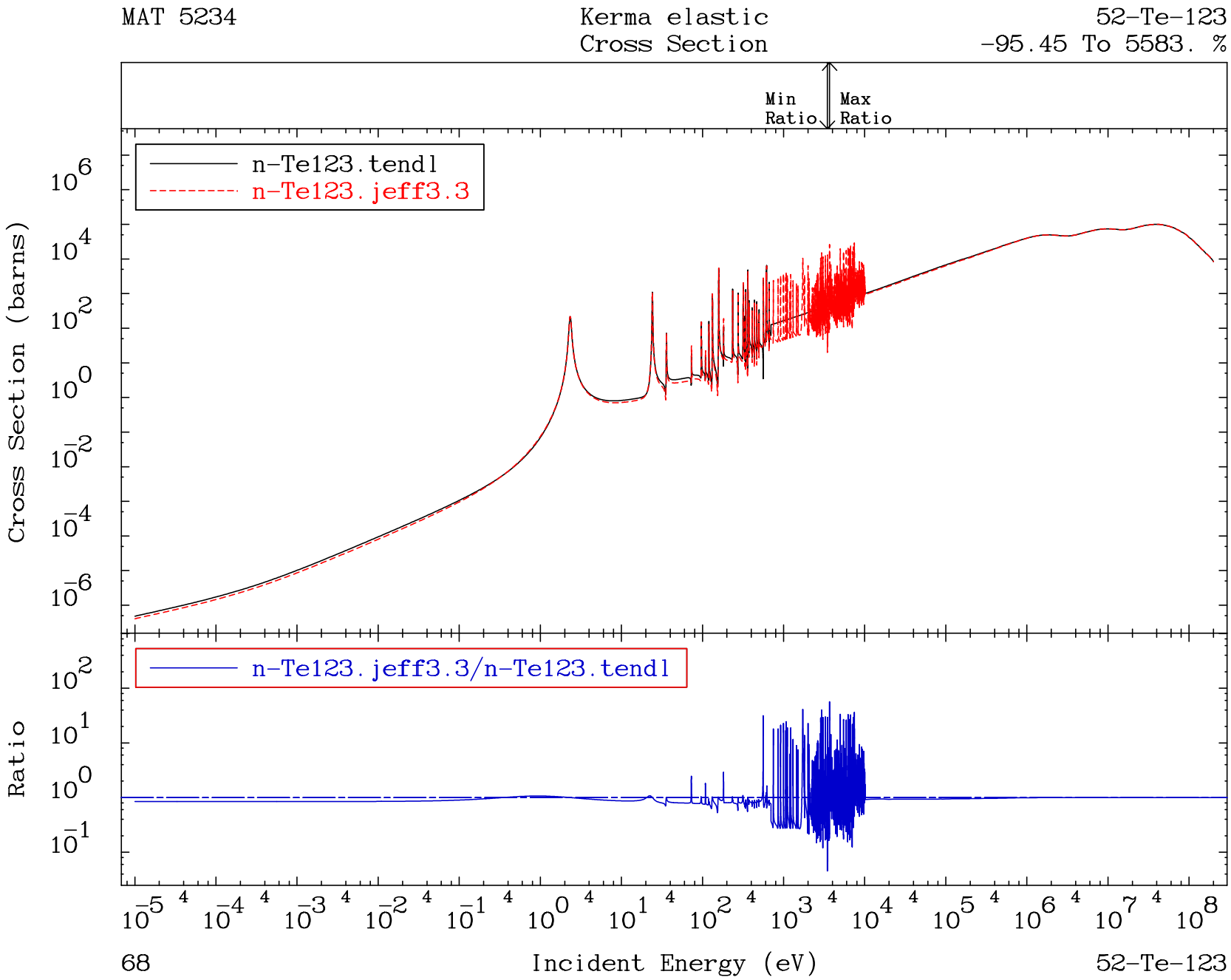

MAT 5234
Deuterium Production
Cross Section
52-Te-123
-9.531 To 1.780 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 5.9496 MeV
n-Te123.jeff3.3 Threshold 5.9514 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.05
1.00
0.95
0.90
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
63
Incident Energy (eV)
52-Te-123

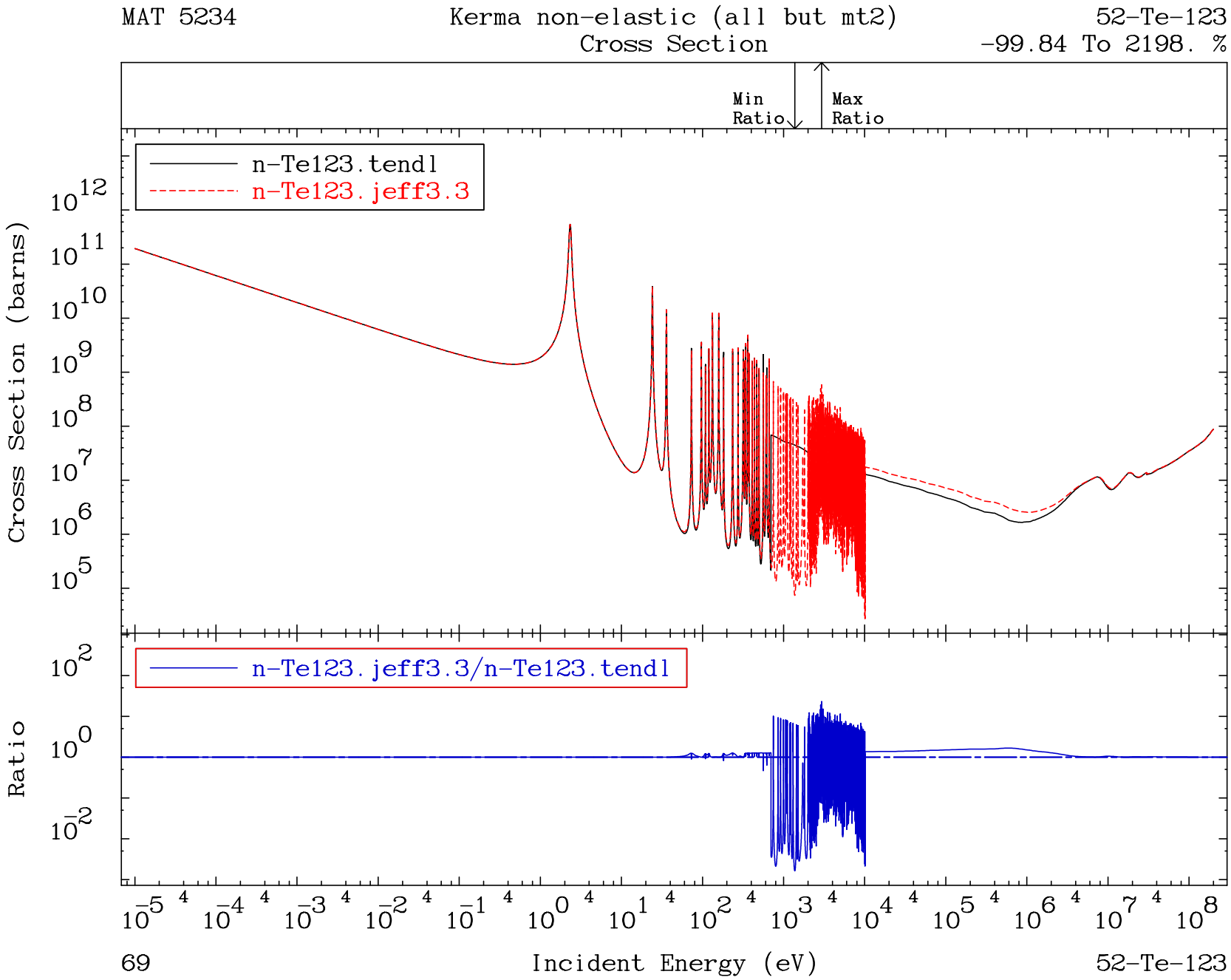

MAT 5234
Tritium Production
Cross Section
52-Te-123
-7.686 To 0.055 %
Min
Ratio
Max
Ratio
n-Te123.tendl Threshold 6.5032 MeV
n-Te123.jeff3.3 Threshold 6.5050 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.96
0.92
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
64
Incident Energy (eV)
52-Te-123

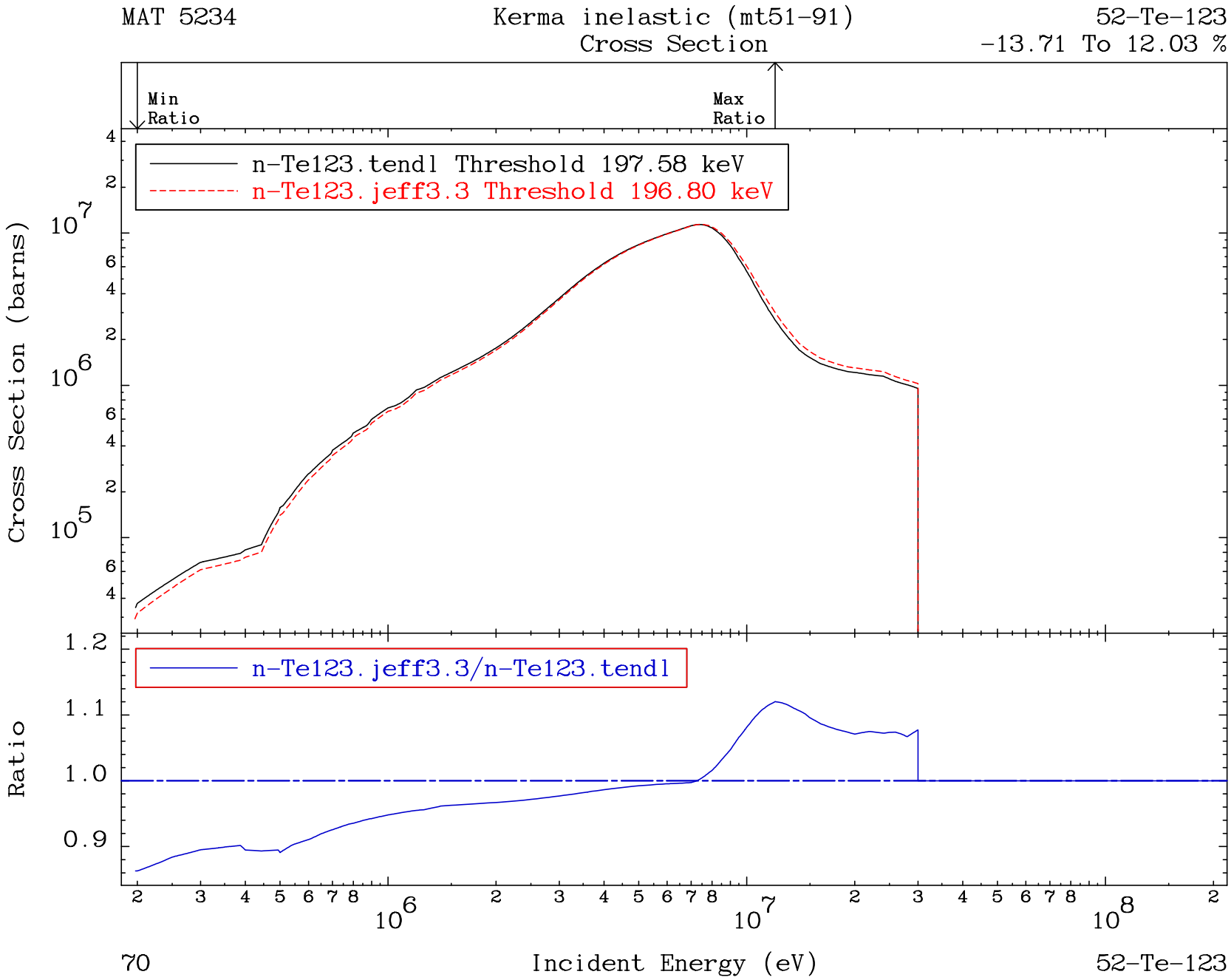

MAT 5234
He-3 Production
Cross Section
52-Te-123
-0.452 To 3.364 %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 6.8909 MeV
n-Te123.jeff3.3 Threshold 6.8909 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.04
1.02
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
65
Incident Energy (eV)
52-Te-123

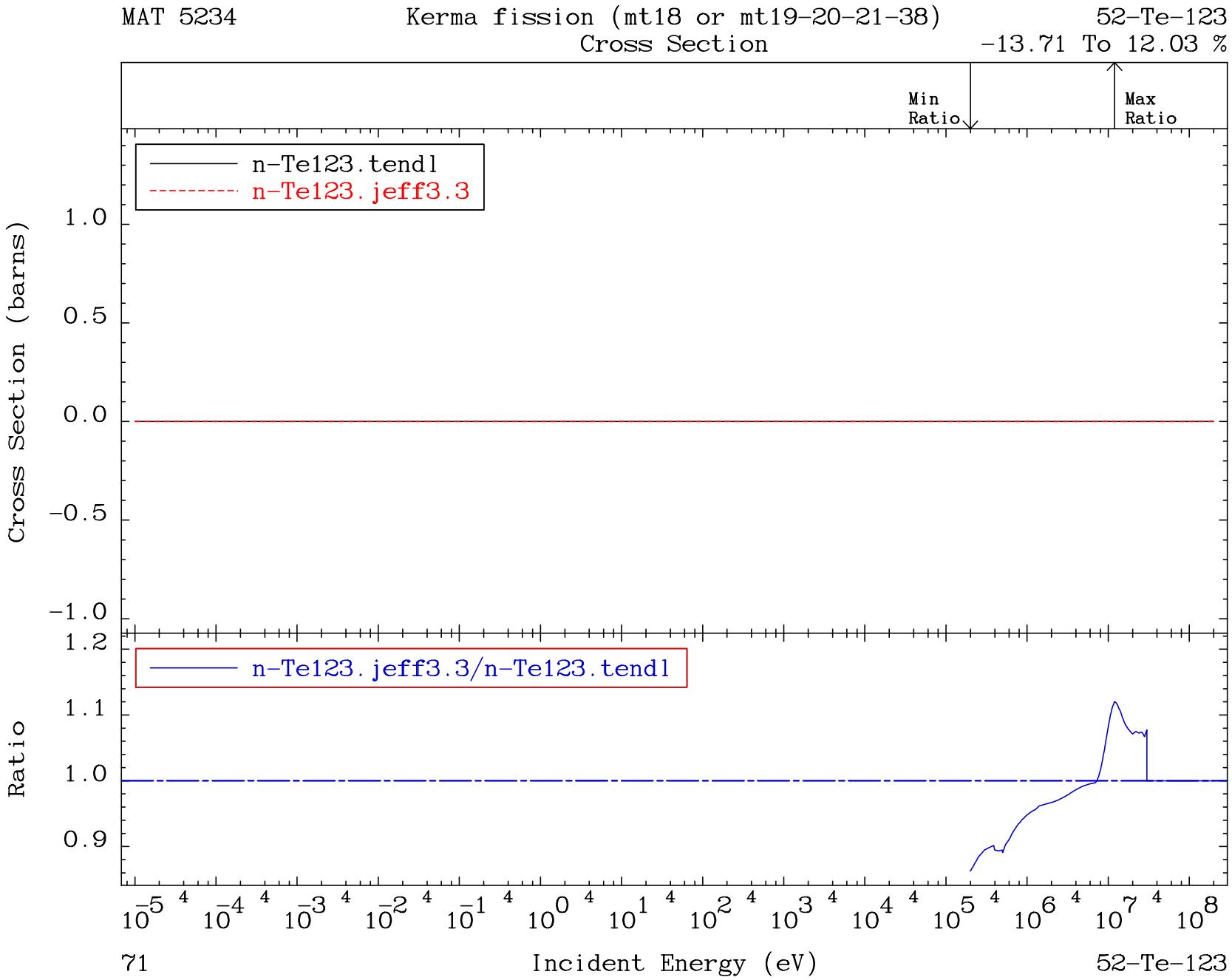

MAT 5234
He-4 Production
Cross Section
52-Te-123
-4.331 To 680.6 %
Max Ratio
Min Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
66
Incident Energy (eV)
52-Te-123

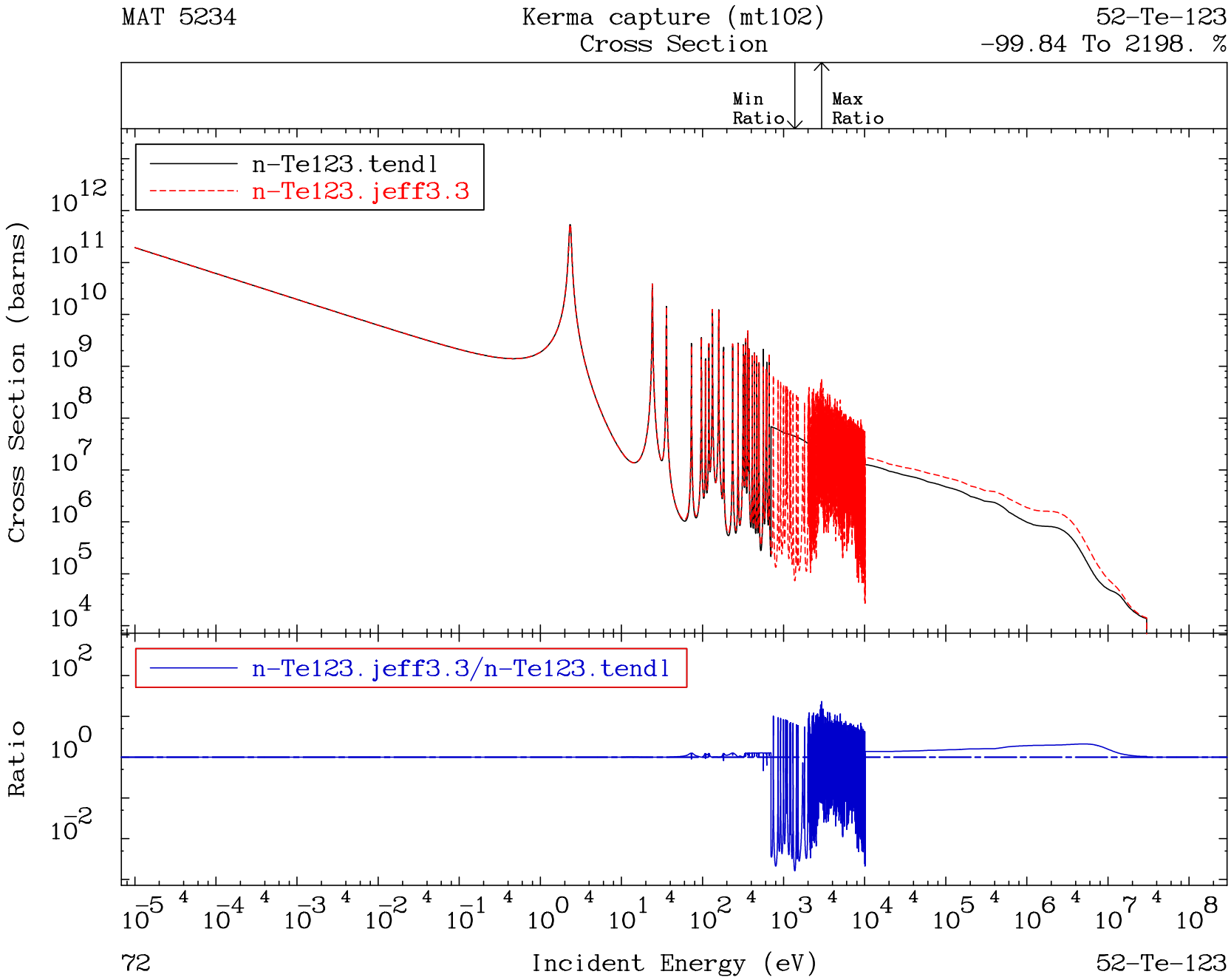

MAT 5234
Kerma total (eV-barns)
Cross Section
52-Te-123
-99.84 To 2198. %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
67
Incident Energy (eV)
52-Te-123

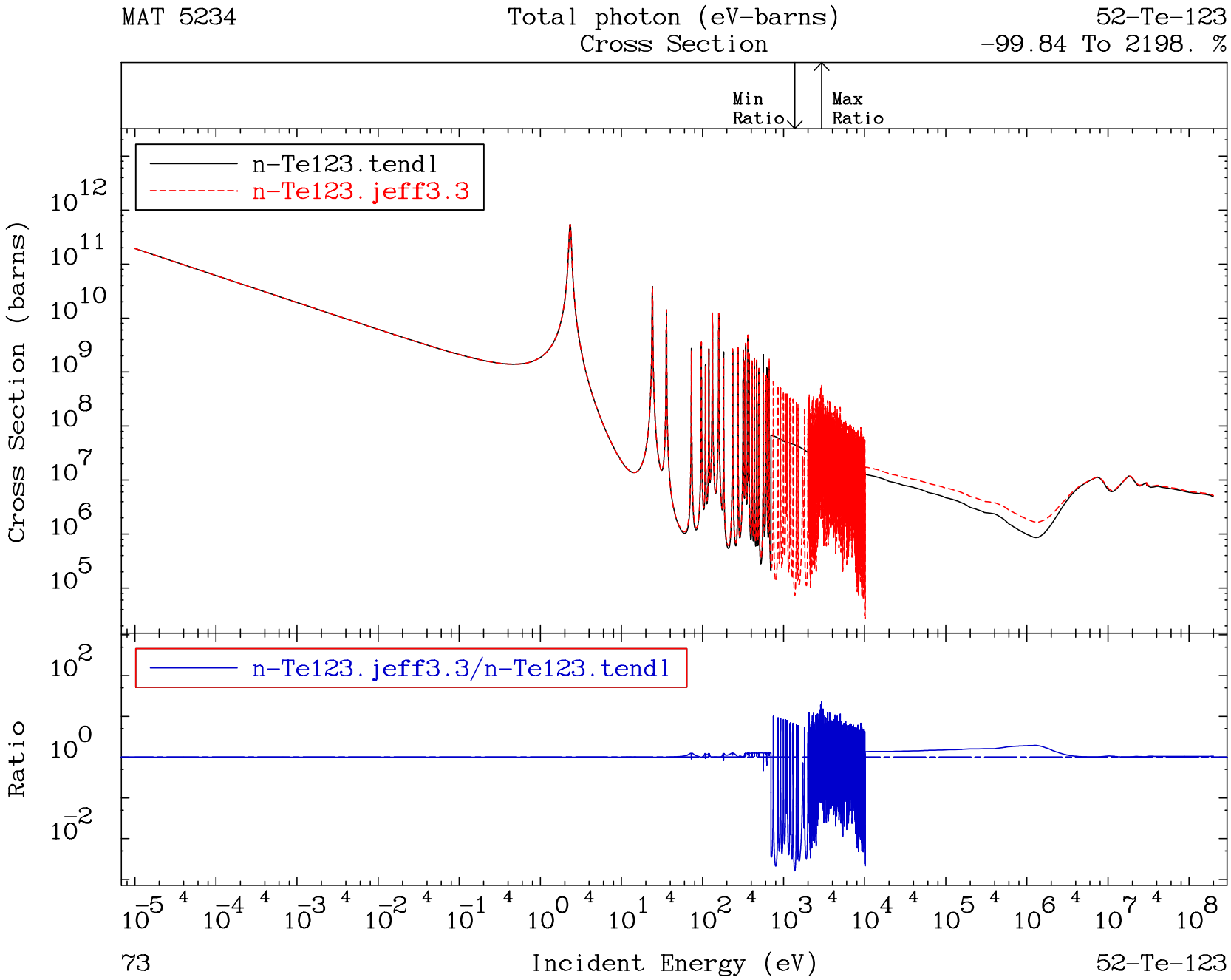

MAT 5234
Kerma elastic
Cross Section
52-Te-123
-95.45 To 5583. %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
68
52-Te-123

