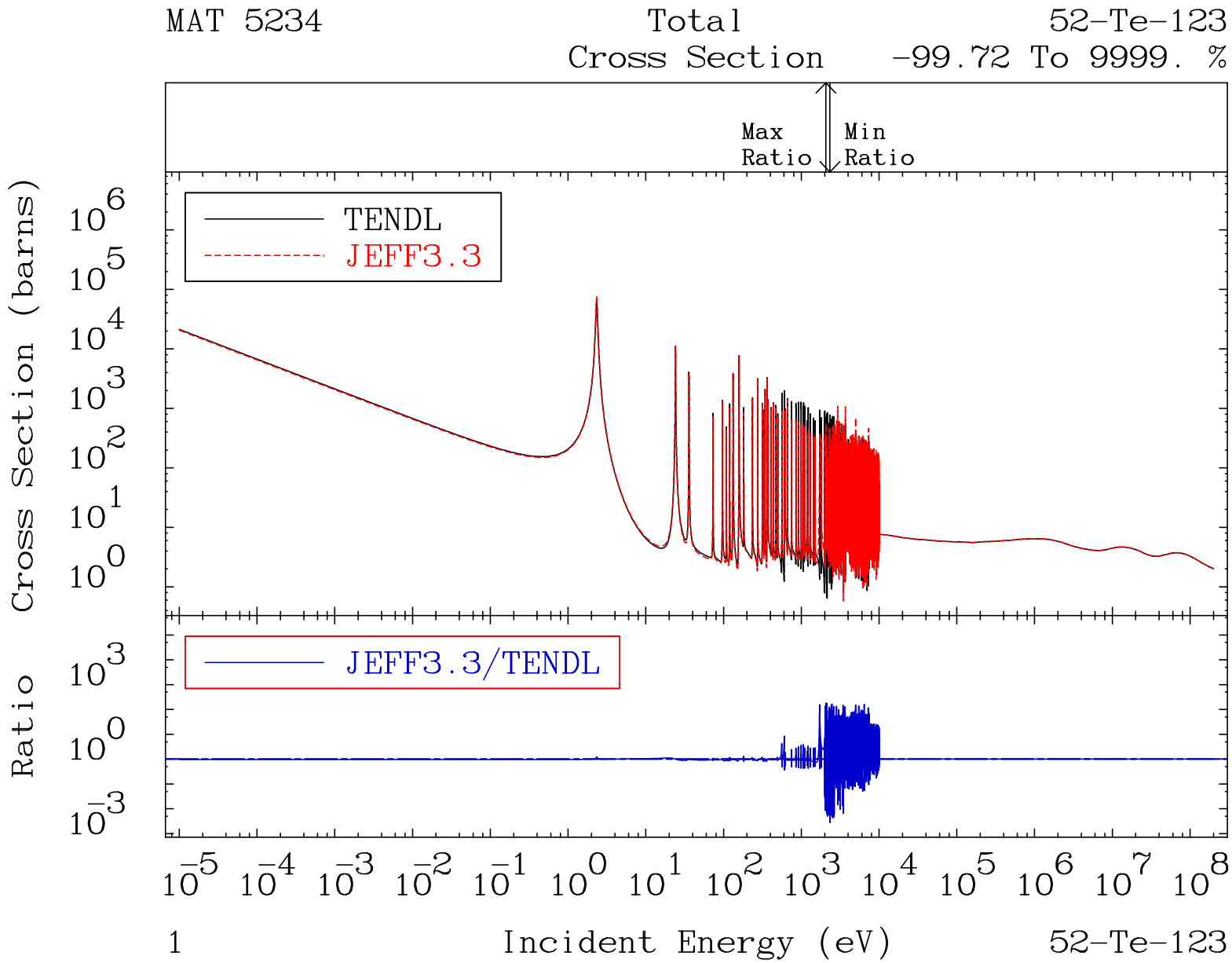
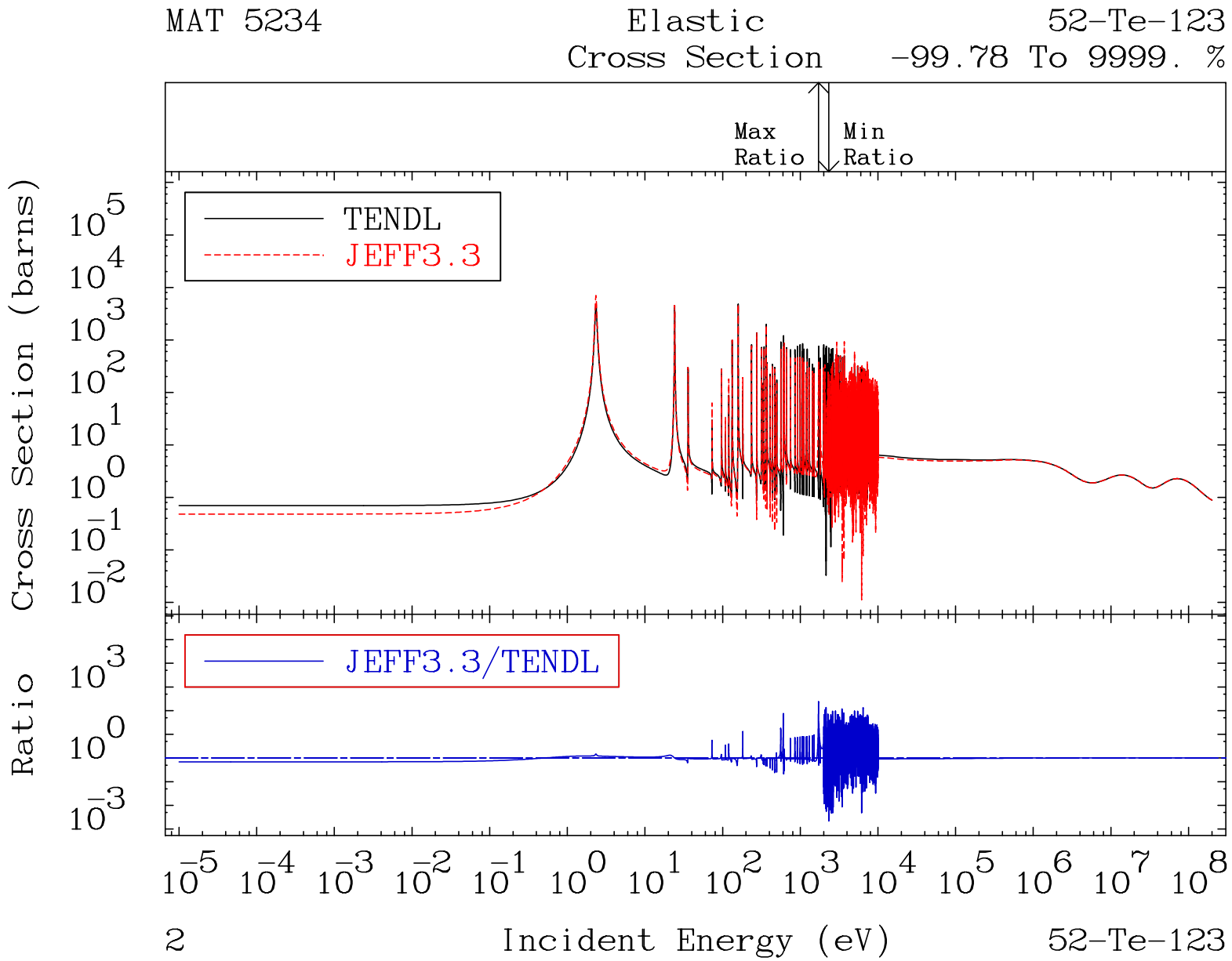