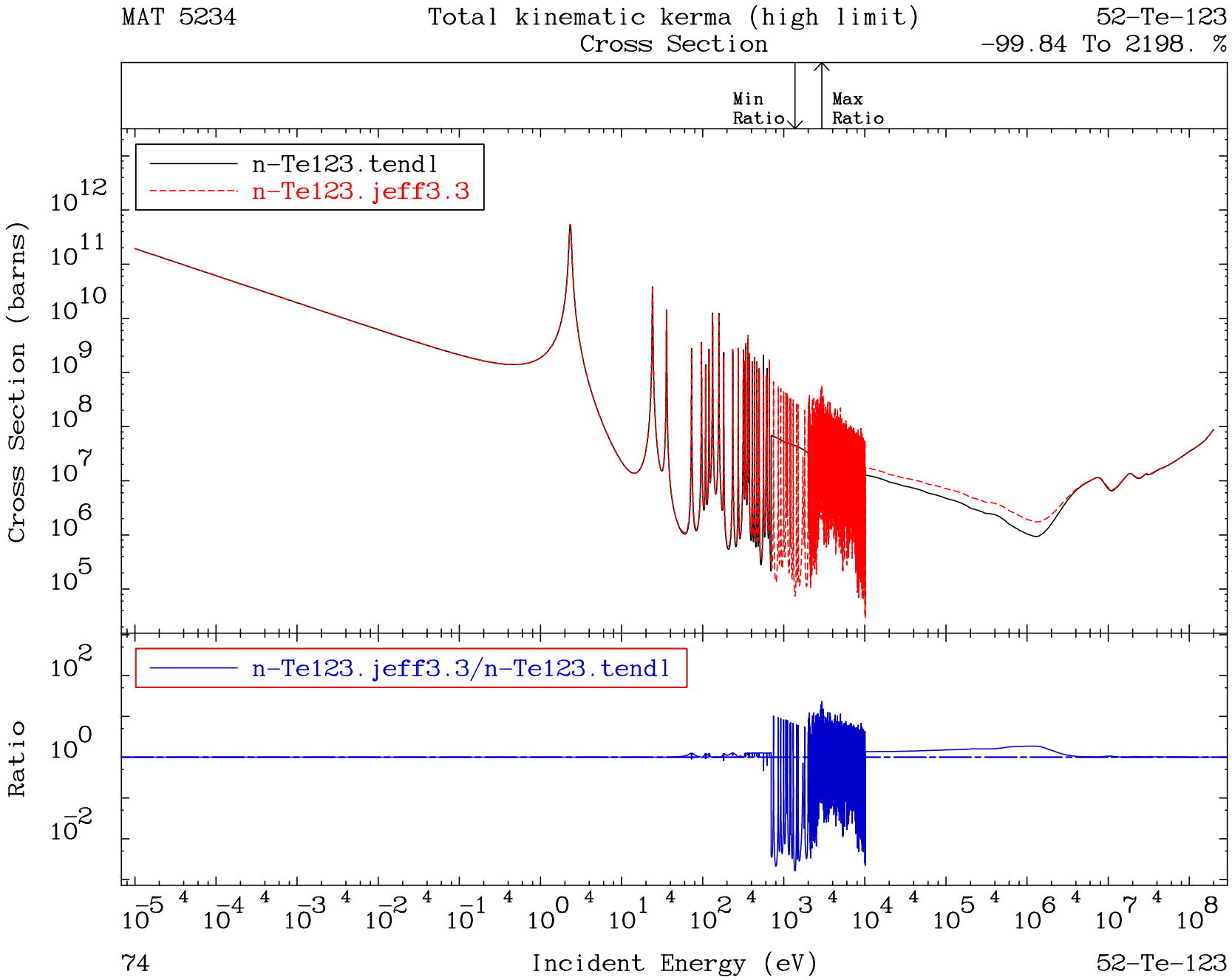

MAT 5234
Kerma non-elastic (all but mt2)
Cross Section
52-Te-123
-99.84 To 2198. %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
69
52-Te-123

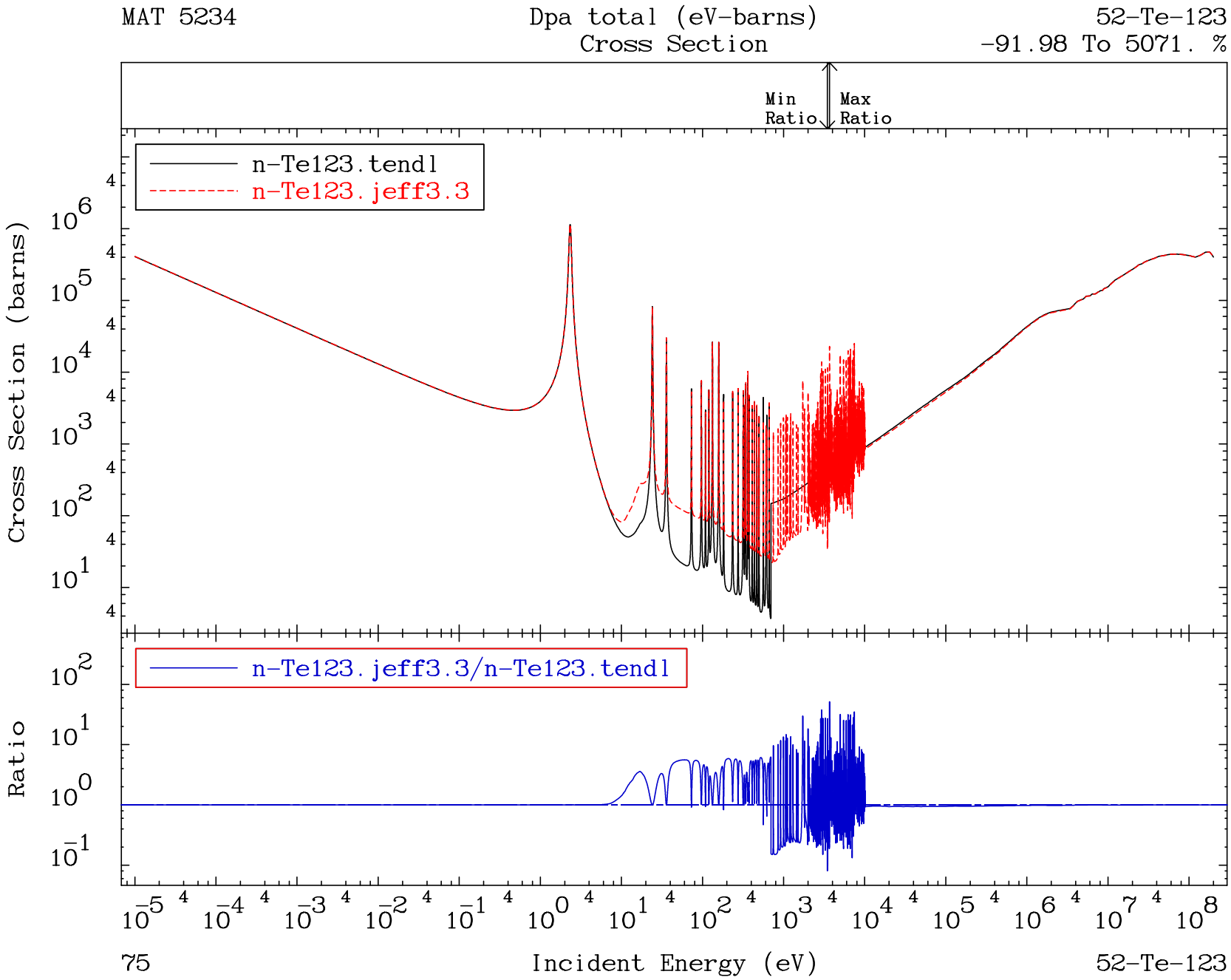

MAT 5234
Kerma inelastic (mt51-91)
Cross Section
52-Te-123
-13.71 To 12.03 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 197.58 keV
n-Te123.jeff3.3 Threshold 196.80 keV
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
70
52-Te-123

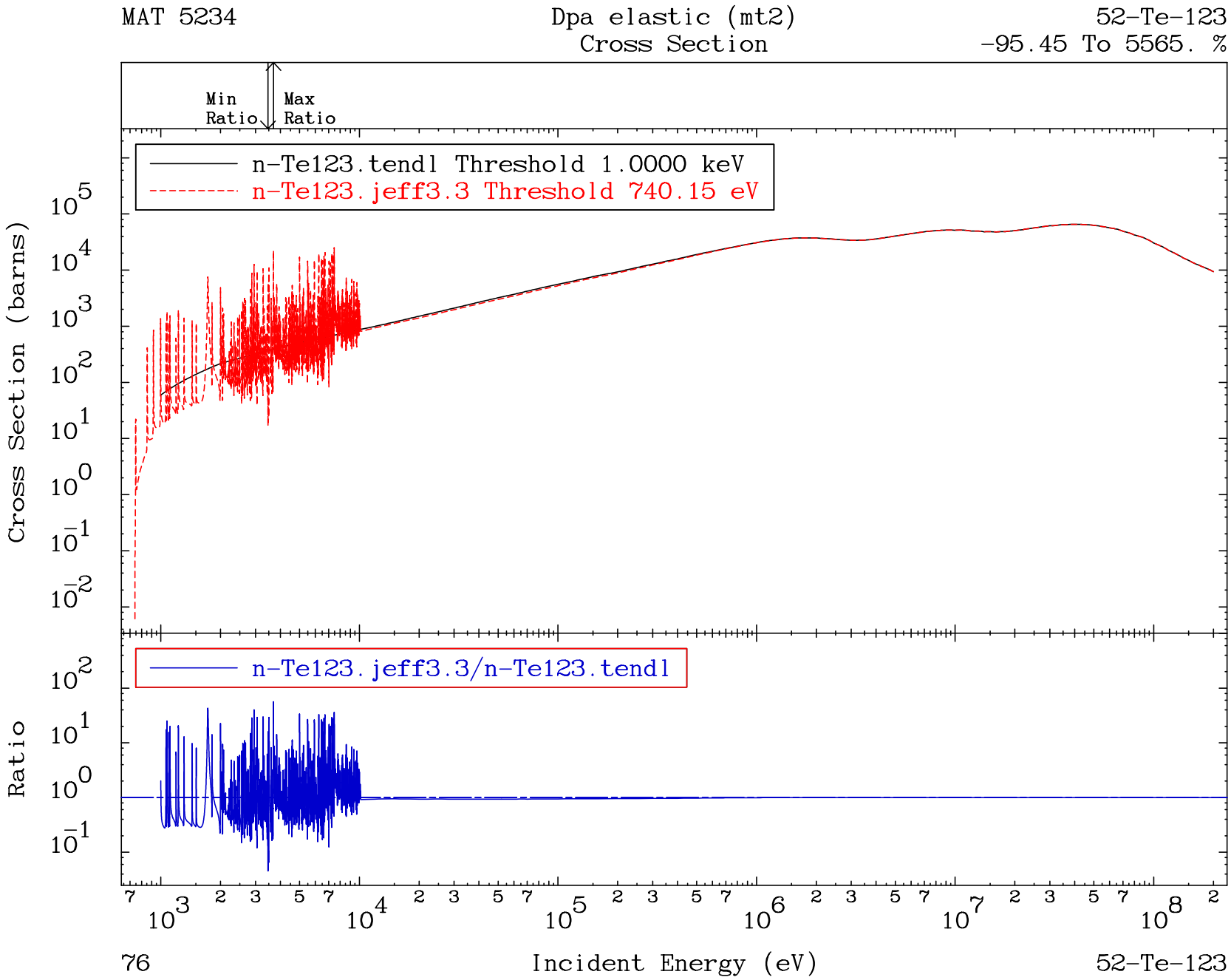

MAT 5234
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
52-Te-123
-13.71 To 12.03 %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.2
1.1
1.0
0.9
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
71
Incident Energy (eV)
52-Te-123

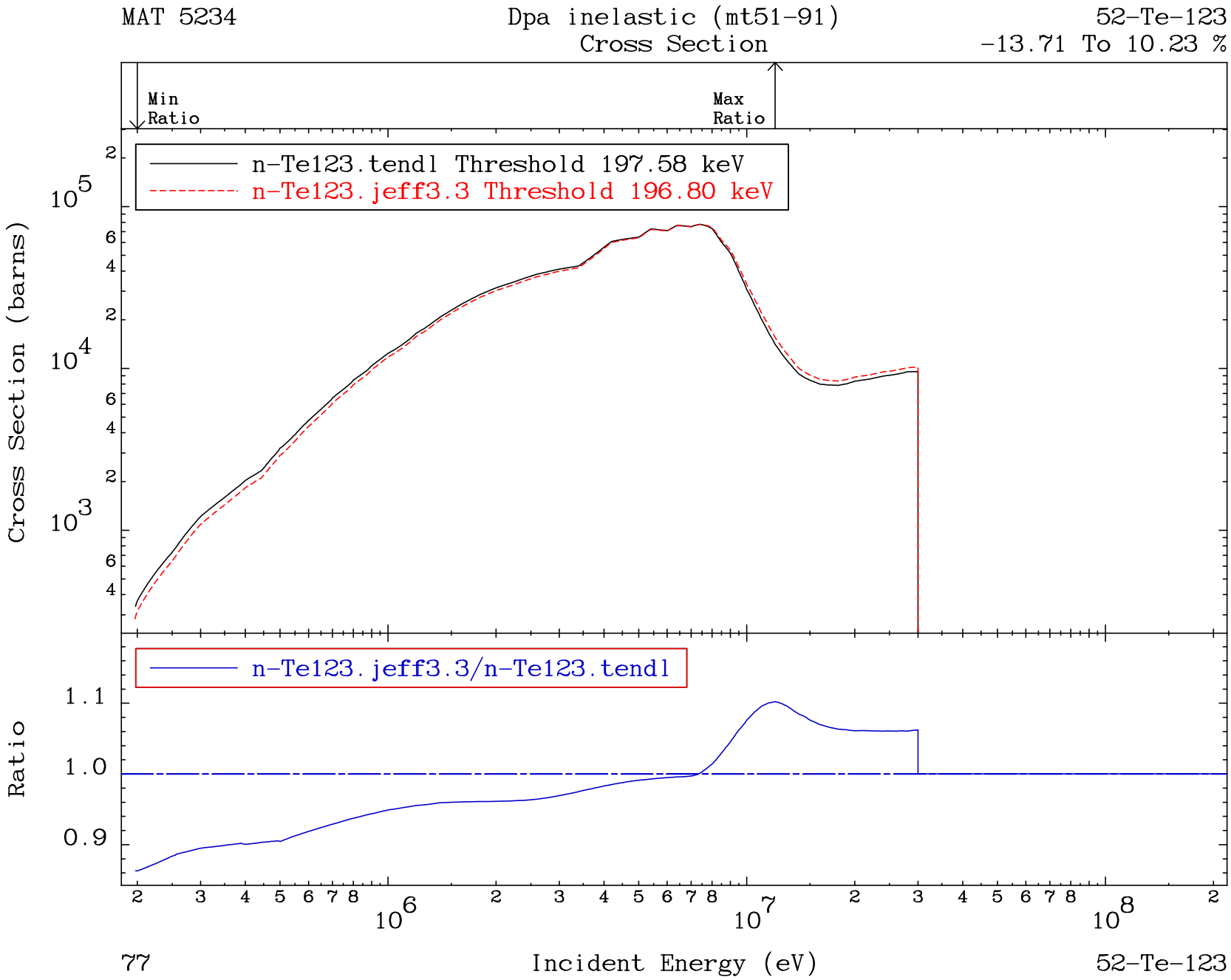

MAT 5234
Kerma capture (mt102)
Cross Section
52-Te-123
-99.84 To 2198. %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
72
52-Te-123

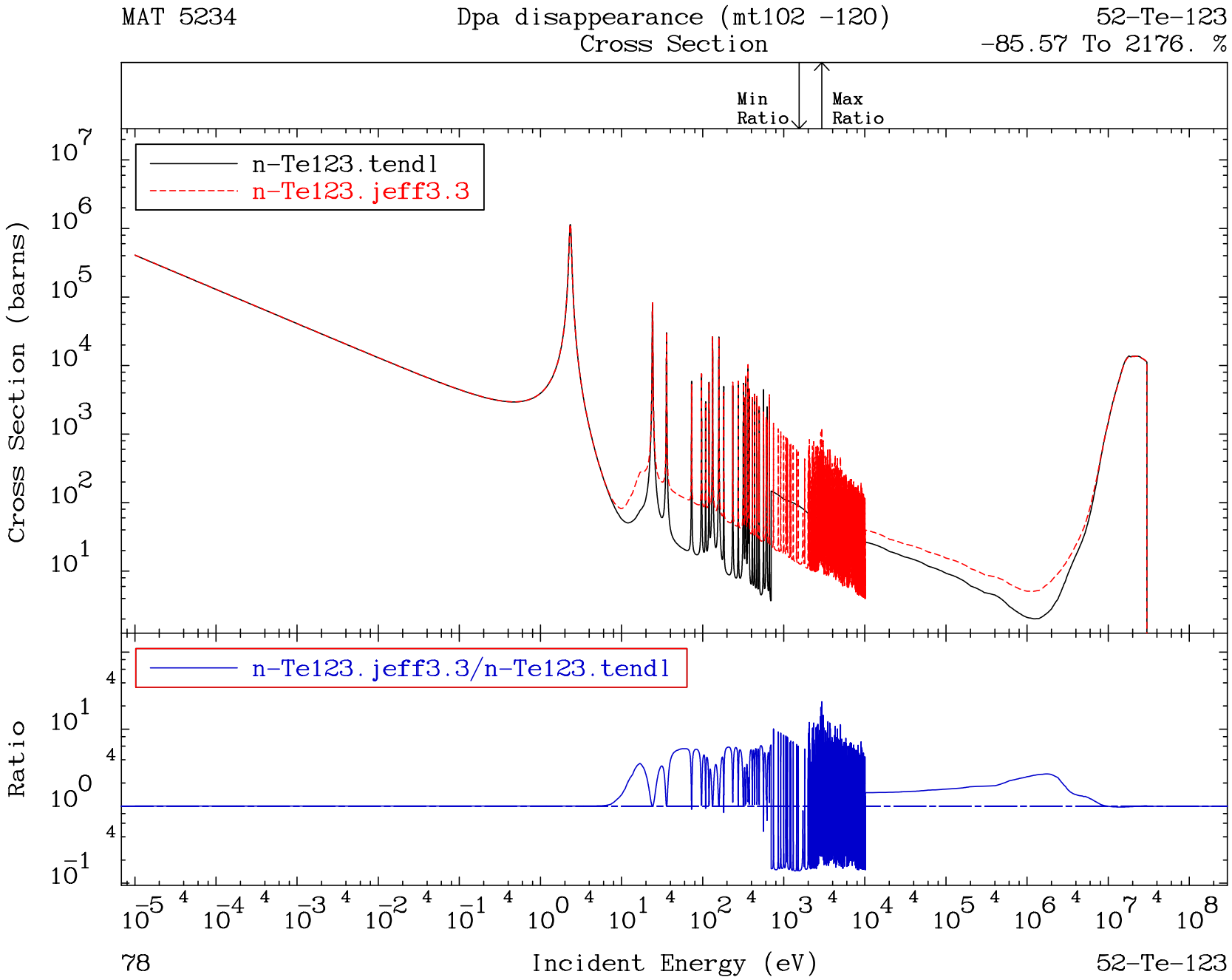

MAT 5234
Total photon (eV-barns)
Cross Section
52-Te-123
-99.84 To 2198. %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
73
52-Te-123

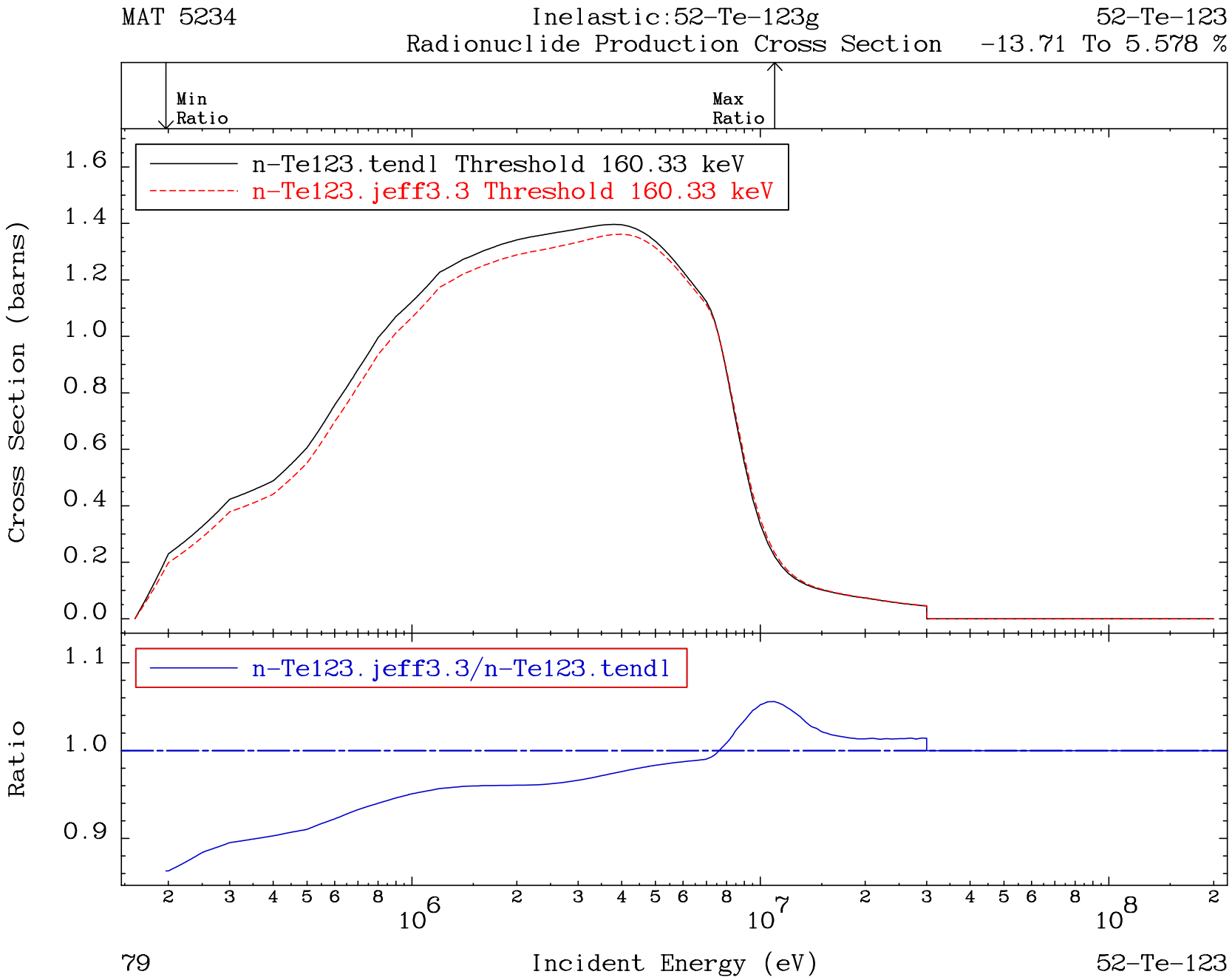

MAT 5234
Total kinematic kerma (high limit)
Cross Section
52-Te-123
-99.84 To 2198. %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
74
52-Te-123