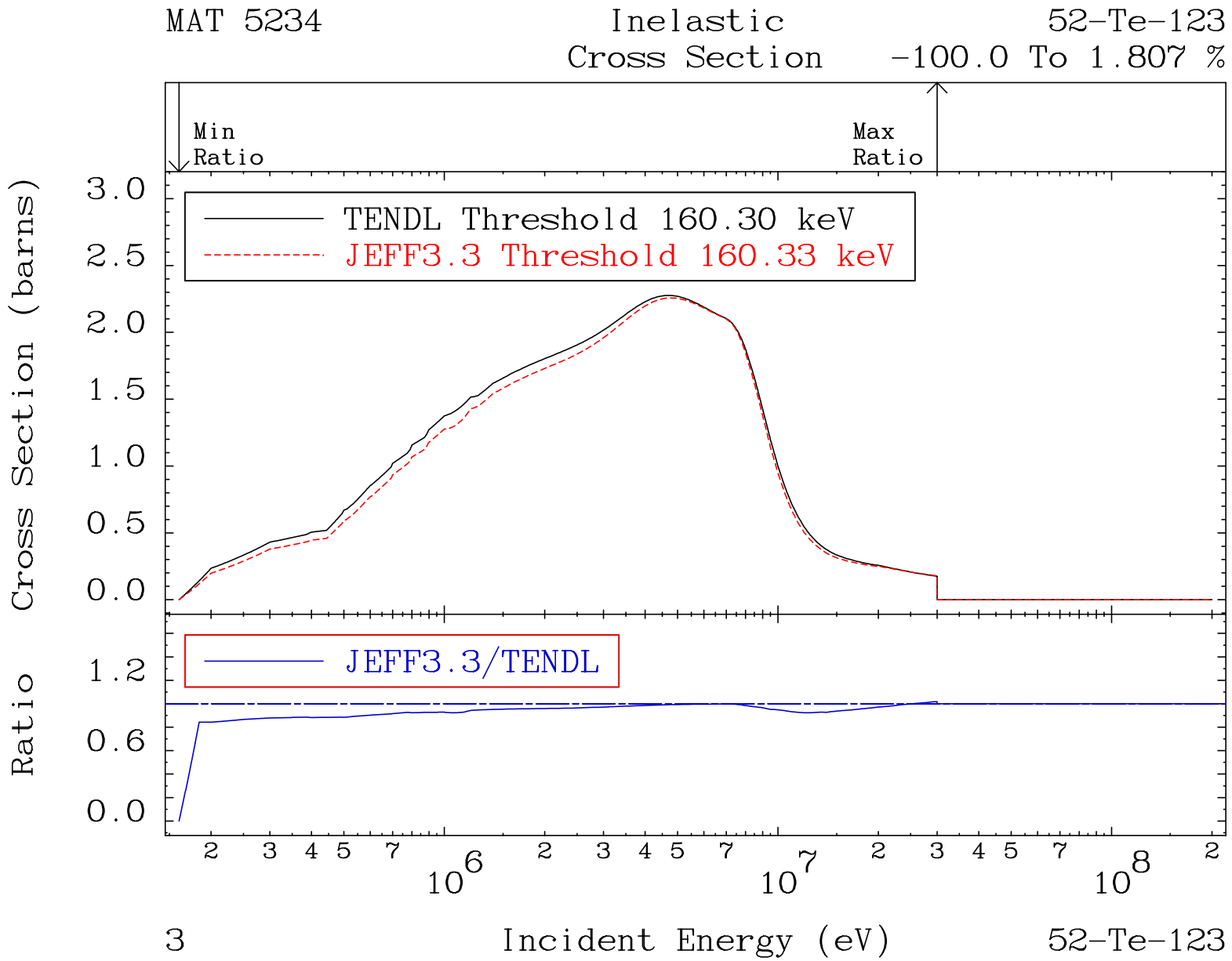
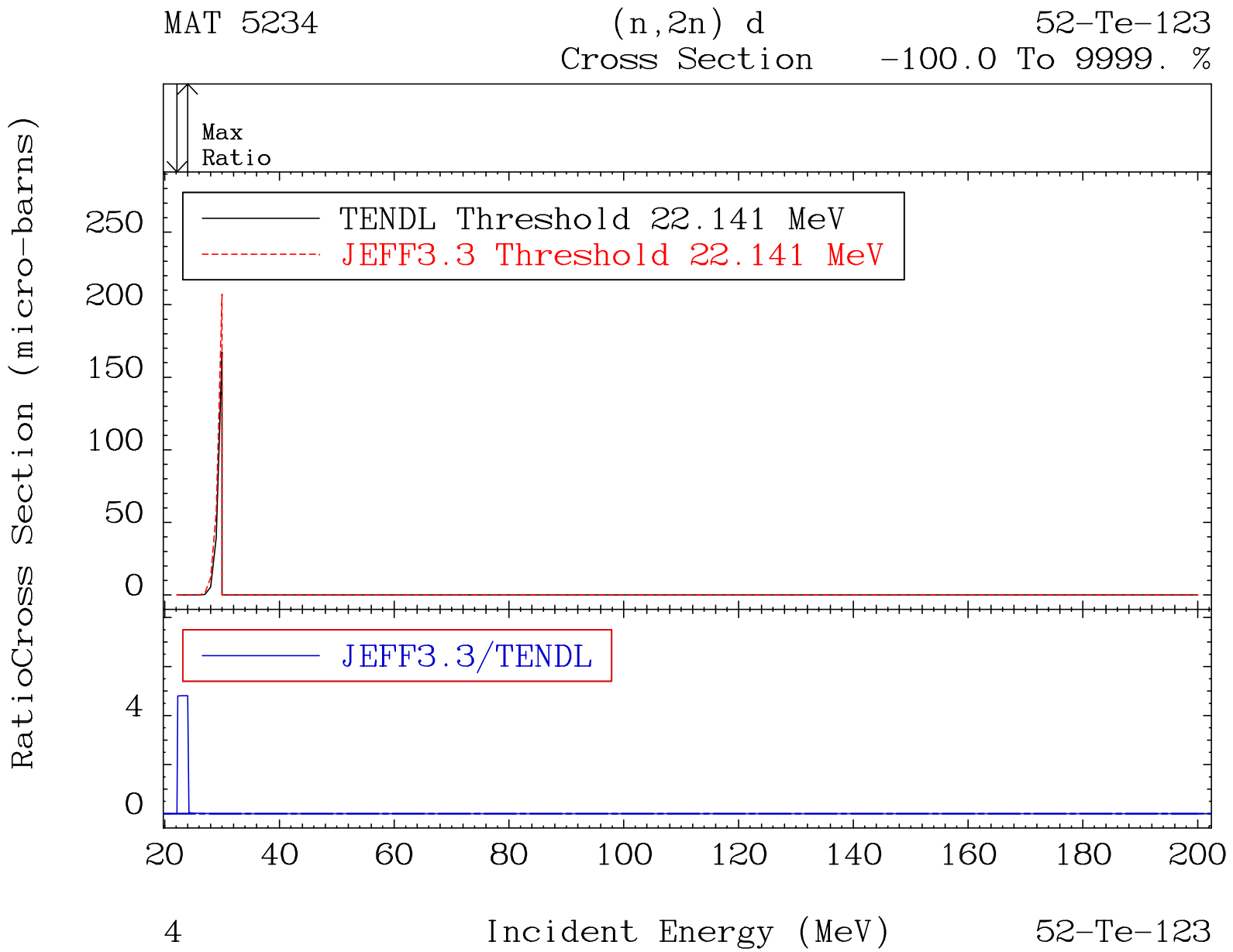
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

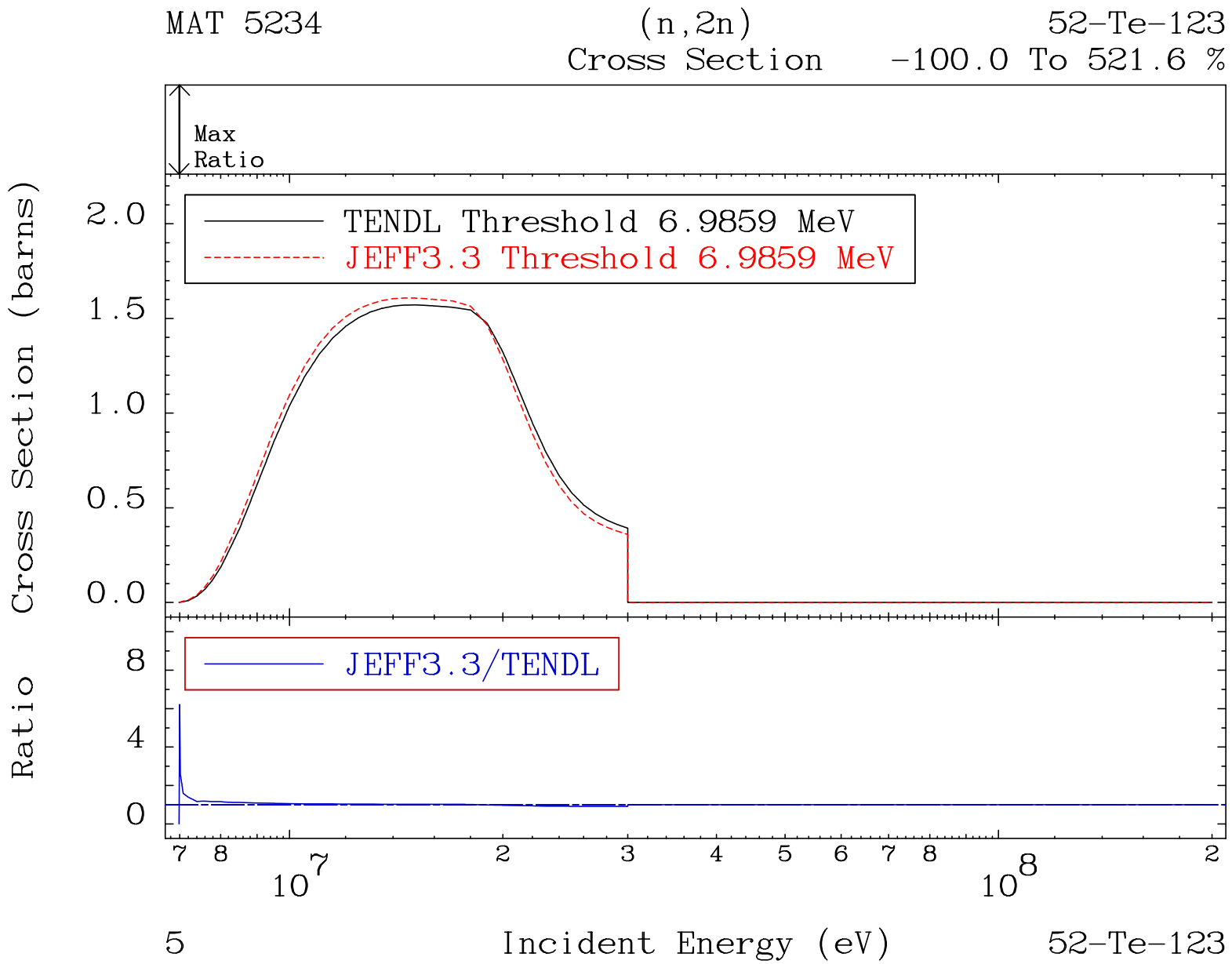
Press Mouse Button to Start

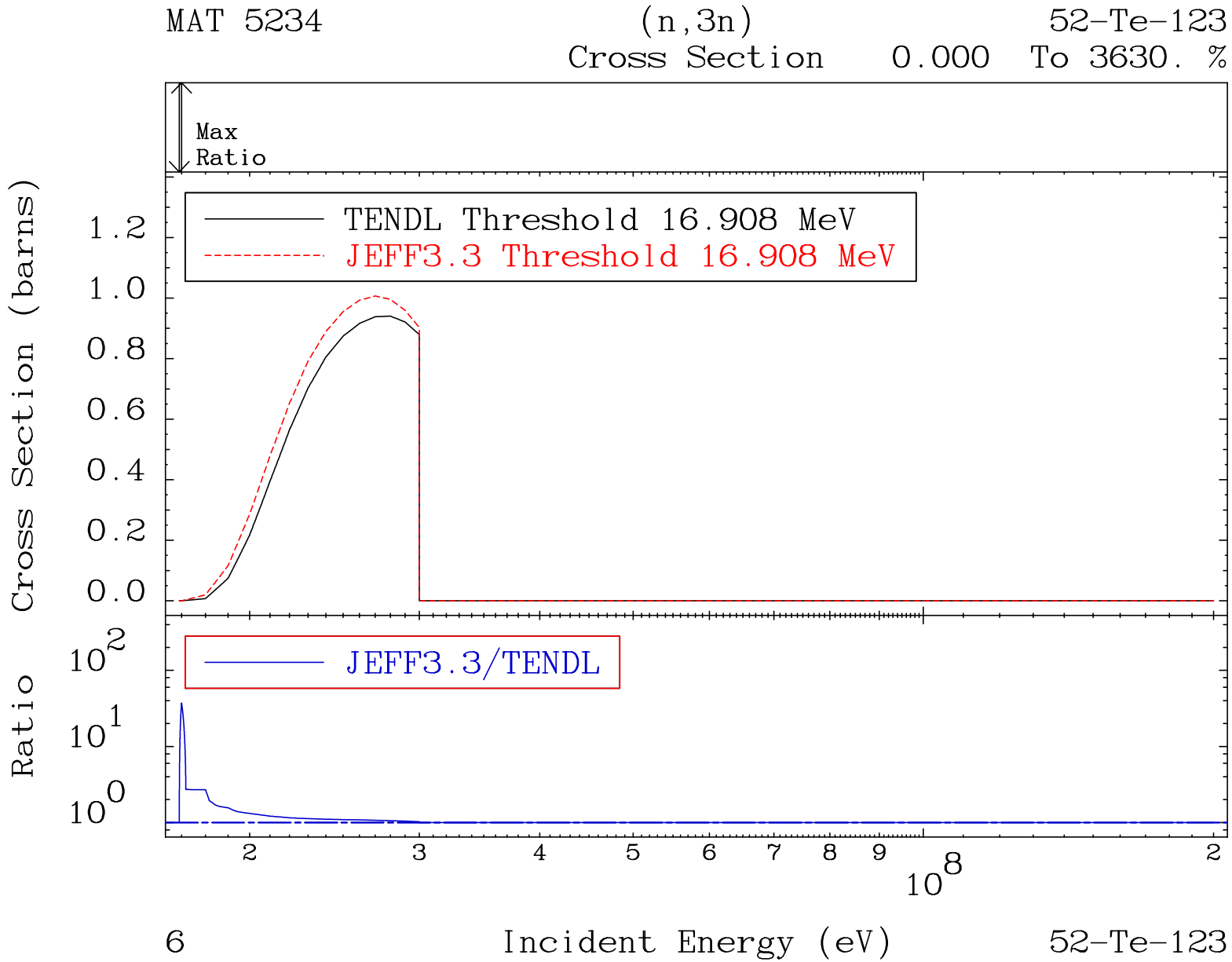

MAT 5234
Total
Cross Section
52-Te-123
-99.72 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
52-Te-123