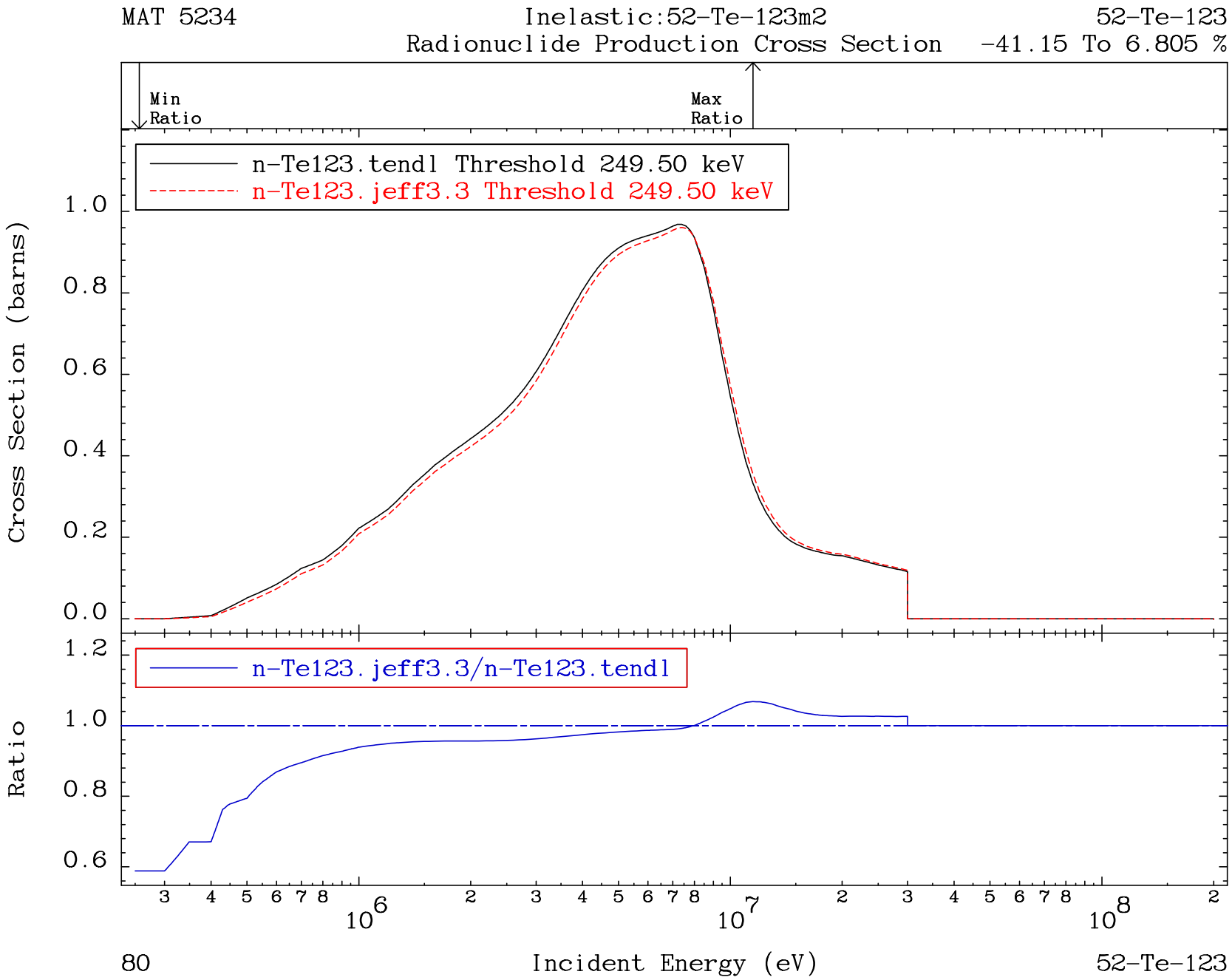

MAT 5234
Dpa total (eV-barns)
Cross Section
52-Te-123
-91.98 To 5071. %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
75
52-Te-123

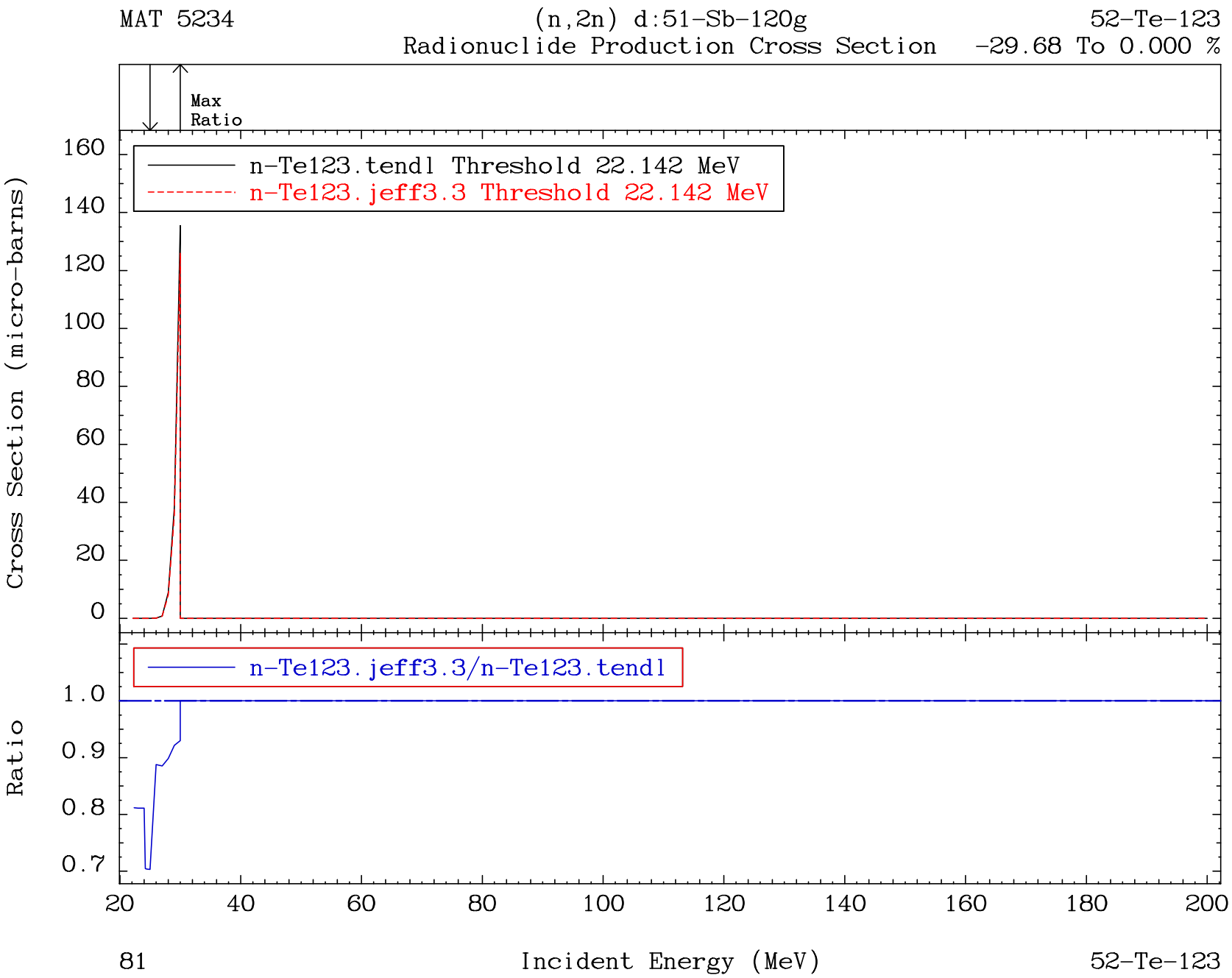

MAT 5234
Dpa elastic (mt2)
Cross Section
52-Te-123
-95.45 To 5565. %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 1.0000 keV
n-Te123.jeff3.3 Threshold 740.15 eV
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
76
52-Te-123

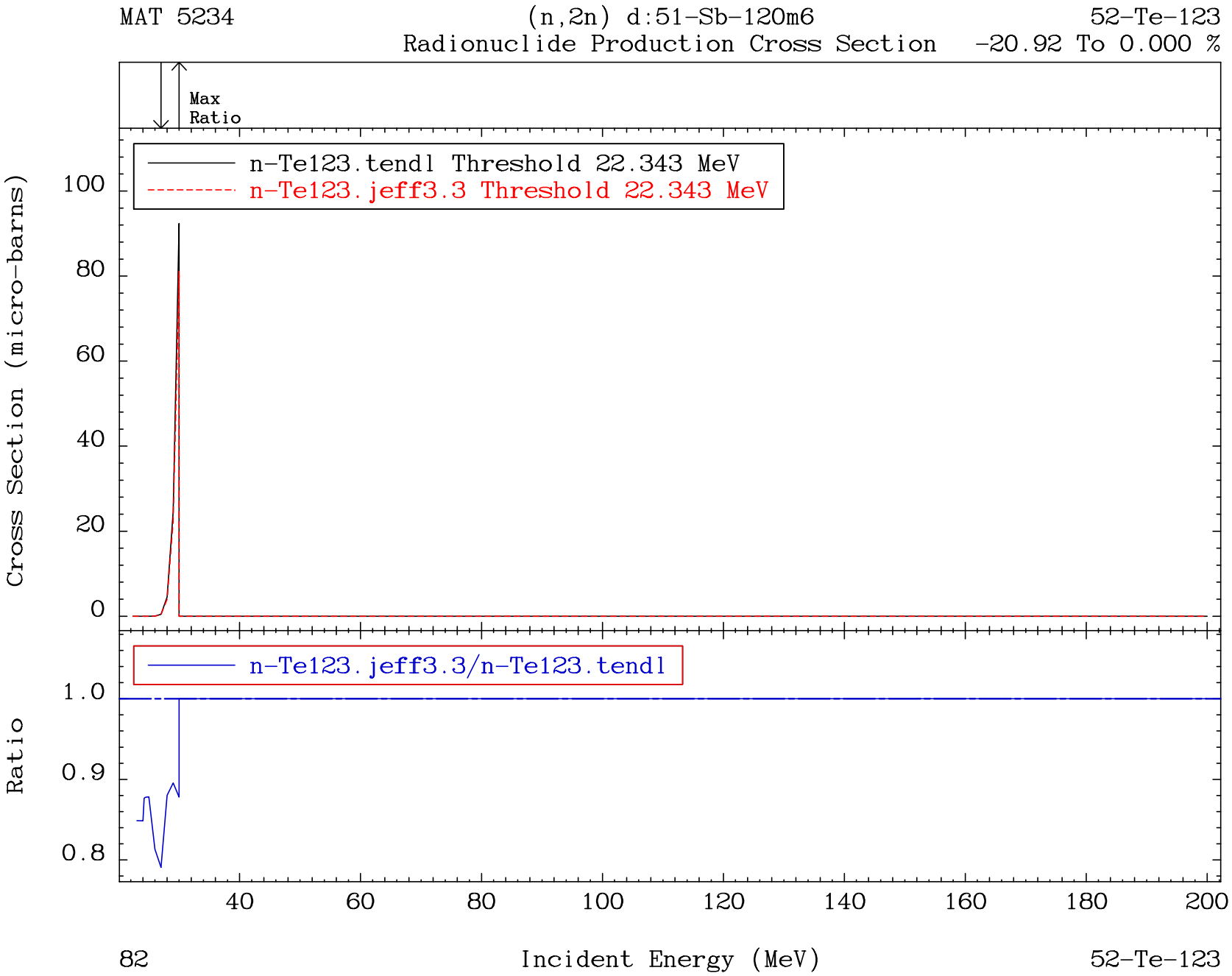

MAT 5234
Dpa inelastic (mt51-91)
Cross Section
52-Te-123
-13.71 To 10.23 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 197.58 keV
n-Te123.jeff3.3 Threshold 196.80 keV
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
77
52-Te-123

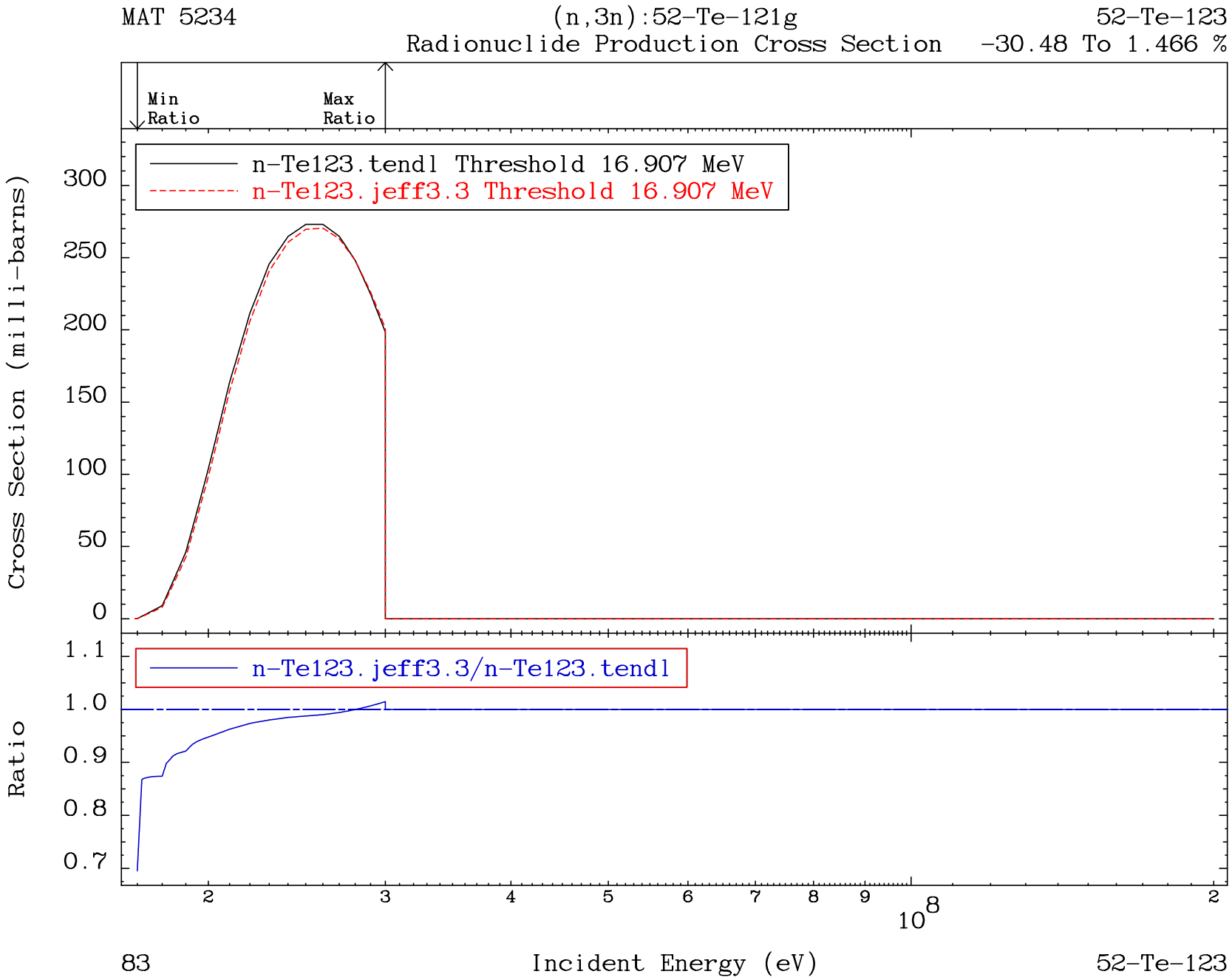

MAT 5234
Dpa disappearance (mt102 -120)
Cross Section
52-Te-123
-85.57 To 2176. %
Min Ratio
Max Ratio
n-Te123.tendl
n-Te123.jeff3.3
Cross Section (barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
78
52-Te-123

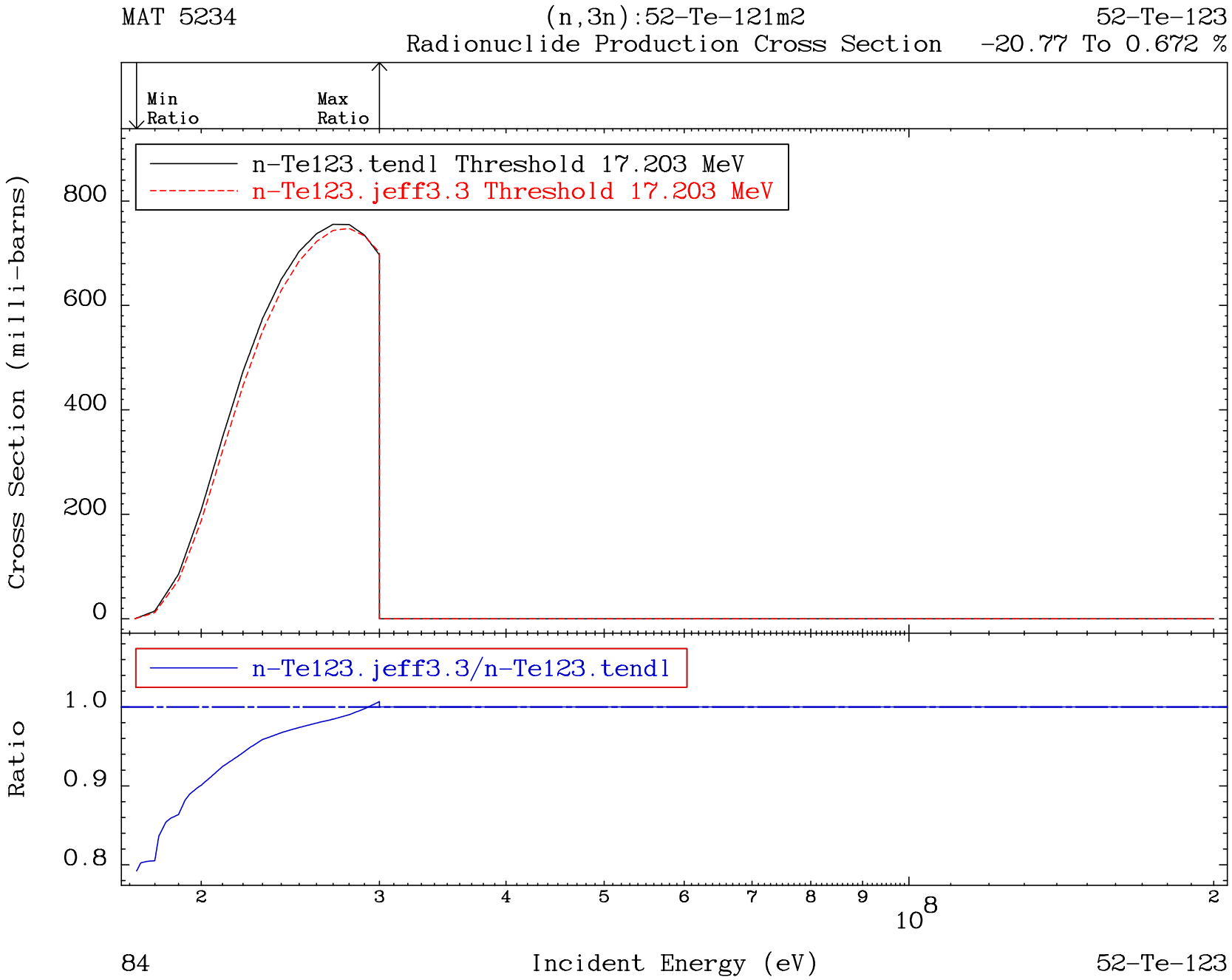

MAT 5234
Inelastic:52-Te-123g
52-Te-123
Radionuclide Production Cross Section
-13.71 To 5.578 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 160.33 keV
n-Te123.jeff3.3 Threshold 160.33 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.1
1.0
0.9
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
79
Incident Energy (eV)
52-Te-123