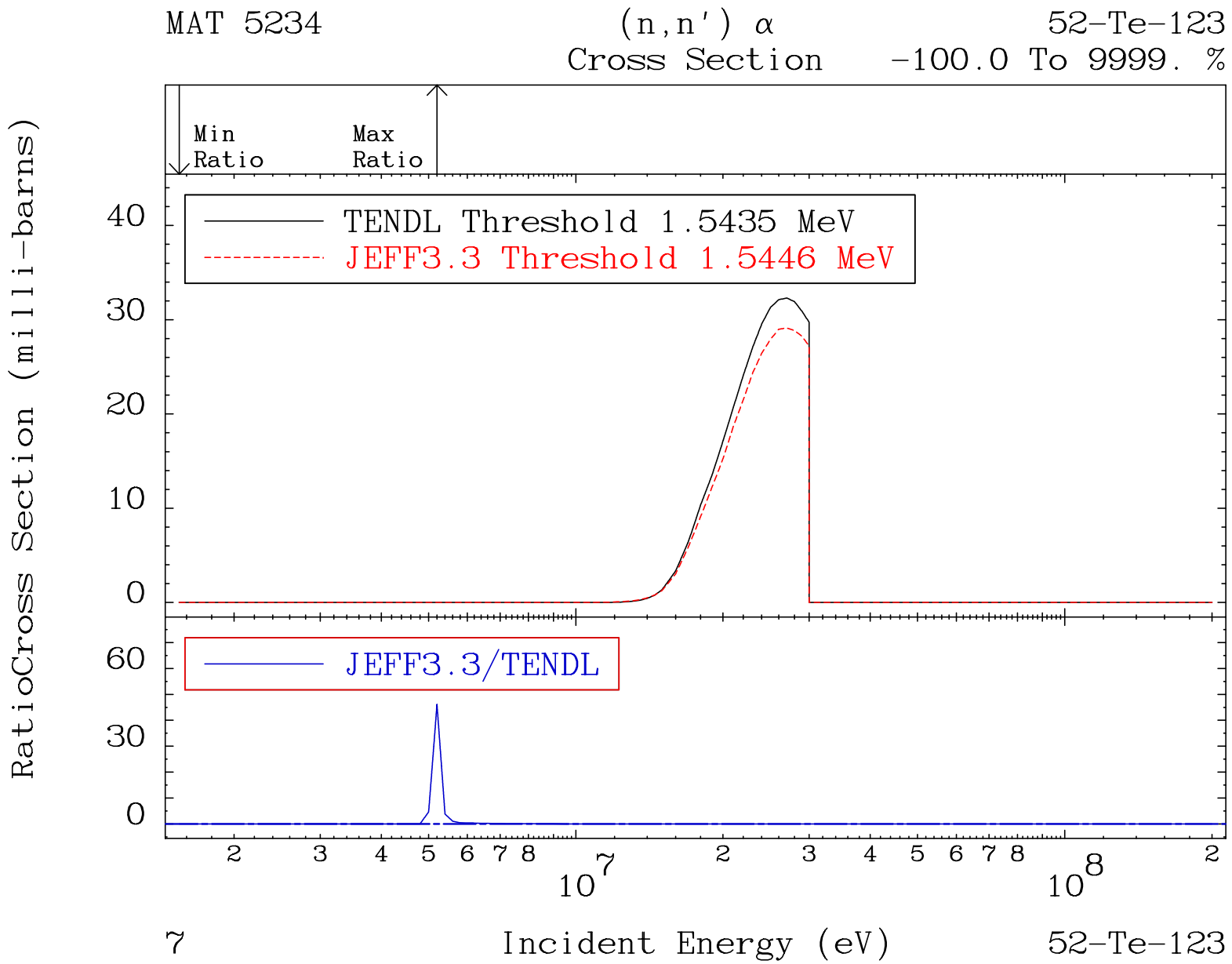

MAT 5234
Elastic
Cross Section
52-Te-123
-99.78 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
52-Te-123

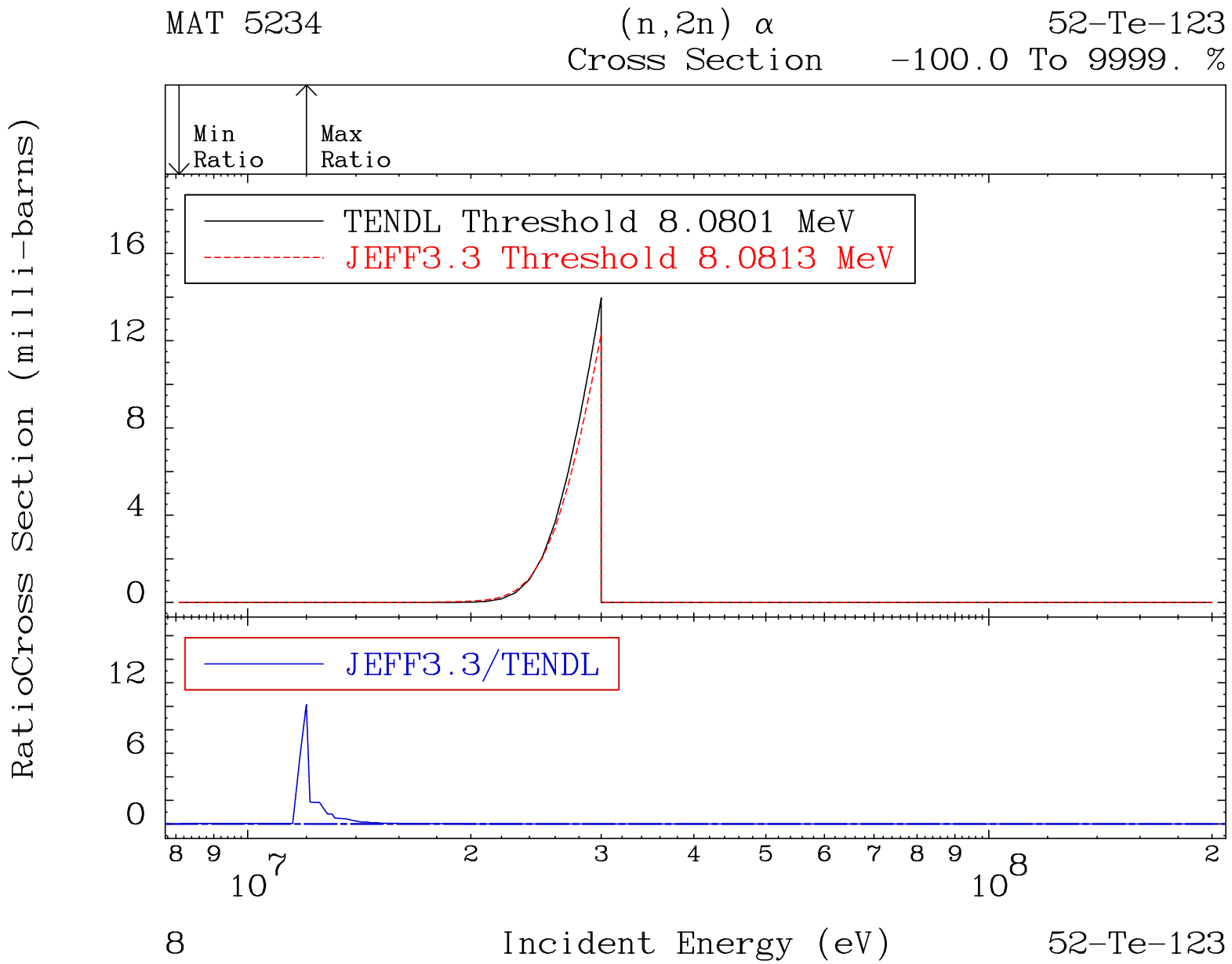

MAT 5234
Inelastic
Cross Section
52-Te-123
-100.0 To 1.807 %
Min
Ratio
Max
Ratio
TENDL Threshold 160.30 keV
JEFF3.3 Threshold 160.33 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
52-Te-123

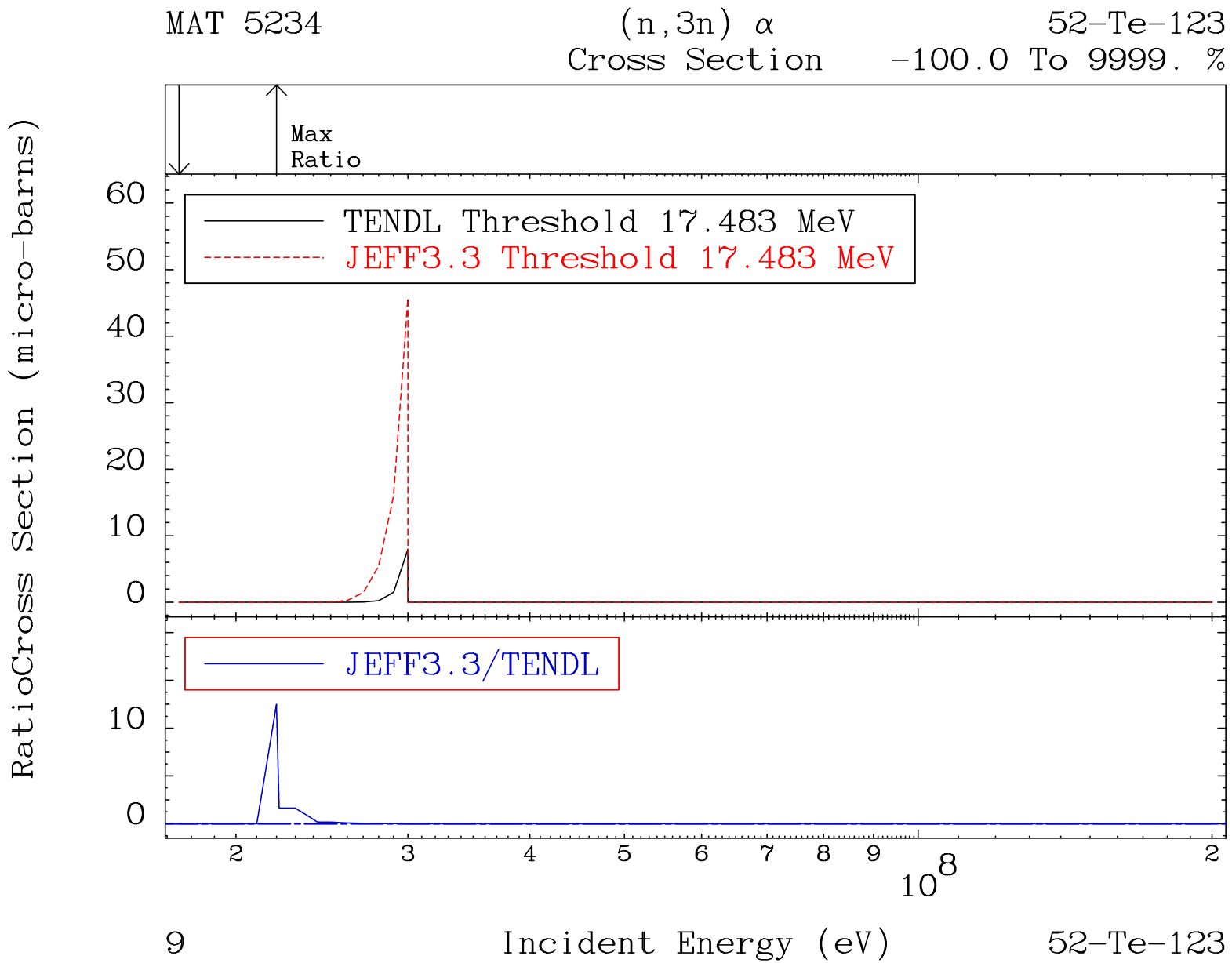

MAT 5234
(n,2n) d
Cross Section
52-Te-123
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 22.141 MeV
JEFF3.3 Threshold 22.141 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
250
200
150
100
50
0
4
0
20
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
52-Te-123