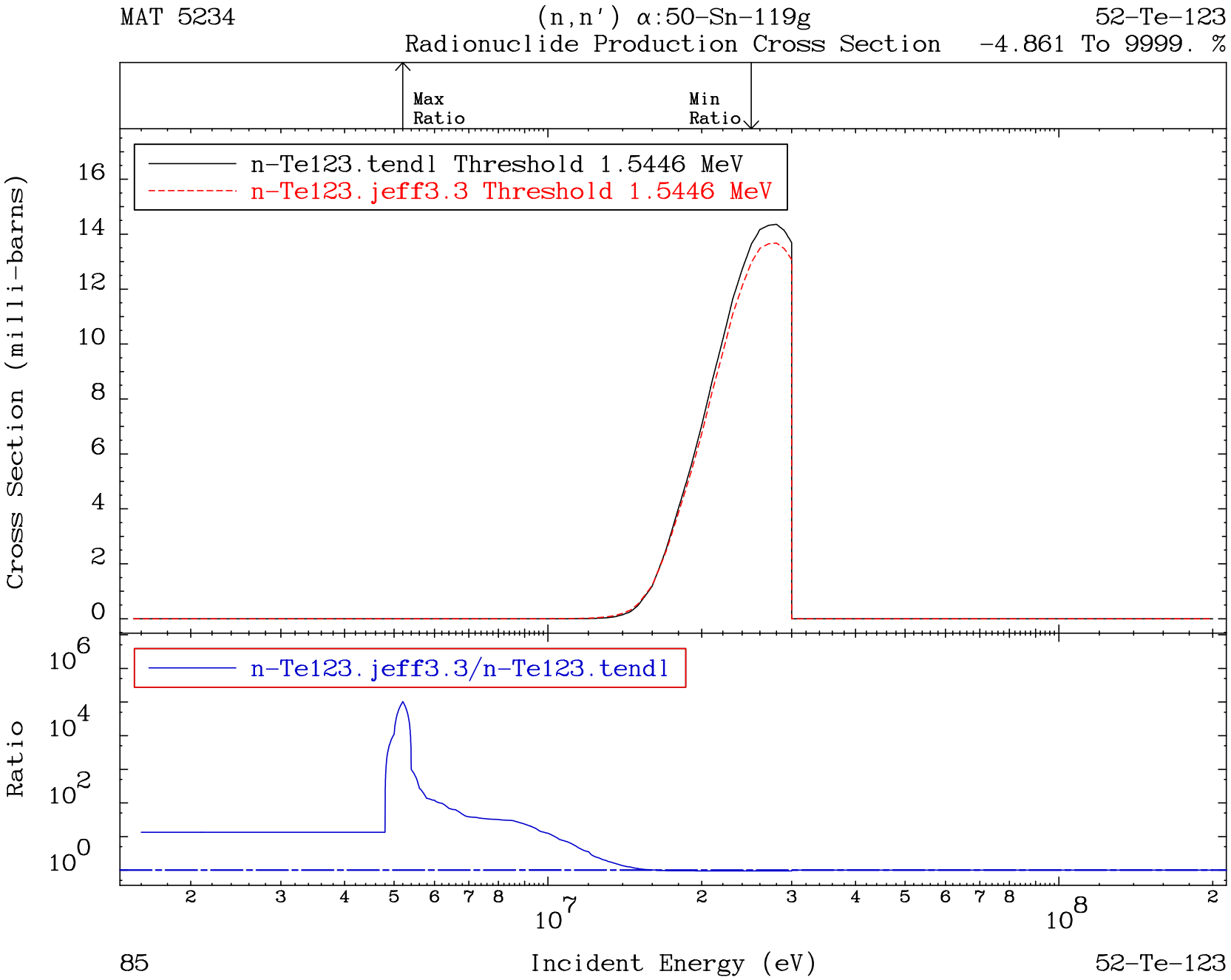

MAT 5234
Inelastic:52-Te-123m2
52-Te-123
Radionuclide Production Cross Section -41.15 To 6.805 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 249.50 keV
n-Te123.jeff3.3 Threshold 249.50 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.2
1.0
0.8
0.6
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
80
Incident Energy (eV)
52-Te-123

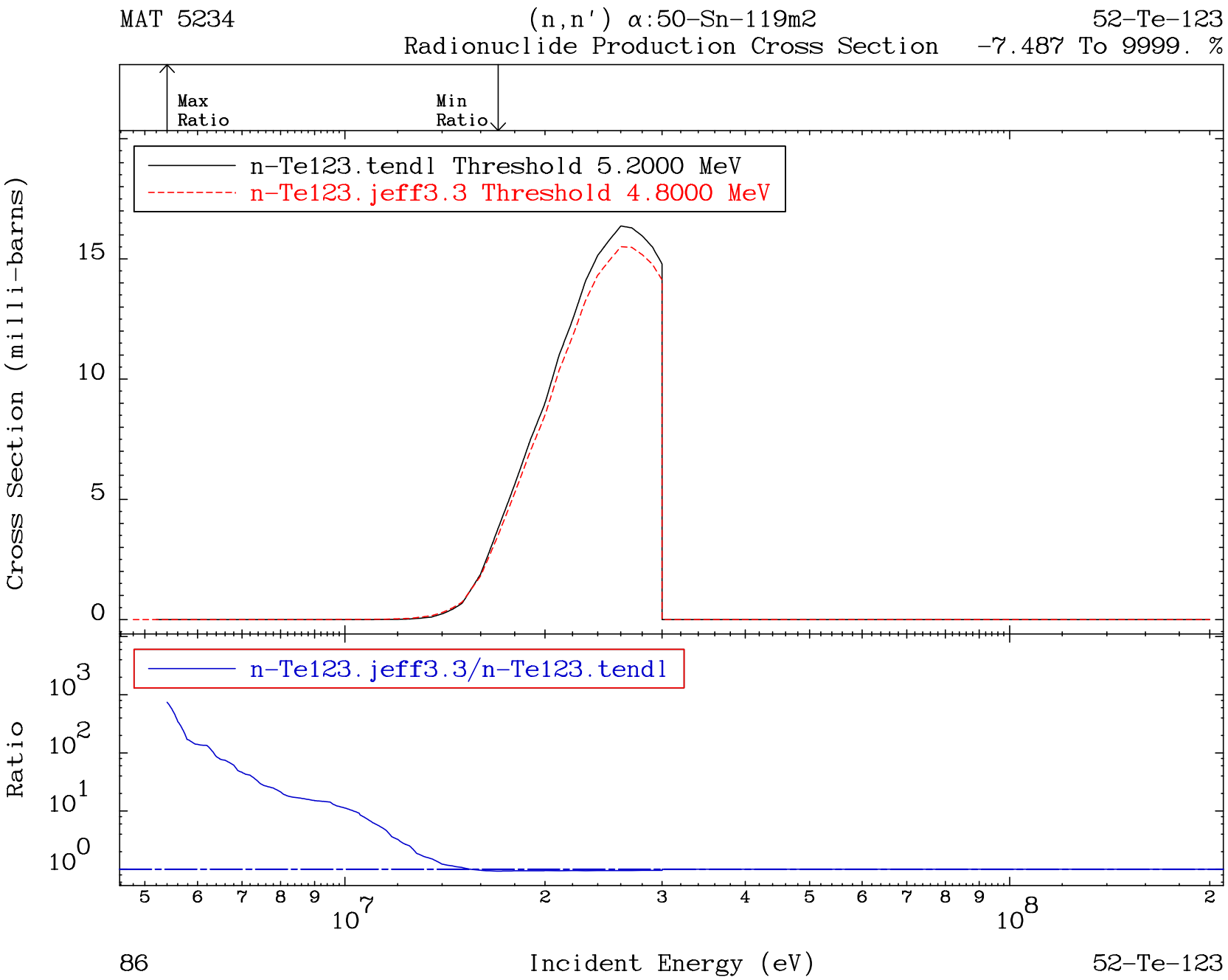

MAT 5234
(n,2n) d:51-Sb-120g
52-Te-123
Radionuclide Production Cross Section -29.68 To 0.000 %
Max
Ratio
n-Te123.tendl Threshold 22.142 MeV
n-Te123.jeff3.3 Threshold 22.142 MeV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.9
0.8
0.7
20
40
60
80
100
120
140
160
180
200
81
Incident Energy (MeV)
52-Te-123

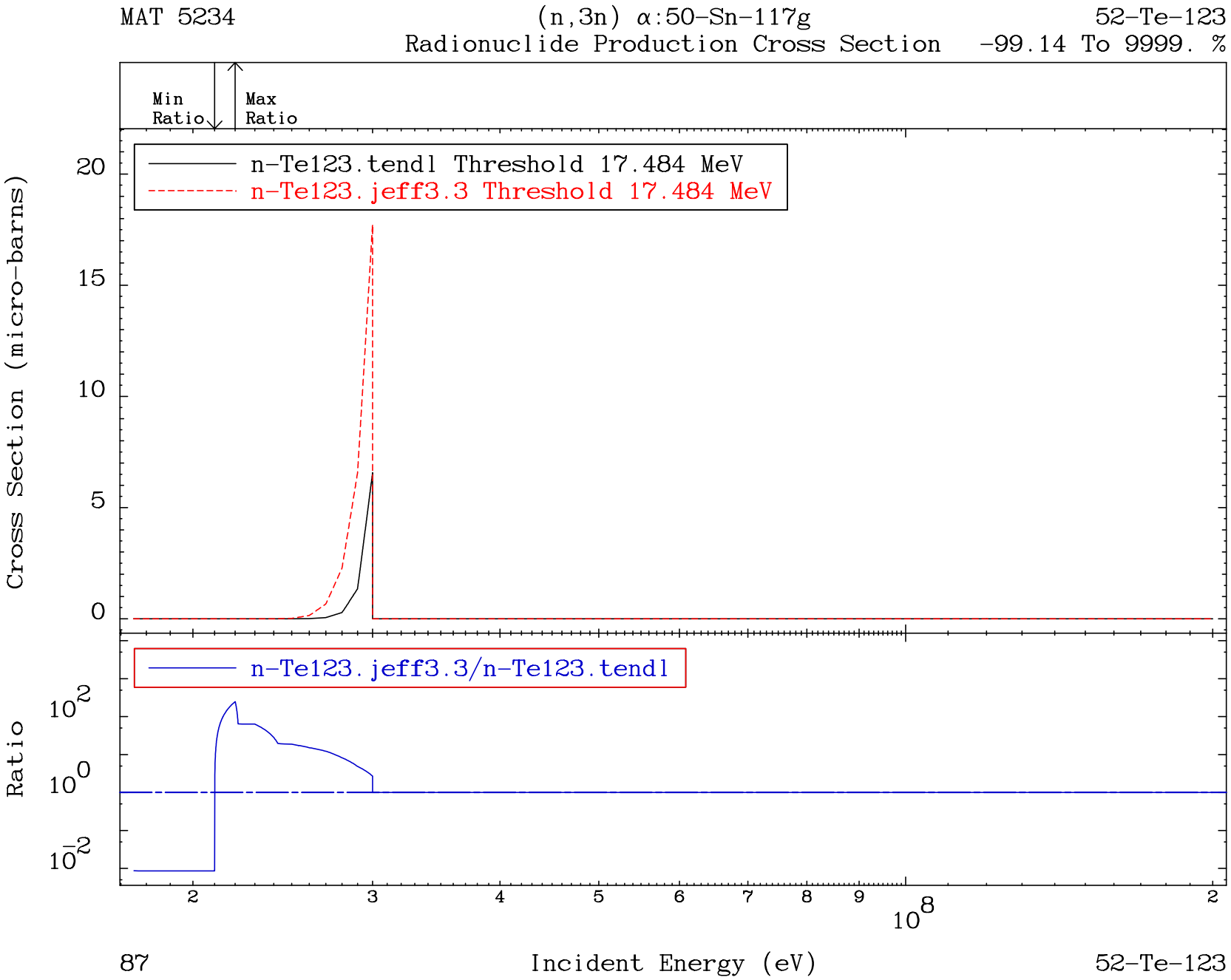

MAT 5234
(n,2n) d:51-Sb-120m6
52-Te-123
Radionuclide Production Cross Section -20.92 To 0.000 %
Max Ratio
n-Te123.tendl Threshold 22.343 MeV
n-Te123.jeff3.3 Threshold 22.343 MeV
Cross Section (micro-barns)
100
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.9
0.8
40
60
80
100
120
140
160
180
200
82
Incident Energy (MeV)
52-Te-123

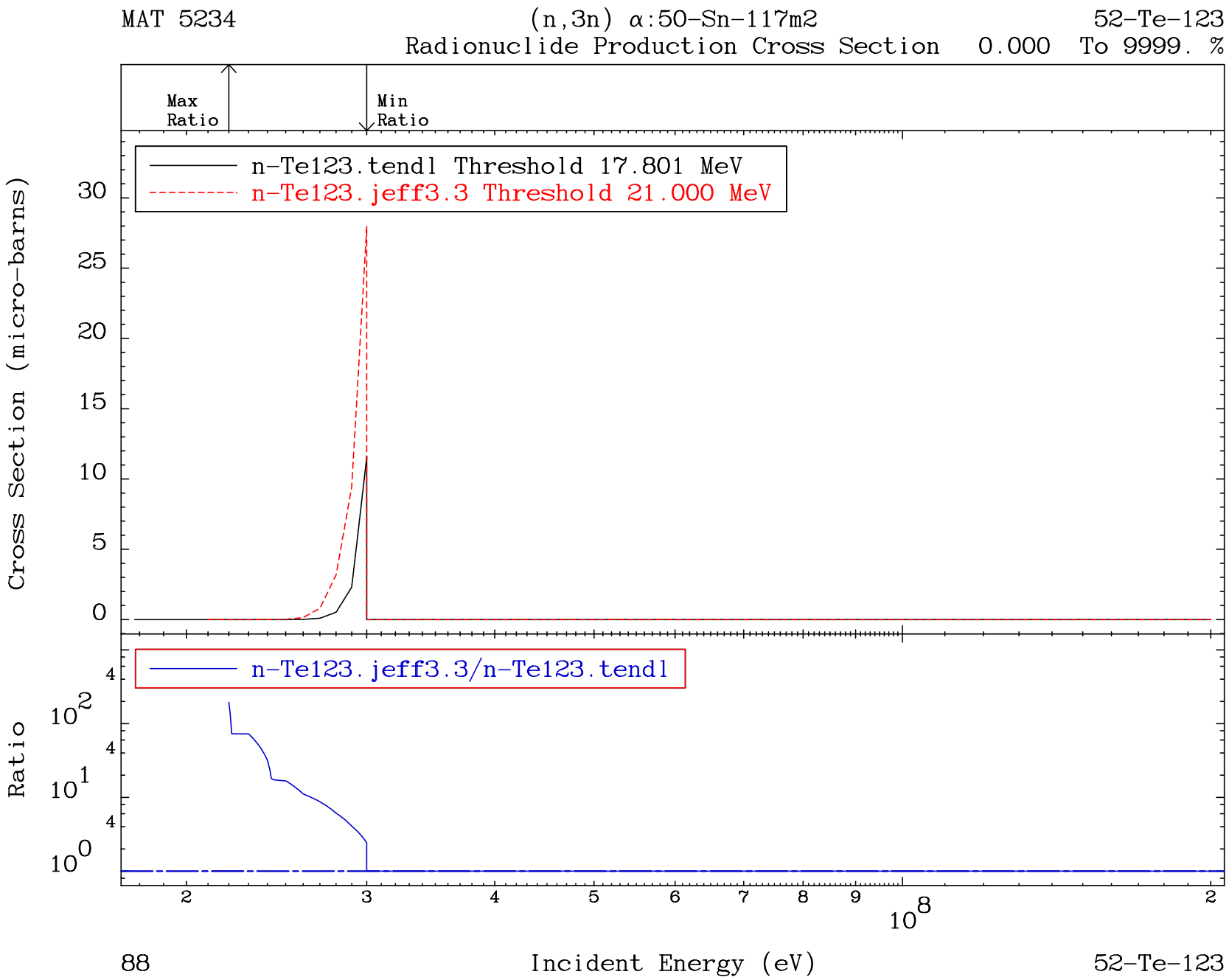

MAT 5234
(n,3n):52-Te-121g
52-Te-123
Radionuclide Production Cross Section
-30.48 To 1.466 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 16.907 MeV
n-Te123.jeff3.3 Threshold 16.907 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.1
1.0
0.9
0.8
0.7
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
52-Te-123

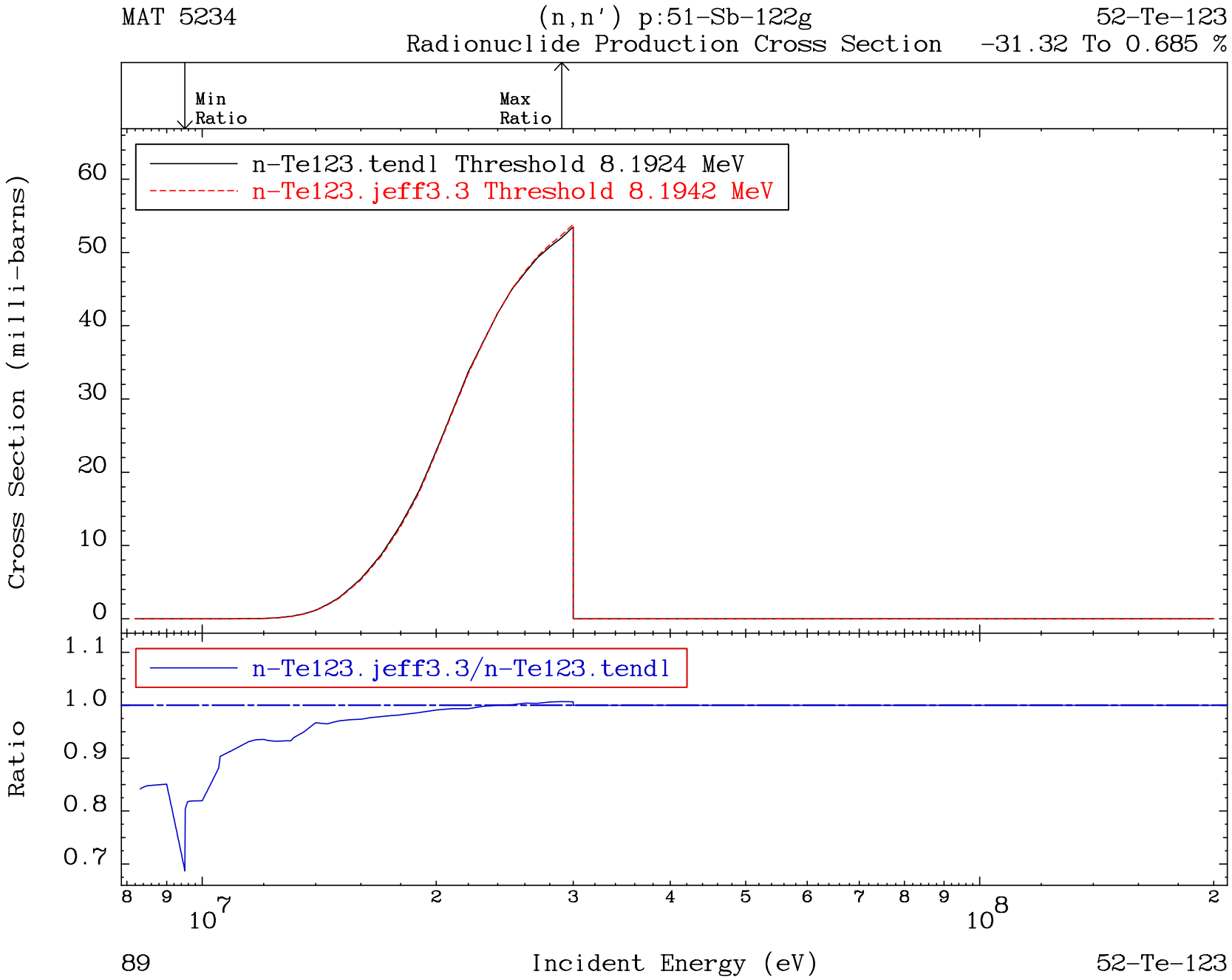

MAT 5234
(n,3n):52-Te-121m2
52-Te-123
Radionuclide Production Cross Section
-20.77 To 0.672 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 17.203 MeV
n-Te123.jeff3.3 Threshold 17.203 MeV
Cross Section (milli-barns)
800
600
400
200
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
52-Te-123

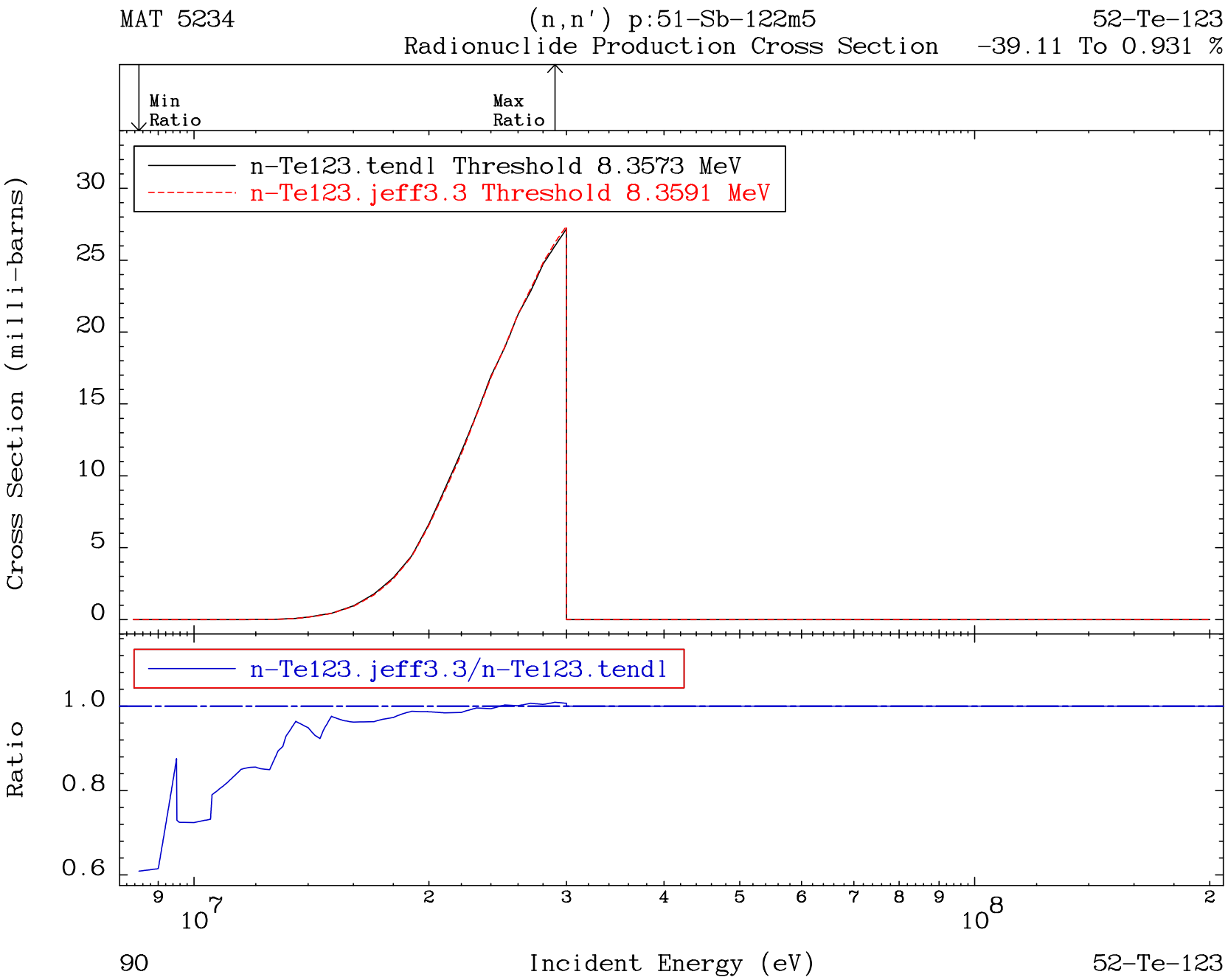

MAT 5234
(n,n') α:50-Sn-119g
52-Te-123
Radionuclide Production Cross Section -4.861 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 1.5446 MeV
n-Te123.jeff3.3 Threshold 1.5446 MeV
Cross Section (milli-barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
85
52-Te-123

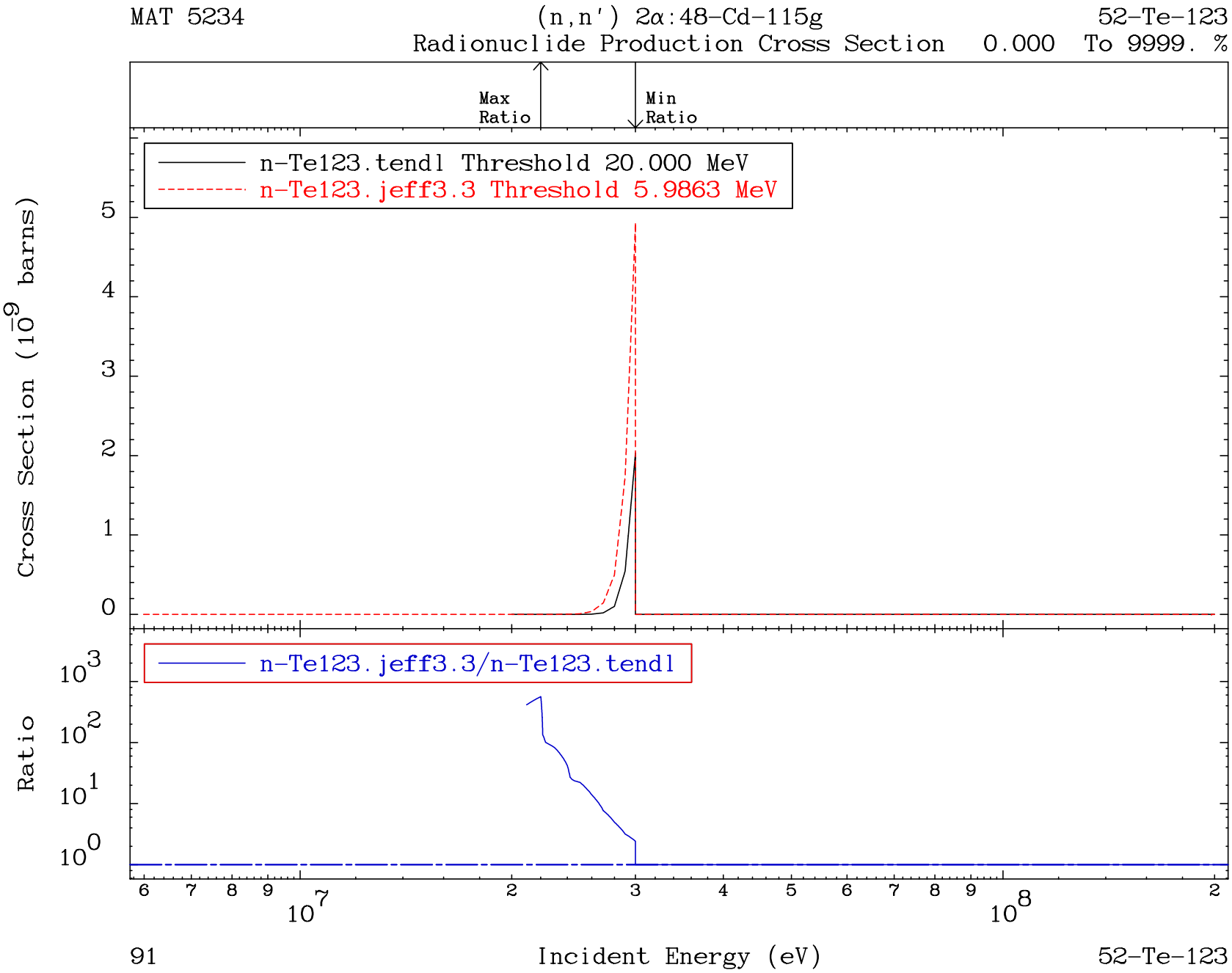

MAT 5234
(n,n') α:50-Sn-119m2
52-Te-123
Radionuclide Production Cross Section -7.487 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 5.2000 MeV
n-Te123.jeff3.3 Threshold 4.8000 MeV
Cross Section (milli-barns)
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^3
10^2
10^1
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
86
Incident Energy (eV)
52-Te-123

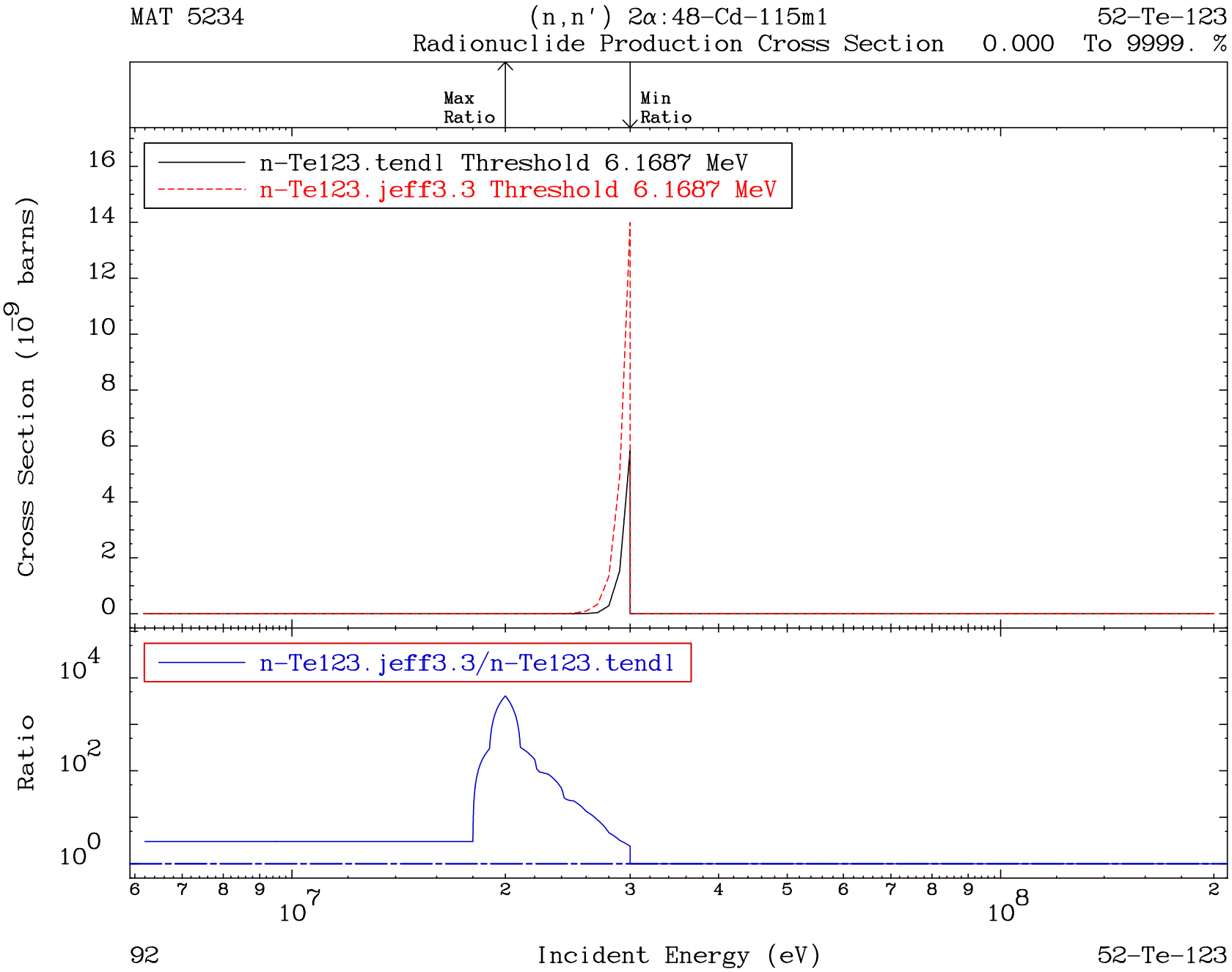

MAT 5234
(n,3n) α:50-Sn-117g
52-Te-123
Radionuclide Production Cross Section -99.14 To 9999. %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 17.484 MeV
n-Te123.jeff3.3 Threshold 17.484 MeV
Cross Section (micro-barns)
20
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
52-Te-123

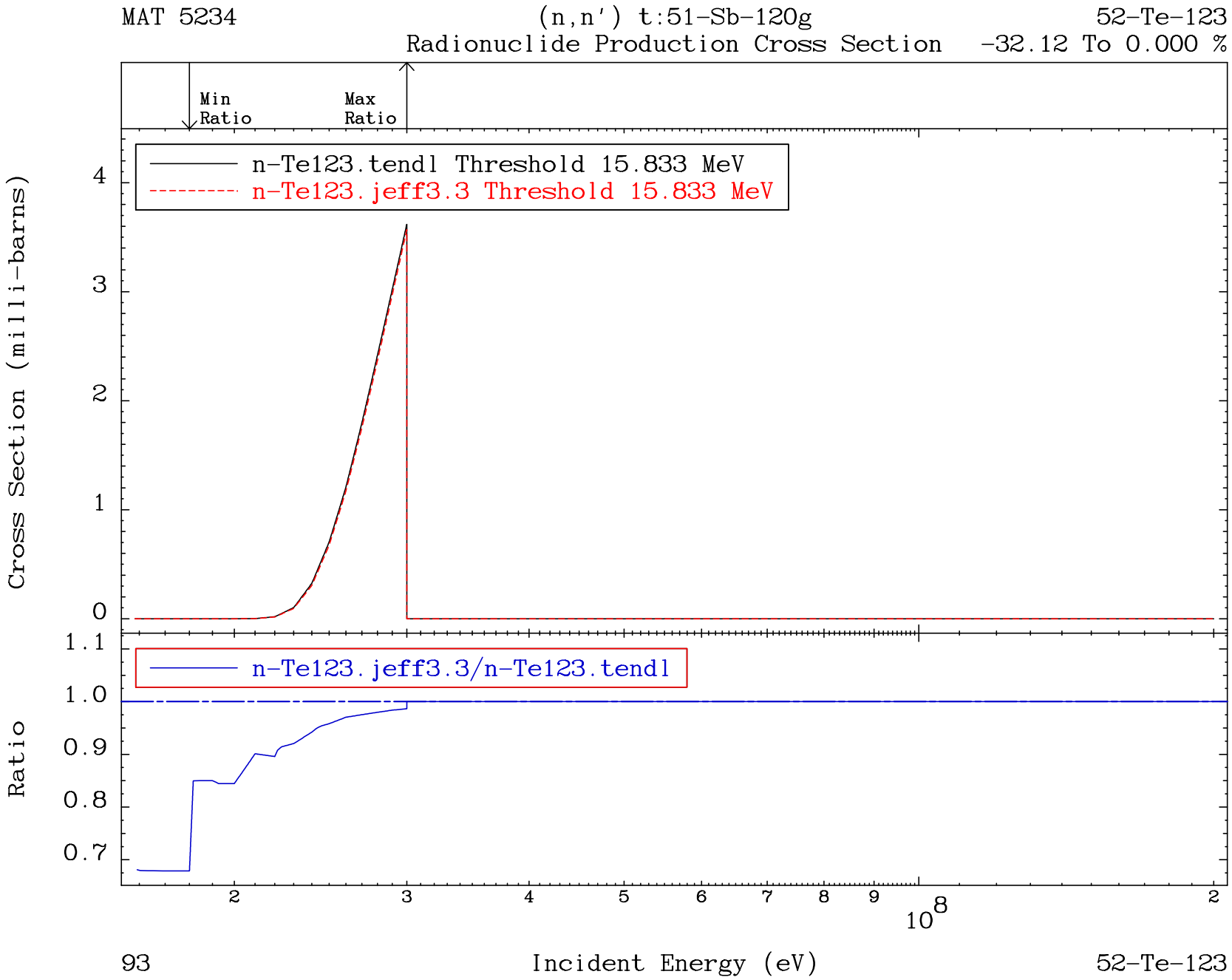

MAT 5234
(n,3n) α:50-Sn-117m2
52-Te-123
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 17.801 MeV
n-Te123.jeff3.3 Threshold 21.000 MeV
Cross Section (micro-barns)
30
25
20
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
52-Te-123

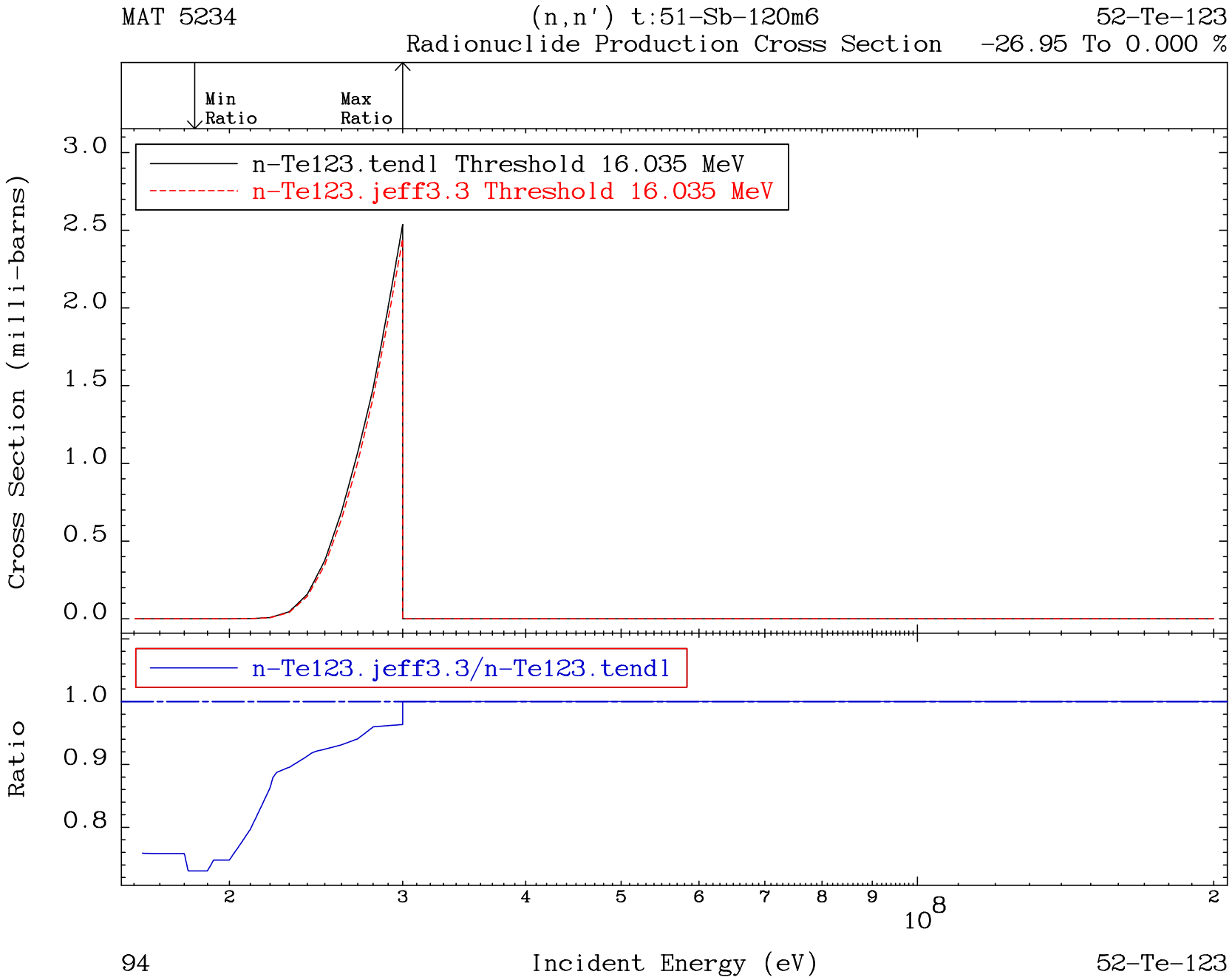

MAT 5234
(n,n') p:51-Sb-122g
52-Te-123
Radionuclide Production Cross Section -31.32 To 0.685 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 8.1924 MeV
n-Te123.jeff3.3 Threshold 8.1942 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.1
1.0
0.9
0.8
0.7
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
89
Incident Energy (eV)
52-Te-123

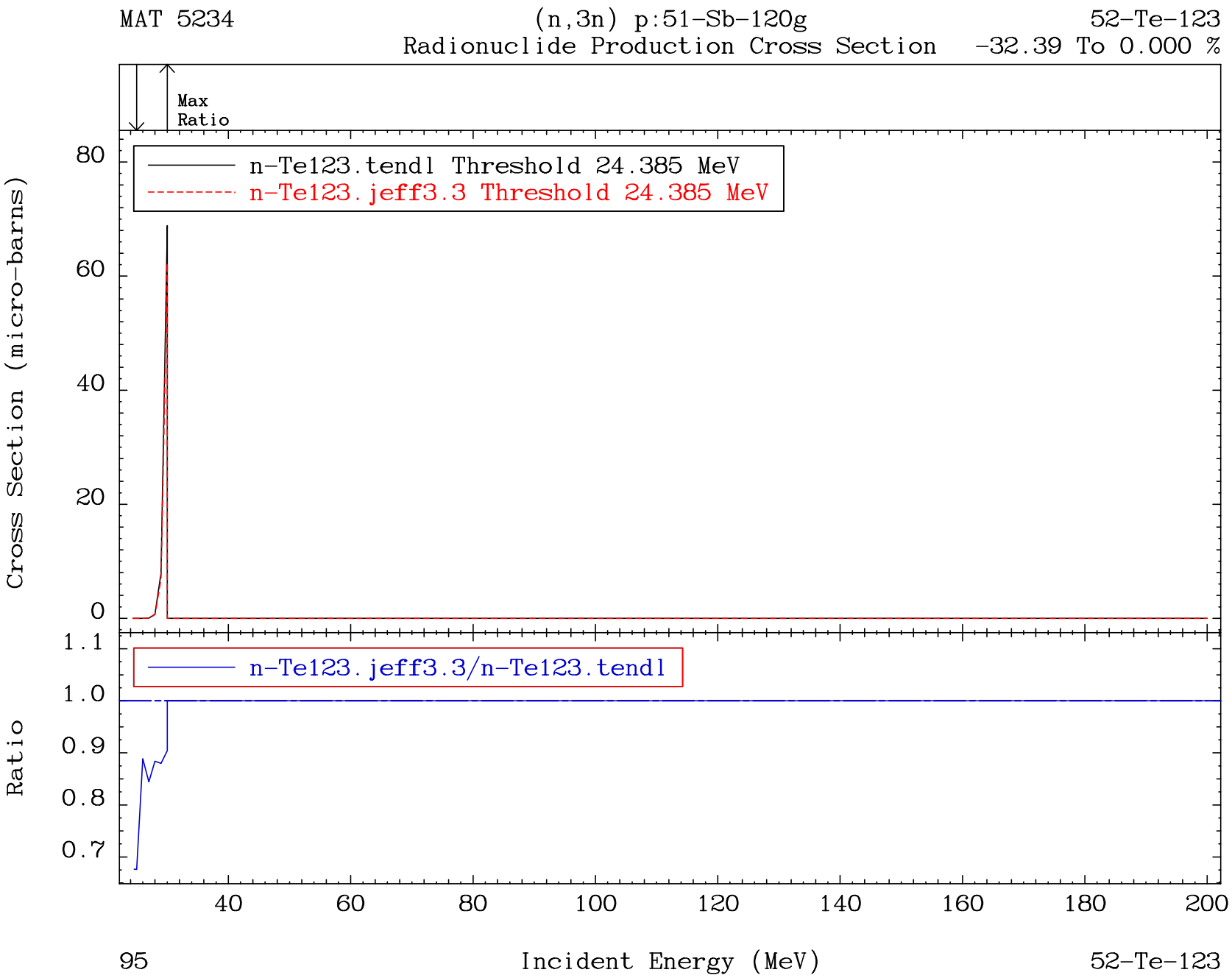

MAT 5234
(n,n') p:51-Sb-122m5
52-Te-123
Radionuclide Production Cross Section -39.11 To 0.931 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 8.3573 MeV
n-Te123.jeff3.3 Threshold 8.3591 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.8
0.6
9
10^7
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
52-Te-123

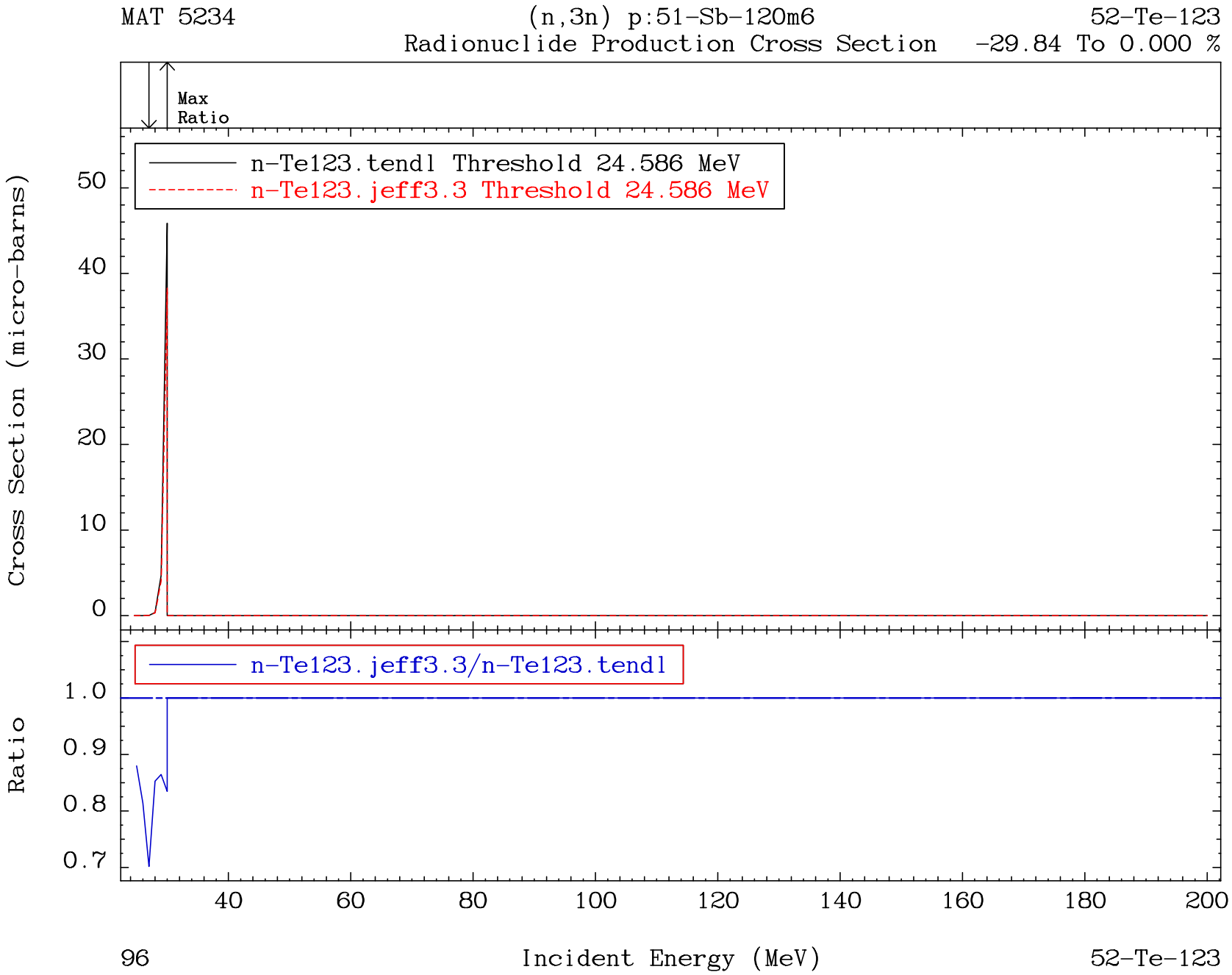

MAT 5234
(n,n') 2α:48-Cd-115g
52-Te-123
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 20.000 MeV
n-Te123.jeff3.3 Threshold 5.9863 MeV
Cross Section (10^{-9} barns)
0
1
2
3
4
5
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^0
10^1
10^2
10^3
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
91
Incident Energy (eV)
52-Te-123