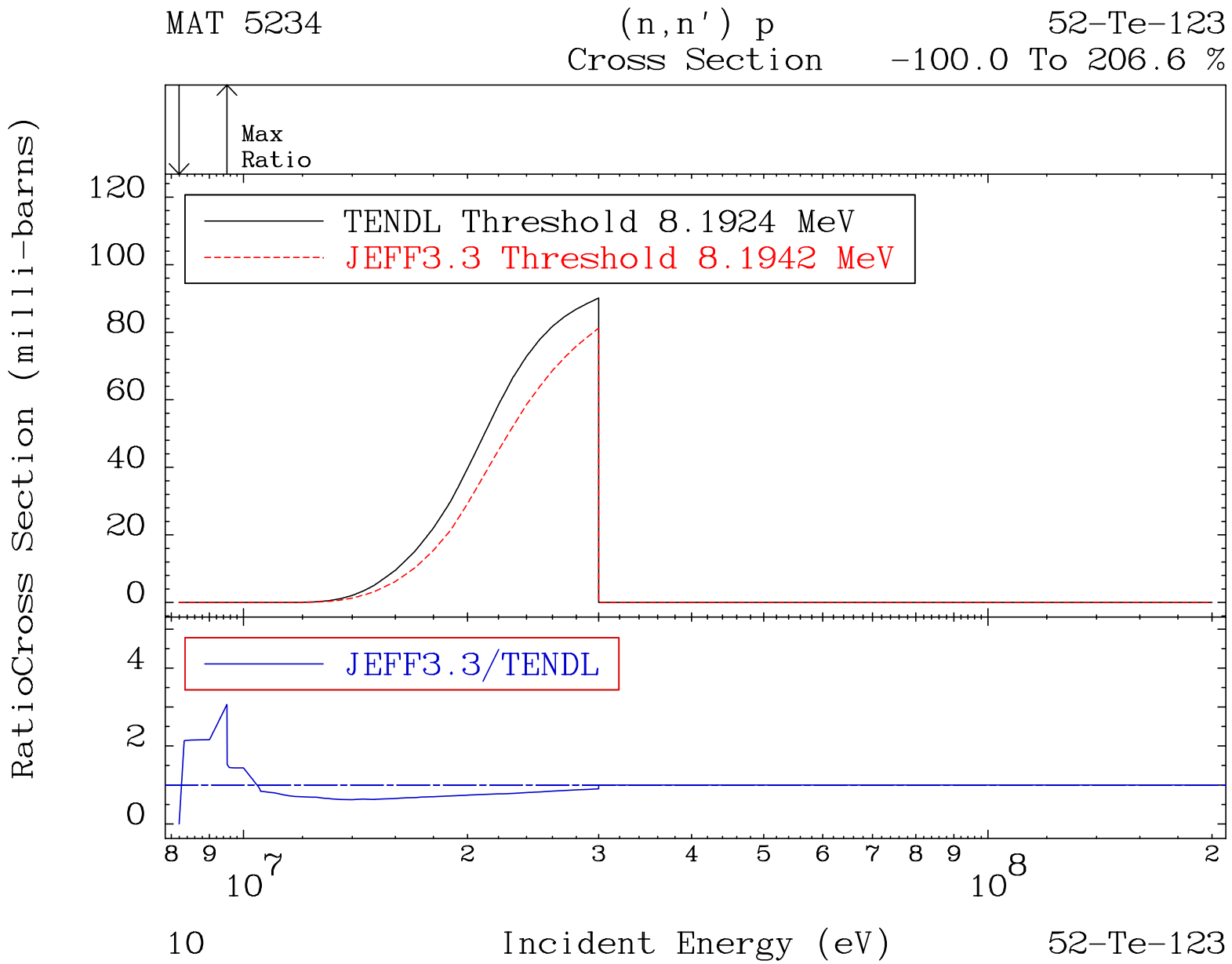

MAT 5234
(n,2n)
Cross Section
52-Te-123
-100.0 To 521.6 %
Max
Ratio
TENDL Threshold 6.9859 MeV
JEFF3.3 Threshold 6.9859 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
8
4
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
5
52-Te-123