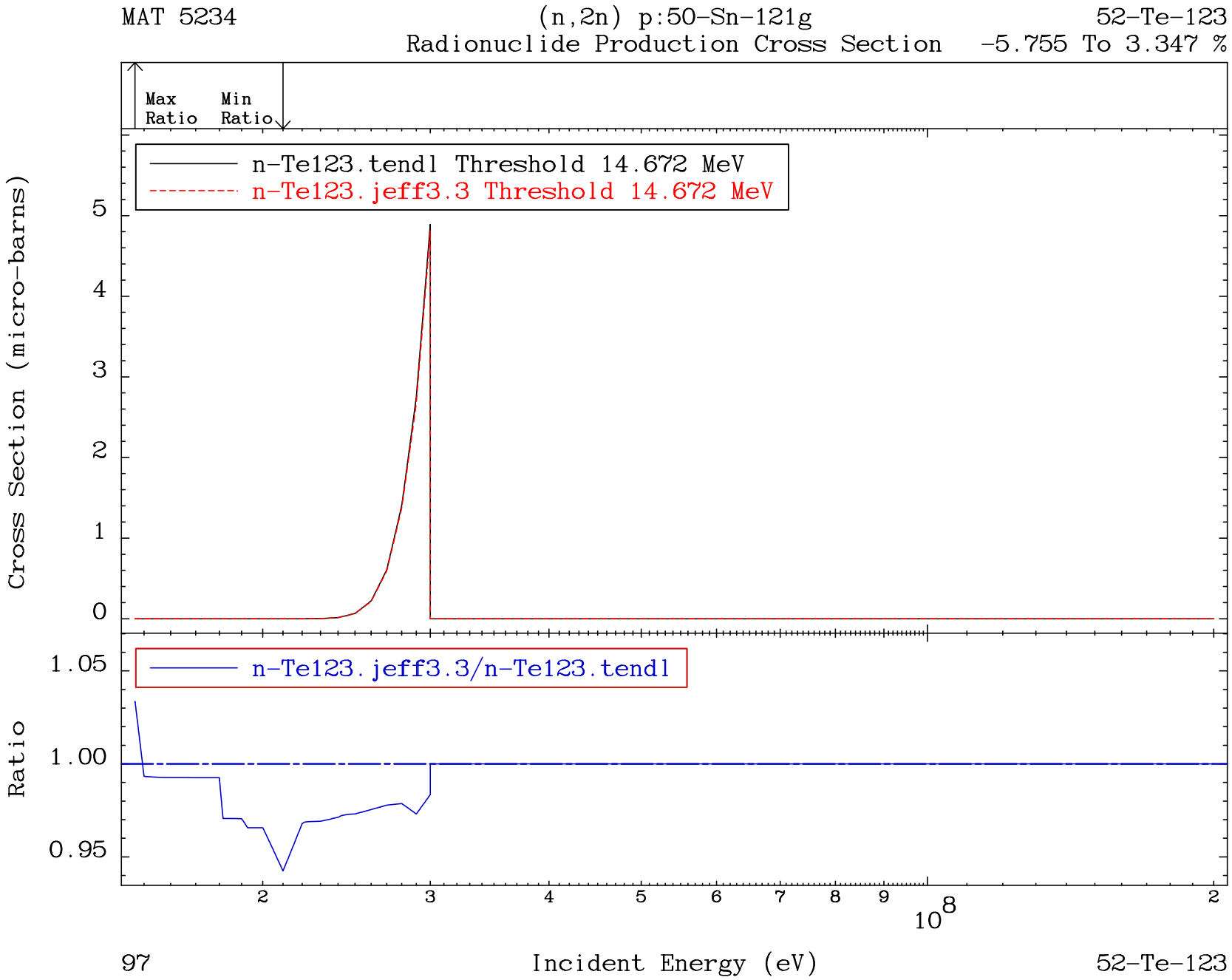

MAT 5234
(n,n') 2α:48-Cd-115m1
52-Te-123
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 6.1687 MeV
n-Te123.jeff3.3 Threshold 6.1687 MeV
Cross Section (10^{-9} barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
92
52-Te-123

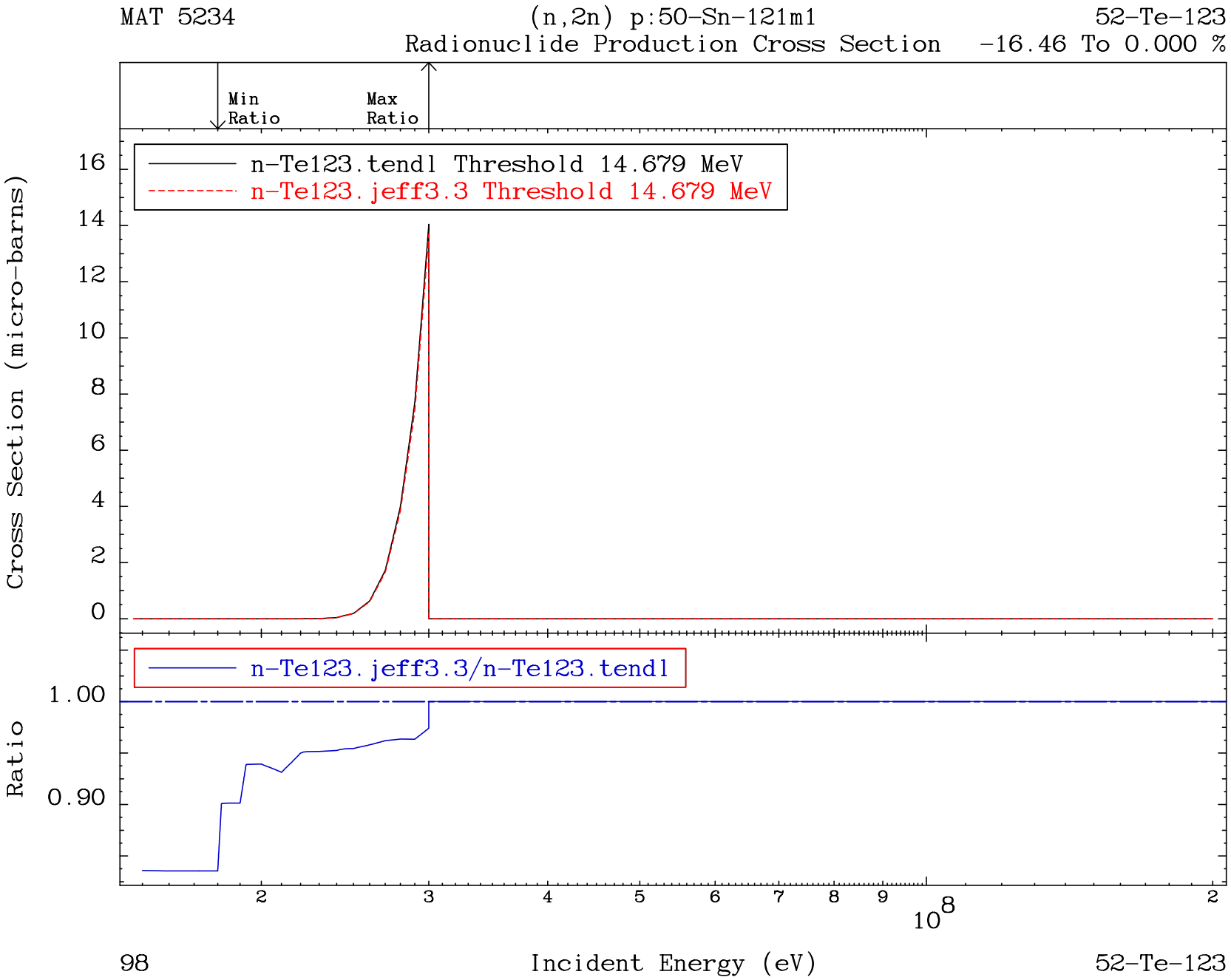

MAT 5234
(n,n') t:51-Sb-120g
52-Te-123
Radionuclide Production Cross Section
-32.12 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 15.833 MeV
n-Te123.jeff3.3 Threshold 15.833 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Te123.jeff3.3/n-Te123.tendl
Ratio
0.7
0.8
0.9
1.0
1.1
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
52-Te-123

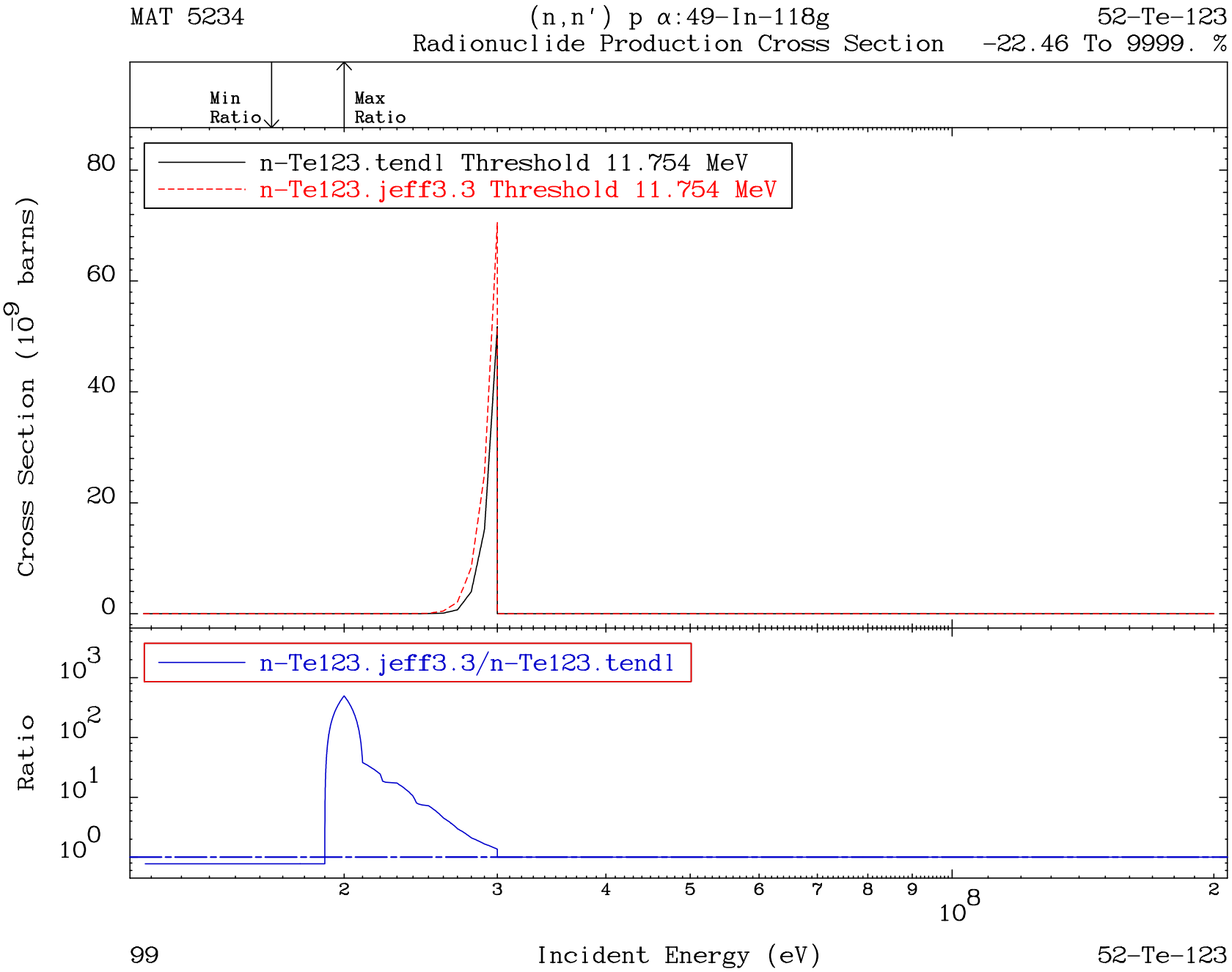

MAT 5234
(n,n') t:51-Sb-120m6
52-Te-123
Radionuclide Production Cross Section -26.95 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 16.035 MeV
n-Te123.jeff3.3 Threshold 16.035 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
52-Te-123

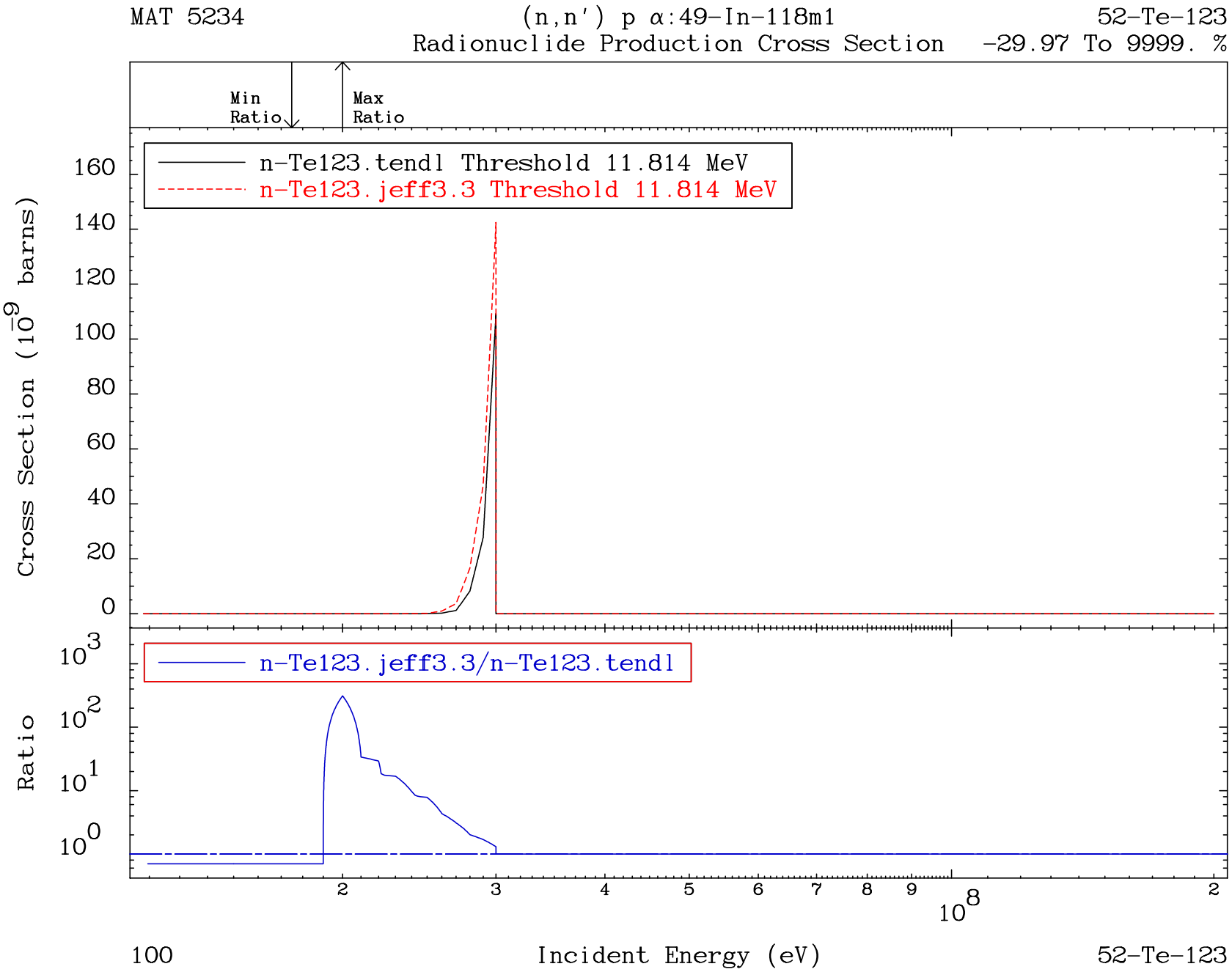

MAT 5234
(n,3n) p:51-Sb-120g
52-Te-123
Radionuclide Production Cross Section
-32.39 To 0.000 %
Max
Ratio
n-Te123.tendl Threshold 24.385 MeV
n-Te123.jeff3.3 Threshold 24.385 MeV
Cross Section (micro-barns)
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
1.1
1.0
0.9
0.8
0.7
Ratio
40
60
80
100
120
140
160
180
200
95
Incident Energy (MeV)
52-Te-123

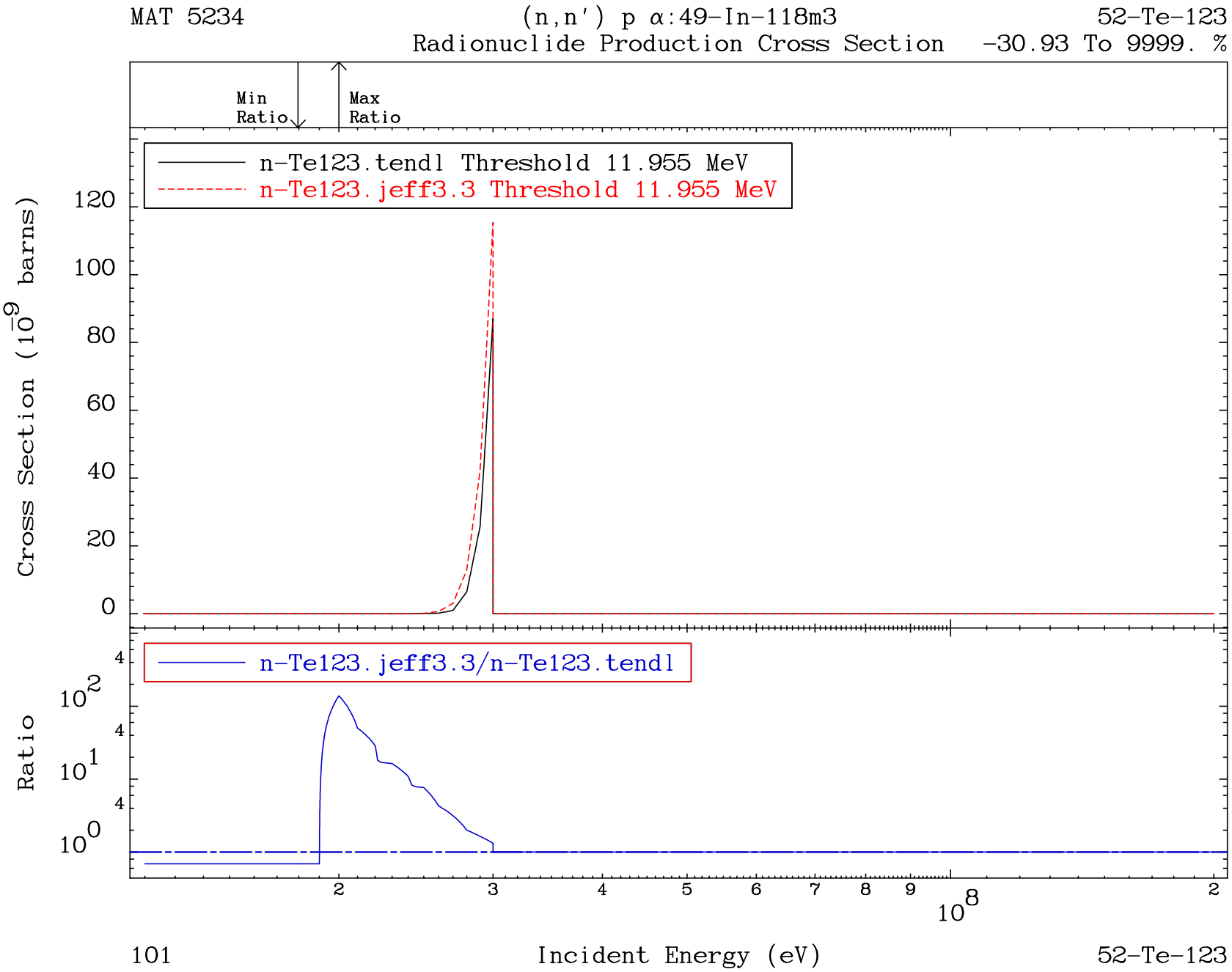

MAT 5234
(n,3n) p:51-Sb-120m6
52-Te-123
Radionuclide Production Cross Section -29.84 To 0.000 %
Max
Ratio
n-Te123.tendl Threshold 24.586 MeV
n-Te123.jeff3.3 Threshold 24.586 MeV
Cross Section (micro-barns)
50
40
30
20
10
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.0
0.9
0.8
0.7
40
60
80
100
120
140
160
180
200
96
Incident Energy (MeV)
52-Te-123

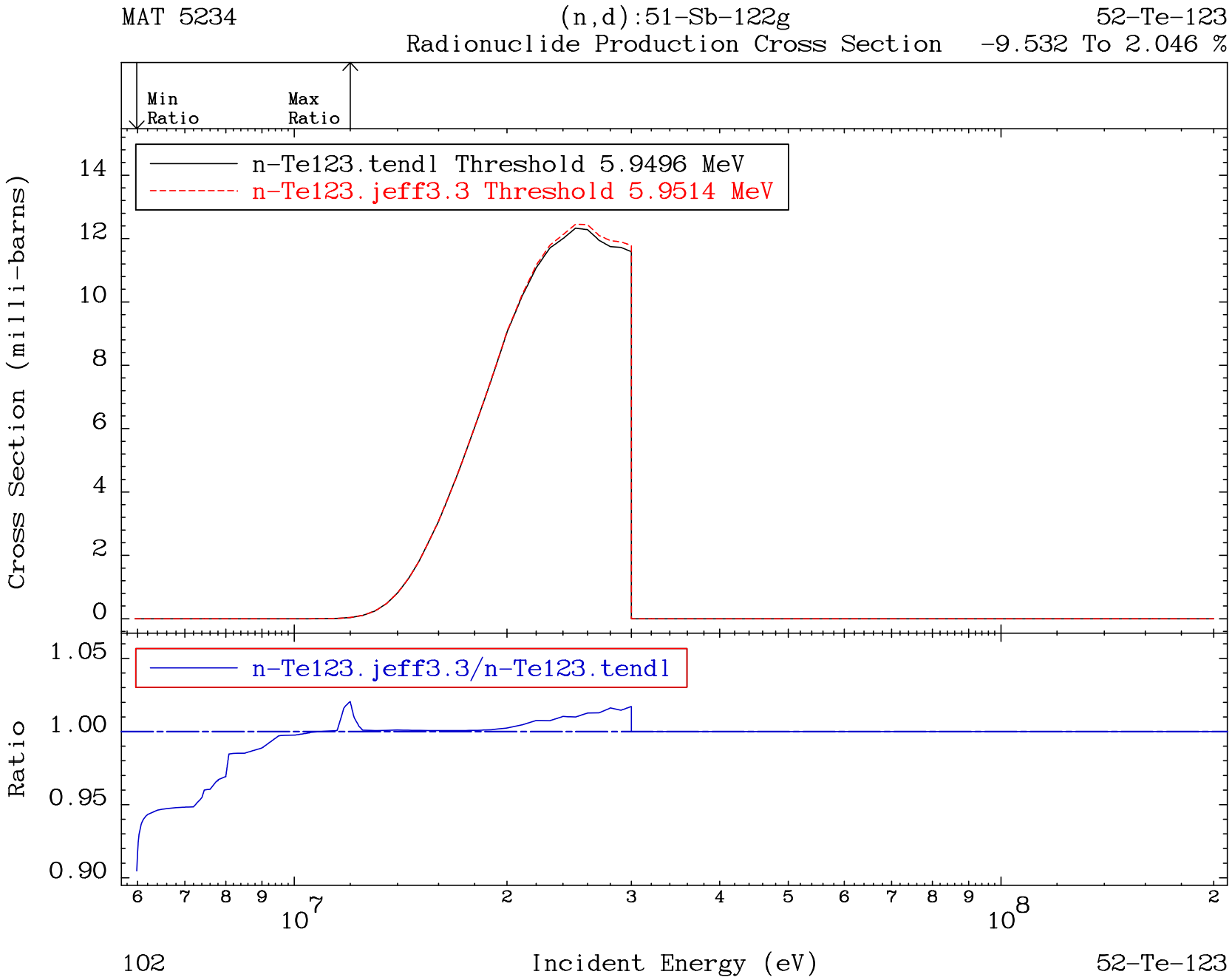

MAT 5234
(n,2n) p:50-Sn-121g
52-Te-123
Radionuclide Production Cross Section
-5.755 To 3.347 %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 14.672 MeV
n-Te123.jeff3.3 Threshold 14.672 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
n-Te123.jeff3.3/n-Te123.tendl
Ratio
0.95
1.00
1.05
2
3
4
5
6
7
8
9
2
10^8
97
Incident Energy (eV)
52-Te-123

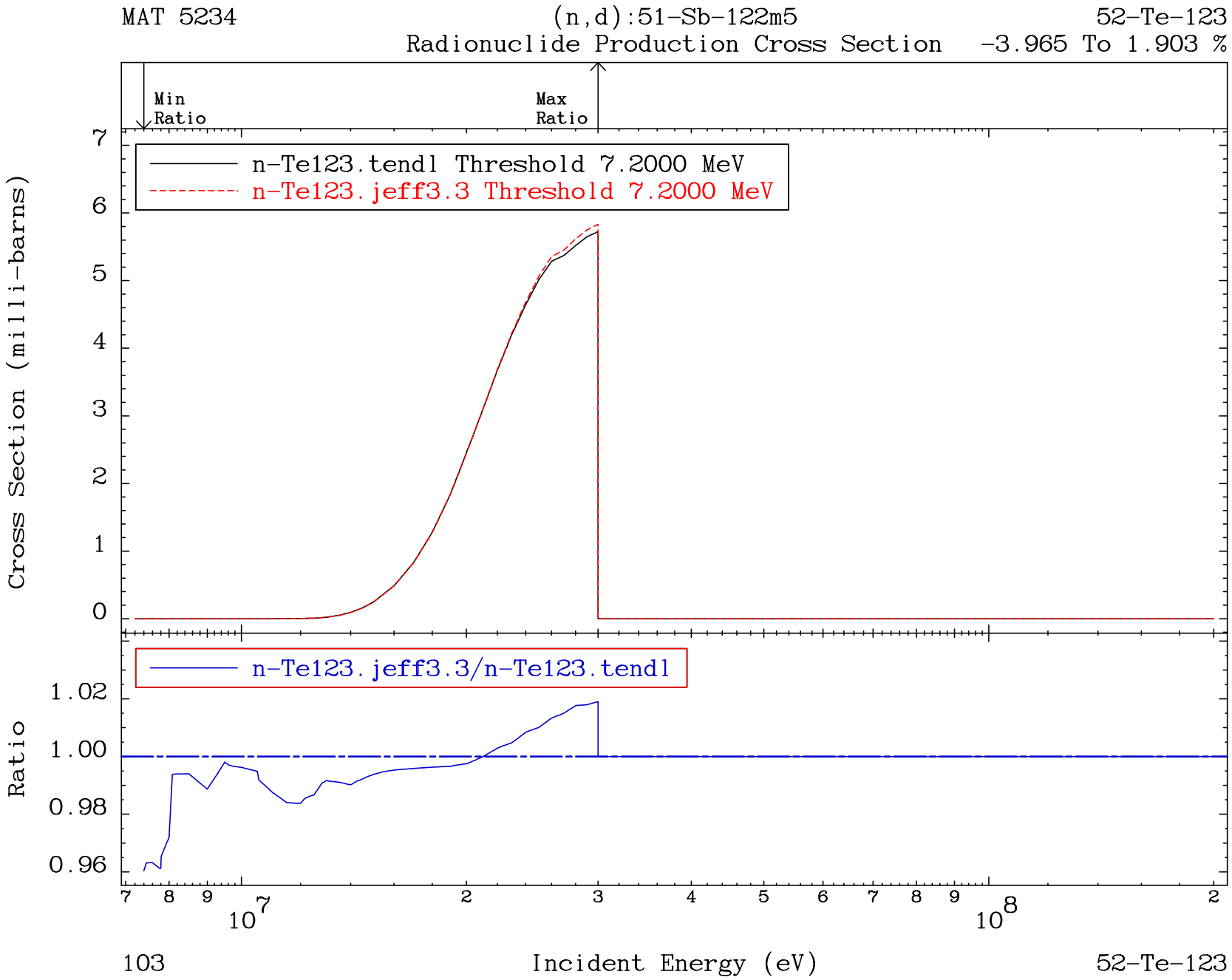

MAT 5234
(n,2n) p:50-Sn-121m1
52-Te-123
Radionuclide Production Cross Section -16.46 To 0.000 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 14.679 MeV
n-Te123.jeff3.3 Threshold 14.679 MeV
Cross Section (micro-barns)
16
14
12
10
8
6
4
2
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.00
0.90
2
3
4
5
6
7
8
9
10^8
2
98
Incident Energy (eV)
52-Te-123

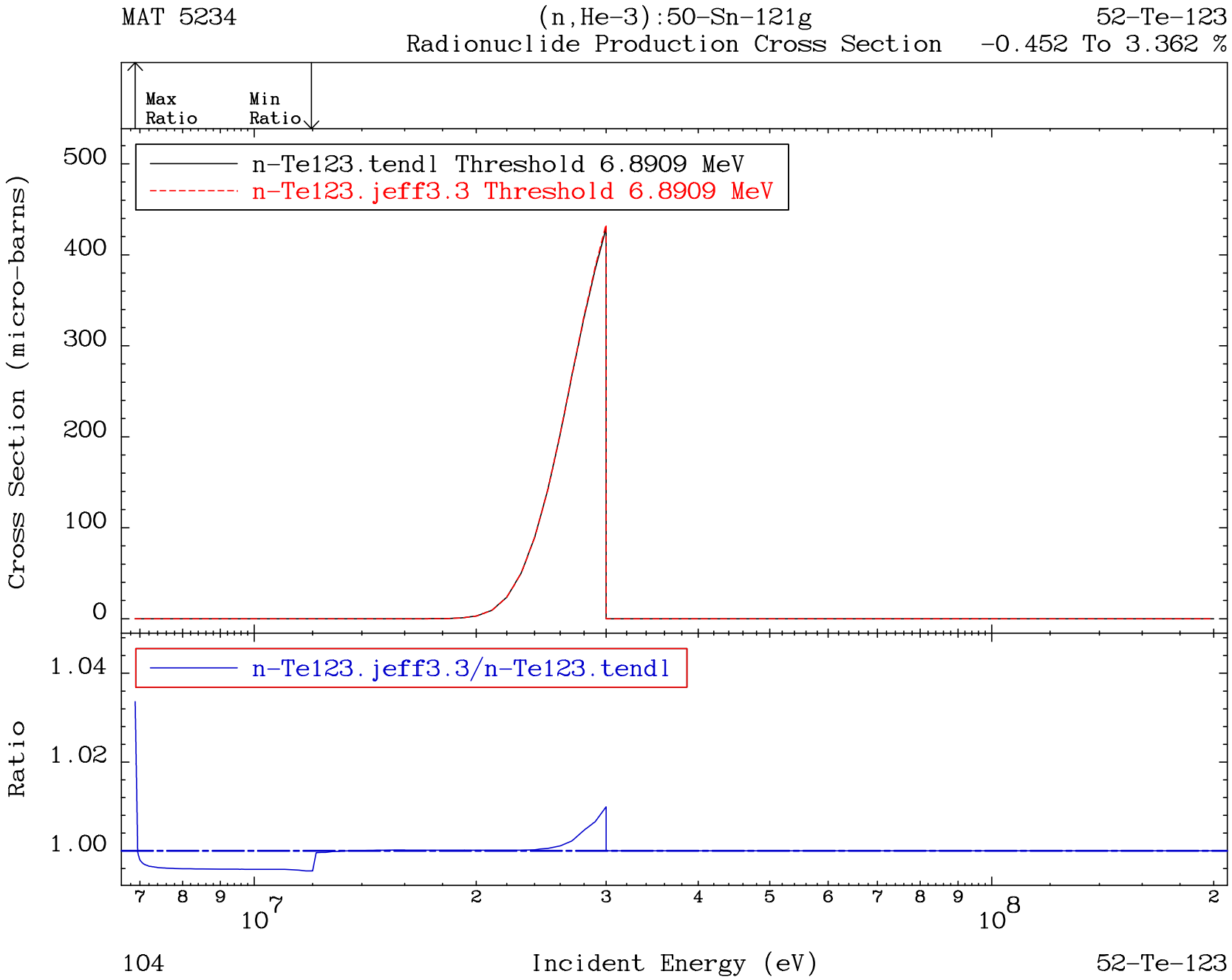

MAT 5234
(n,n') p α:49-In-118g
52-Te-123
Radionuclide Production Cross Section -22.46 To 9999. %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 11.754 MeV
n-Te123.jeff3.3 Threshold 11.754 MeV
Cross Section (10^{-9} barns)
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
99
Incident Energy (eV)
52-Te-123

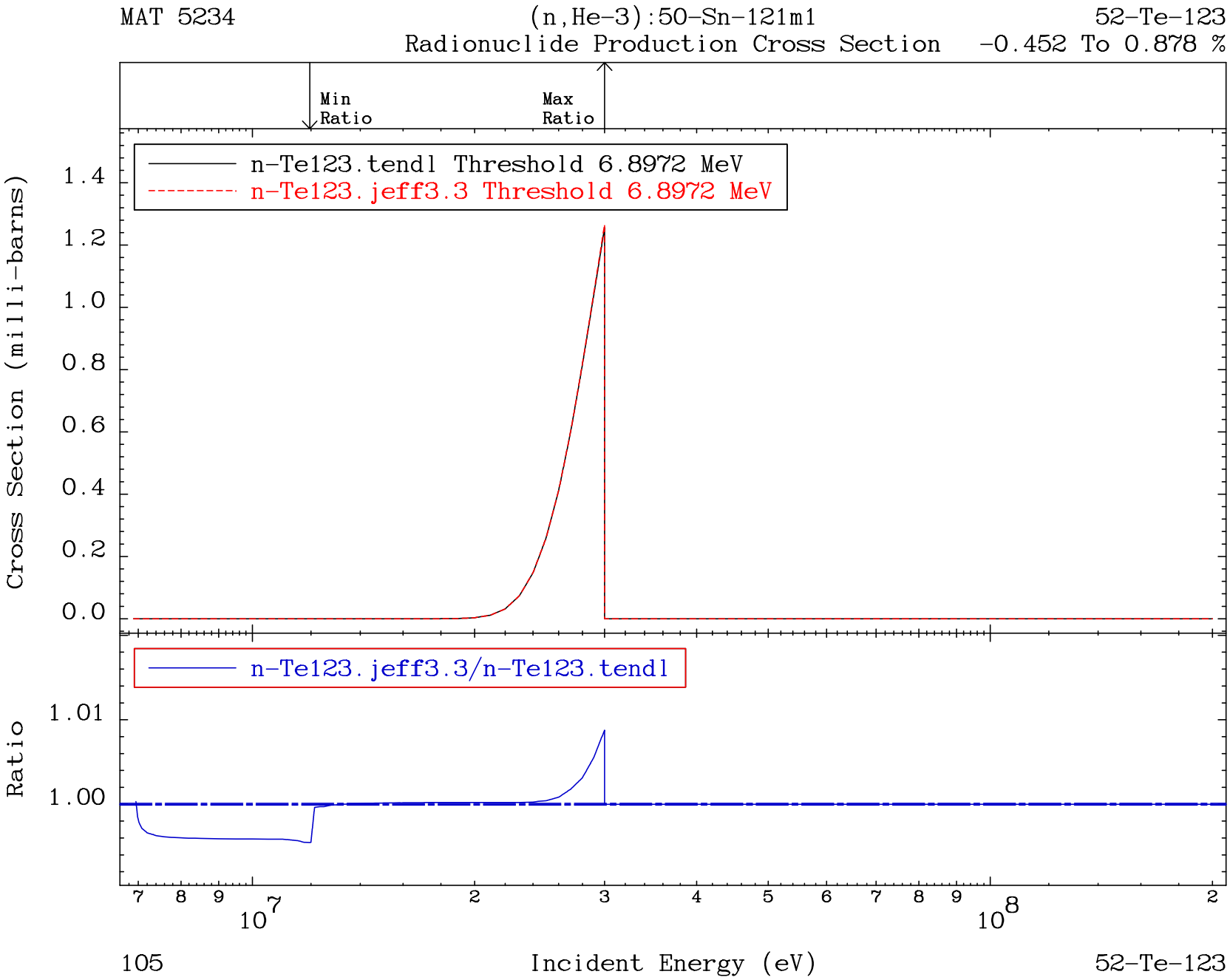

MAT 5234
(n,n') p α:49-In-118m1
52-Te-123
Radionuclide Production Cross Section -29.97 To 9999. %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 11.814 MeV
n-Te123.jeff3.3 Threshold 11.814 MeV
Cross Section (10^{-9} barns)
160
140
120
100
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
100
Incident Energy (eV)
52-Te-123

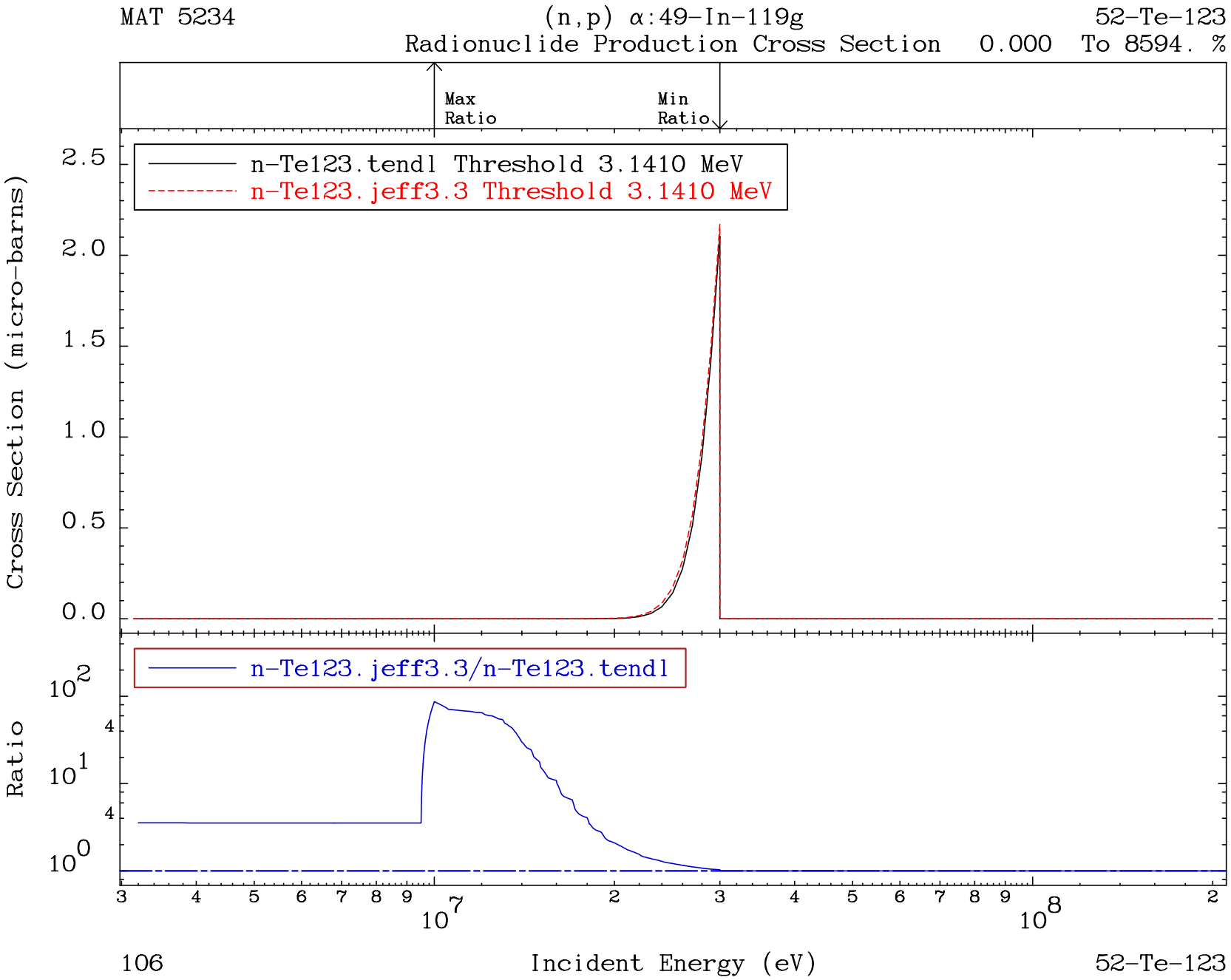

MAT 5234
(n,n') p α:49-In-118m3
52-Te-123
Radionuclide Production Cross Section
-30.93 To 9999. %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 11.955 MeV
n-Te123.jeff3.3 Threshold 11.955 MeV
Cross Section (10^{-9} barns)
120
100
80
60
40
20
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^{2}
10^{1}
10^{0}
2
3
4
5
6
7
8
9
10^{8}
2
101
Incident Energy (eV)
52-Te-123

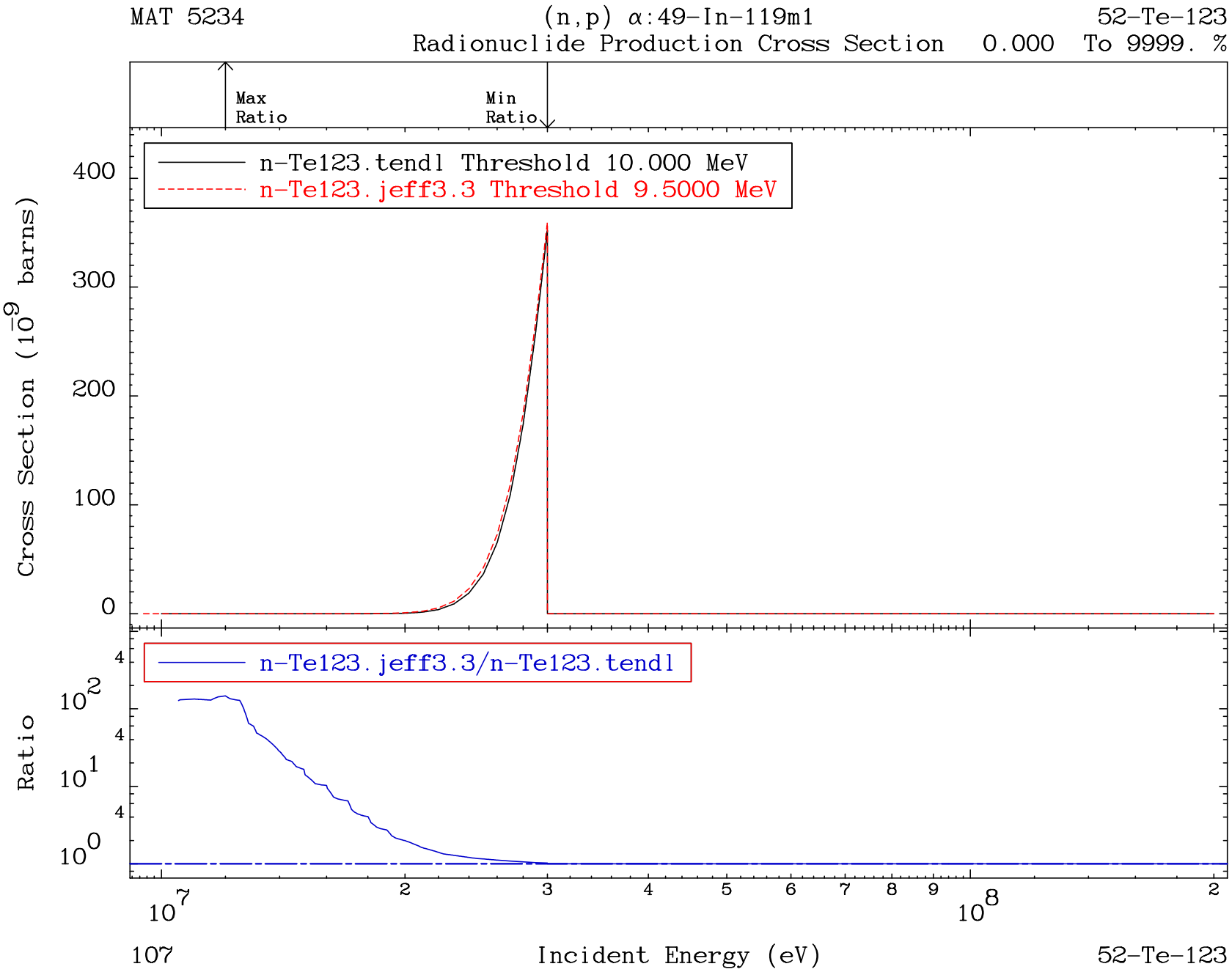

MAT 5234
(n,d):51-Sb-122g
52-Te-123
Radionuclide Production Cross Section -9.532 To 2.046 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 5.9496 MeV
n-Te123.jeff3.3 Threshold 5.9514 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
n-Te123.jeff3.3/n-Te123.tendl
Ratio
0.90
0.95
1.00
1.05
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
102
Incident Energy (eV)
52-Te-123

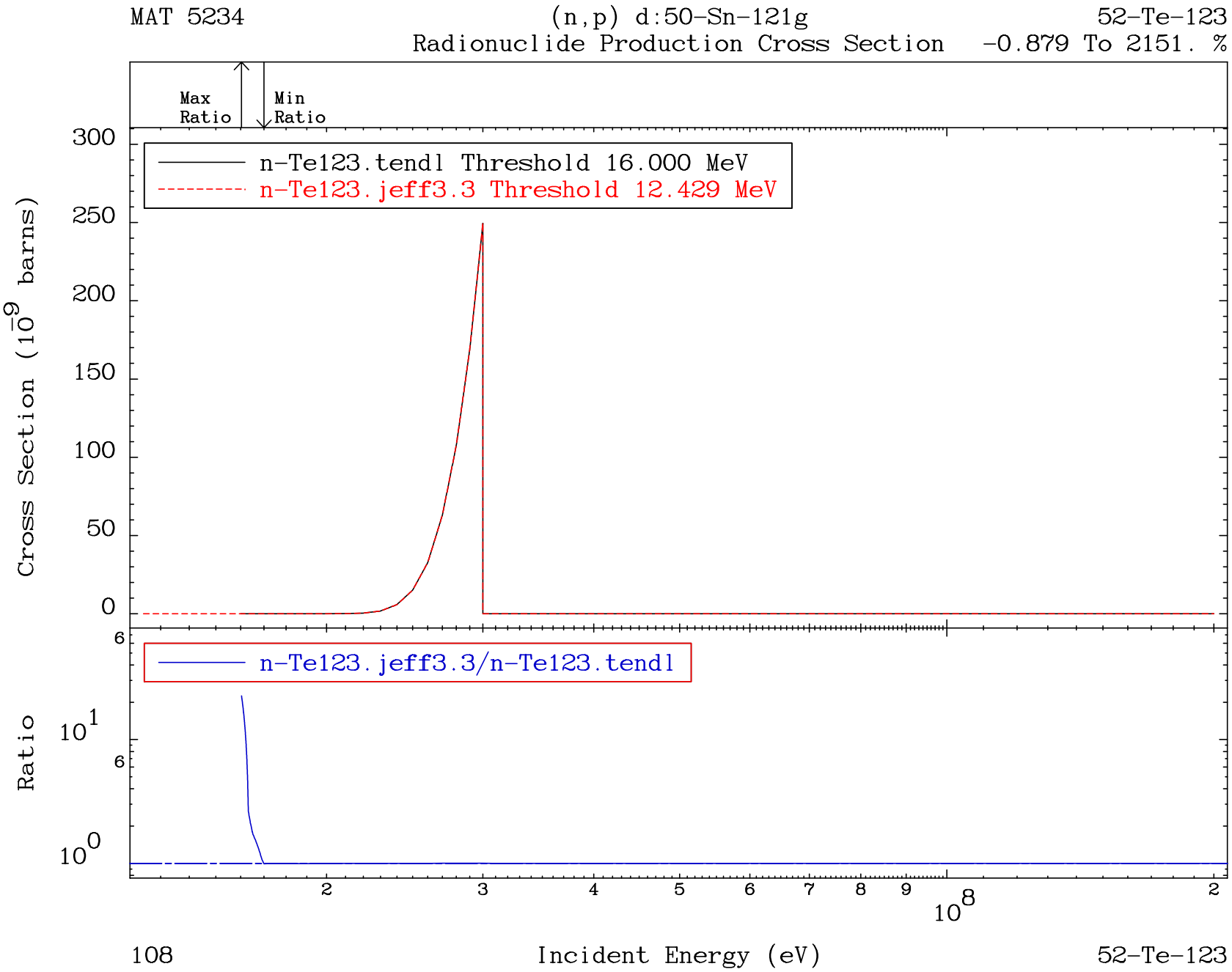

MAT 5234
(n,d):51-Sb-122m5
52-Te-123
Radionuclide Production Cross Section -3.965 To 1.903 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 7.2000 MeV
n-Te123.jeff3.3 Threshold 7.2000 MeV
Cross Section (milli-barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
103
52-Te-123

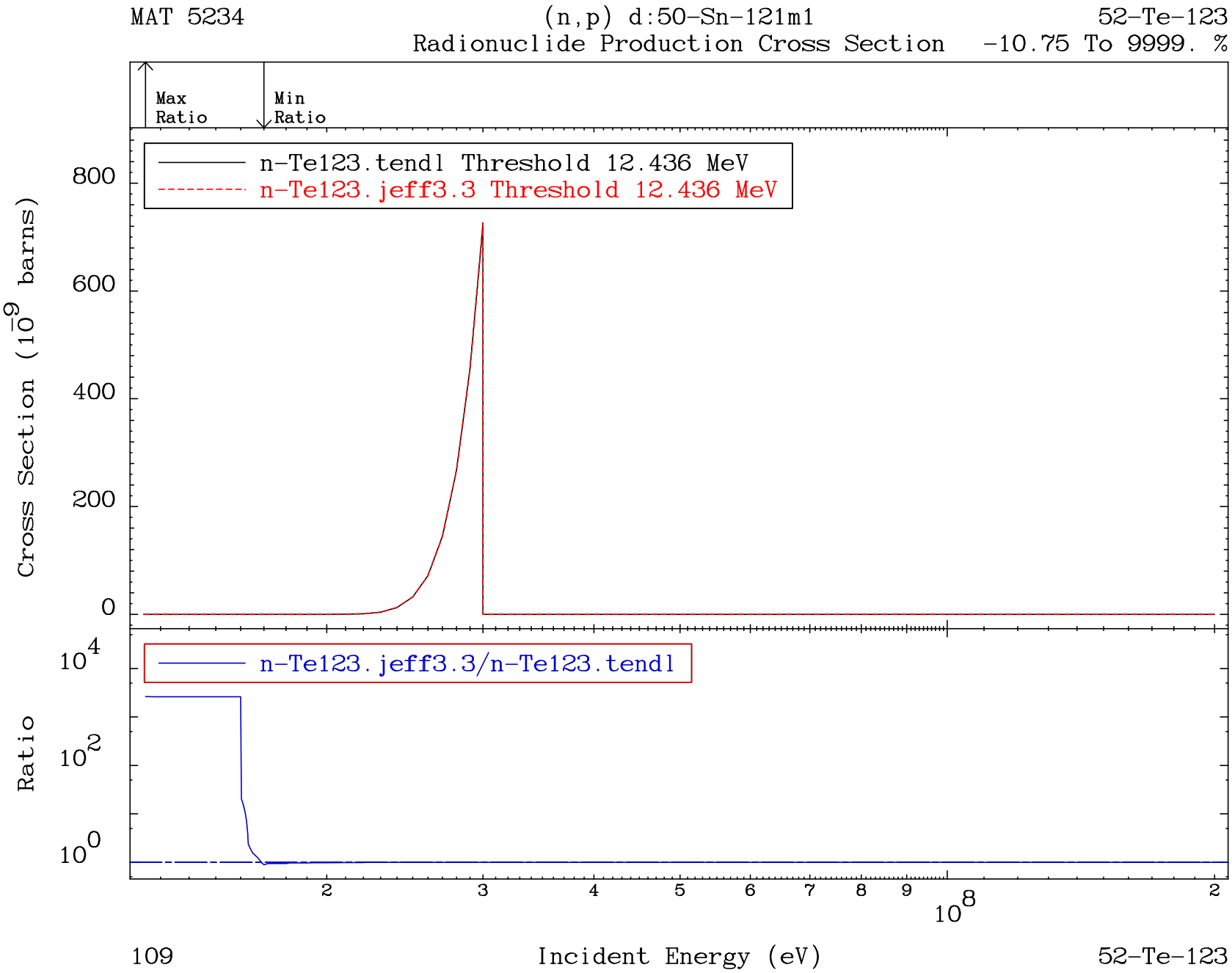

MAT 5234
(n,He-3):50-Sn-121g
52-Te-123
Radionuclide Production Cross Section
-0.452 To 3.362 %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 6.8909 MeV
n-Te123.jeff3.3 Threshold 6.8909 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.04
1.02
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
104
Incident Energy (eV)
52-Te-123

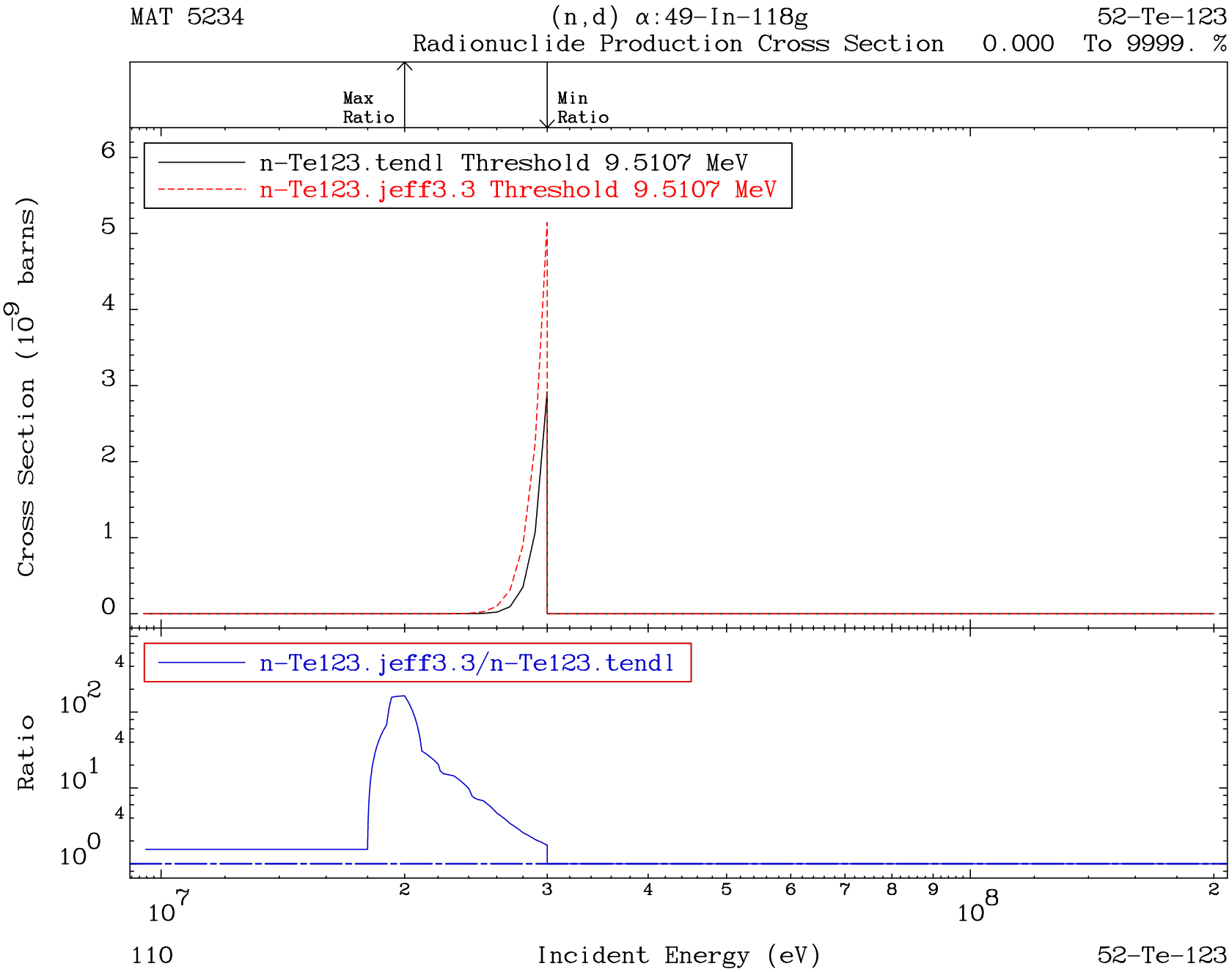

MAT 5234
(n,He-3):50-Sn-121m1
52-Te-123
Radionuclide Production Cross Section -0.452 To 0.878 %
Min Ratio
Max Ratio
n-Te123.tendl Threshold 6.8972 MeV
n-Te123.jeff3.3 Threshold 6.8972 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
1.01
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
105
Incident Energy (eV)
52-Te-123

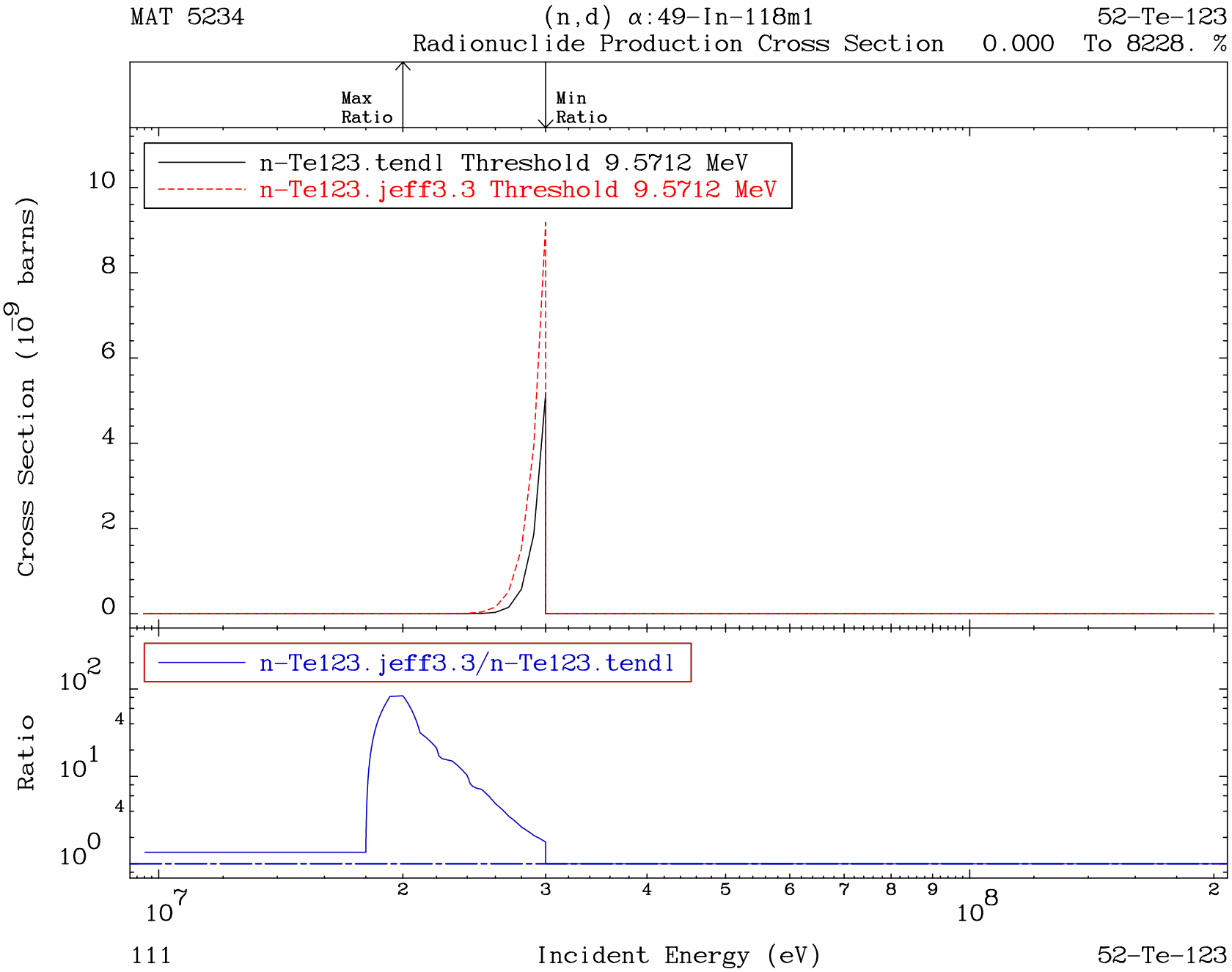

MAT 5234
(n,p) α:49-In-119g
52-Te-123
Radionuclide Production Cross Section 0.000 To 8594. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 3.1410 MeV
n-Te123.jeff3.3 Threshold 3.1410 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^2
10^1
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
106
Incident Energy (eV)
52-Te-123

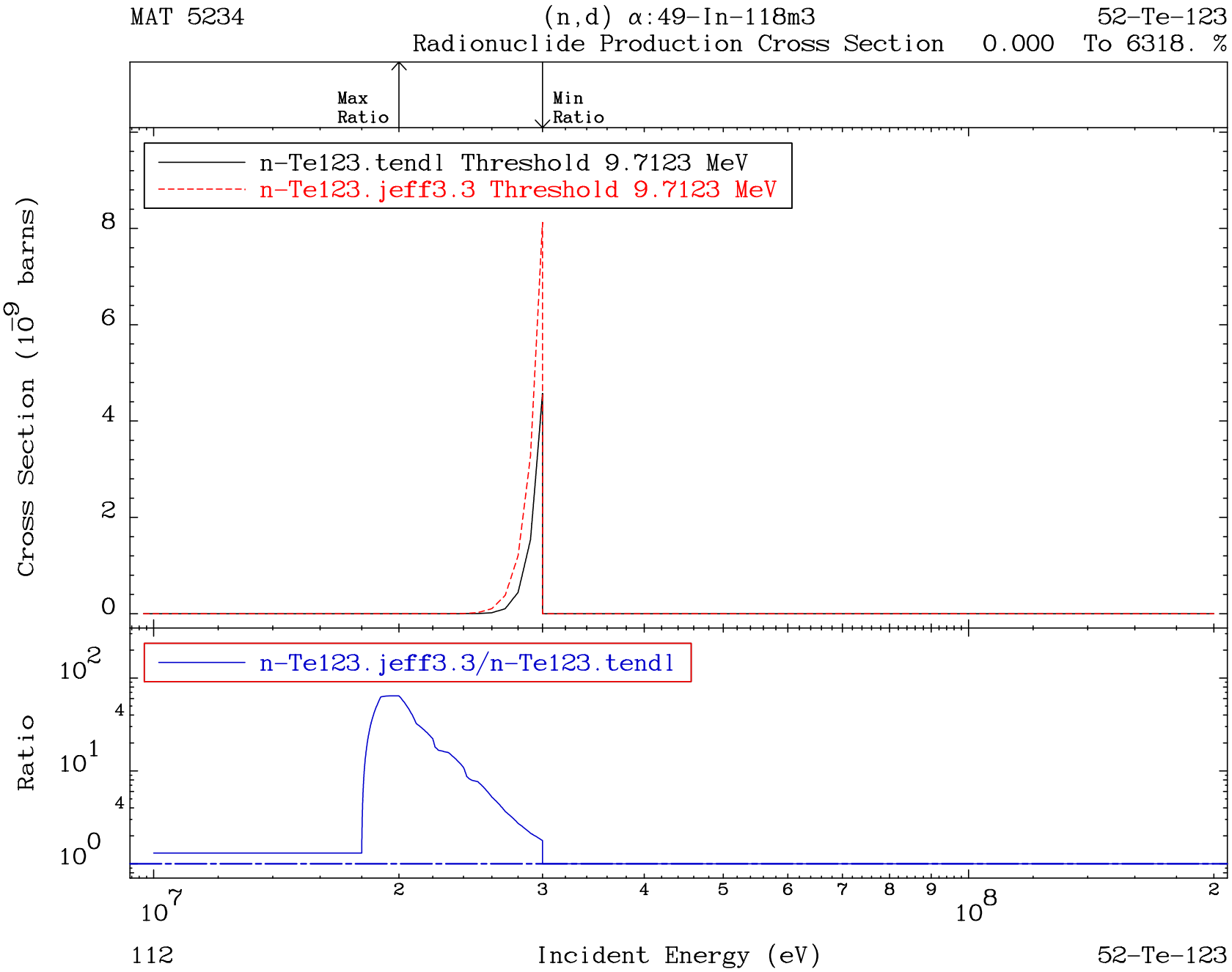

MAT 5234
(n,p) α:49-In-119m1
52-Te-123
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 10.000 MeV
n-Te123.jeff3.3 Threshold 9.5000 MeV
Cross Section (10^{-9} barns)
400
300
200
100
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^{2}
10^{1}
10^{0}
4
10^{7}
2
3
4
5
6
7
8
9
10^{8}
2
107
Incident Energy (eV)
52-Te-123


MAT 5234
(n,p) d:50-Sn-121g
52-Te-123
Radionuclide Production Cross Section -0.879 To 2151. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 16.000 MeV
n-Te123.jeff3.3 Threshold 12.429 MeV
Cross Section (10^{-9} barns)
300
250
200
150
100
50
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^1
6
10^0
2
3
4
5
6
7
8
9
10^8
2
108
Incident Energy (eV)
52-Te-123


MAT 5234
(n,p) d:50-Sn-121m1
52-Te-123
Radionuclide Production Cross Section -10.75 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 12.436 MeV
n-Te123.jeff3.3 Threshold 12.436 MeV
Cross Section (10^{-9} barns)
800
600
400
200
0
n-Te123.jeff3.3/n-Te123.tendl
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
109
Incident Energy (eV)
52-Te-123


MAT 5234
(n,d) α:49-In-118g
52-Te-123
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 9.5107 MeV
n-Te123.jeff3.3 Threshold 9.5107 MeV
Cross Section (10^{-9} barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
110
52-Te-123


MAT 5234
(n,d) α:49-In-118m1
52-Te-123
Radionuclide Production Cross Section 0.000 To 8228. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 9.5712 MeV
n-Te123.jeff3.3 Threshold 9.5712 MeV
Cross Section (10^{-9} barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
111
52-Te-123


MAT 5234
(n,d) α:49-In-118m3
52-Te-123
Radionuclide Production Cross Section 0.000 To 6318. %
Max Ratio
Min Ratio
n-Te123.tendl Threshold 9.7123 MeV
n-Te123.jeff3.3 Threshold 9.7123 MeV
Cross Section (10^{-9} barns)
n-Te123.jeff3.3/n-Te123.tendl
Ratio
Incident Energy (eV)
112
52-Te-123