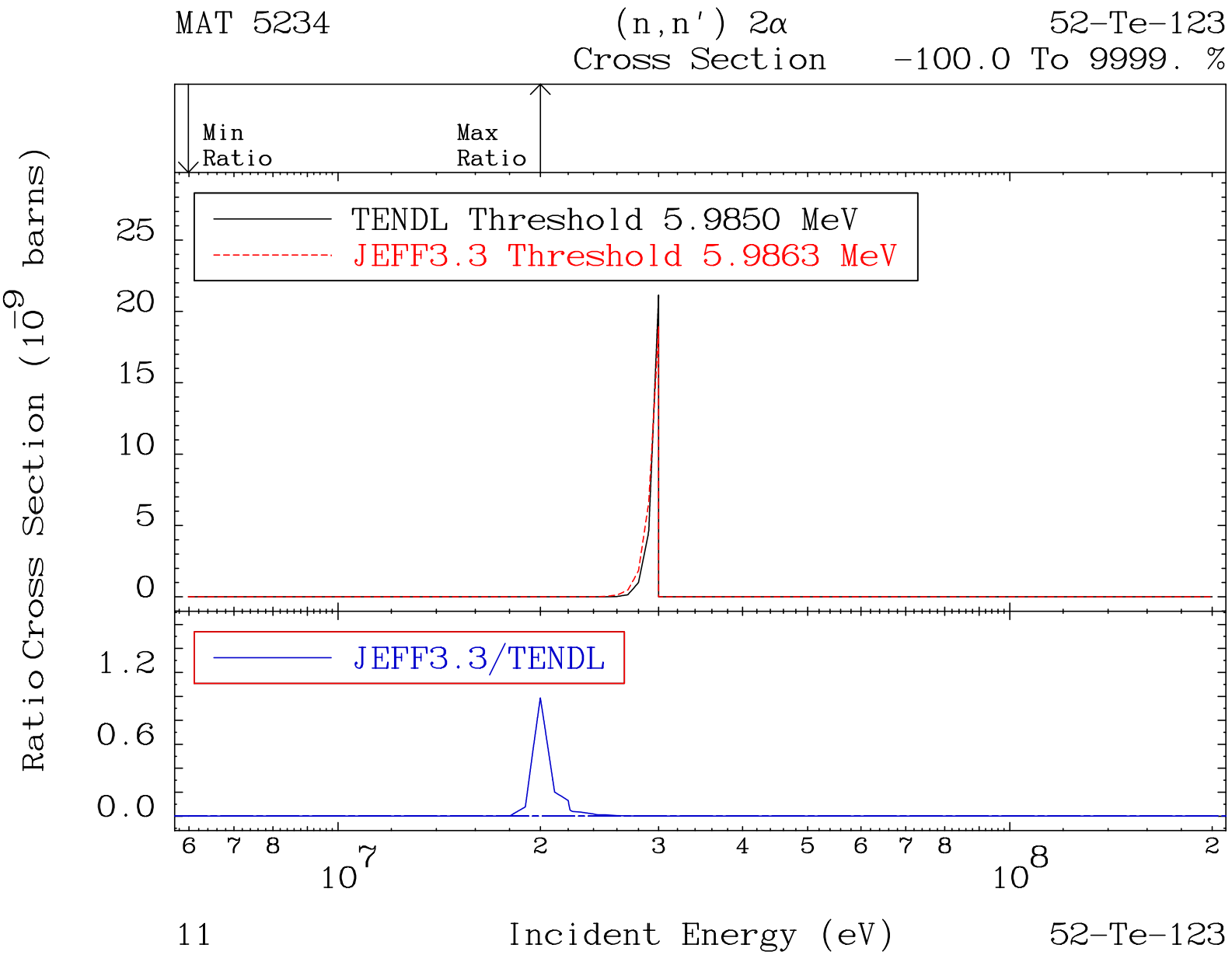

MAT 5234
(n,3n)
52-Te-123
Cross Section 0.000 To 3630. %
Max
Ratio
TENDL Threshold 16.908 MeV
JEFF3.3 Threshold 16.908 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
52-Te-123

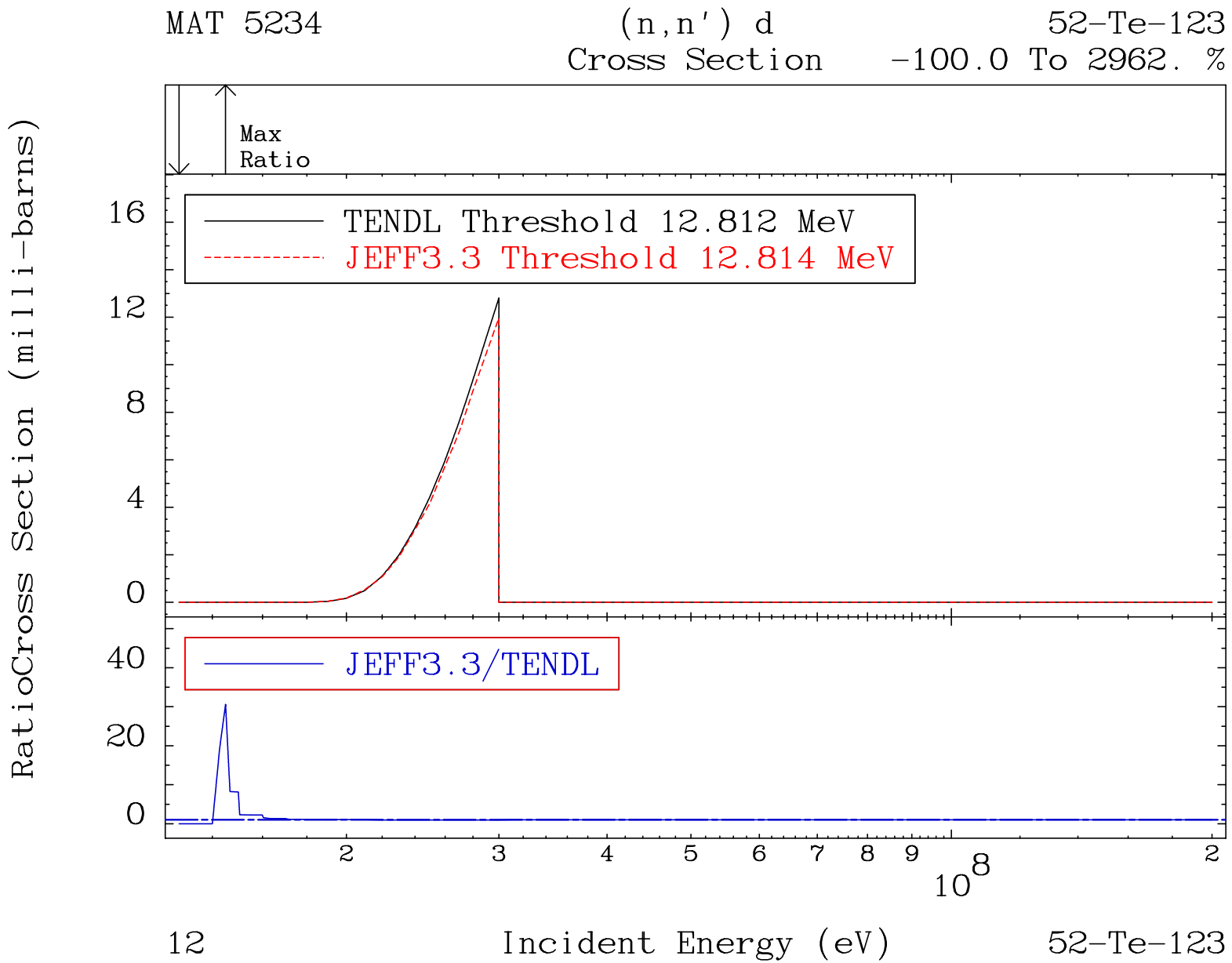

MAT 5234
(n,n') α
Cross Section
52-Te-123
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.5435 MeV
JEFF3.3 Threshold 1.5446 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
60
30
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
7
Incident Energy (eV)
52-Te-123

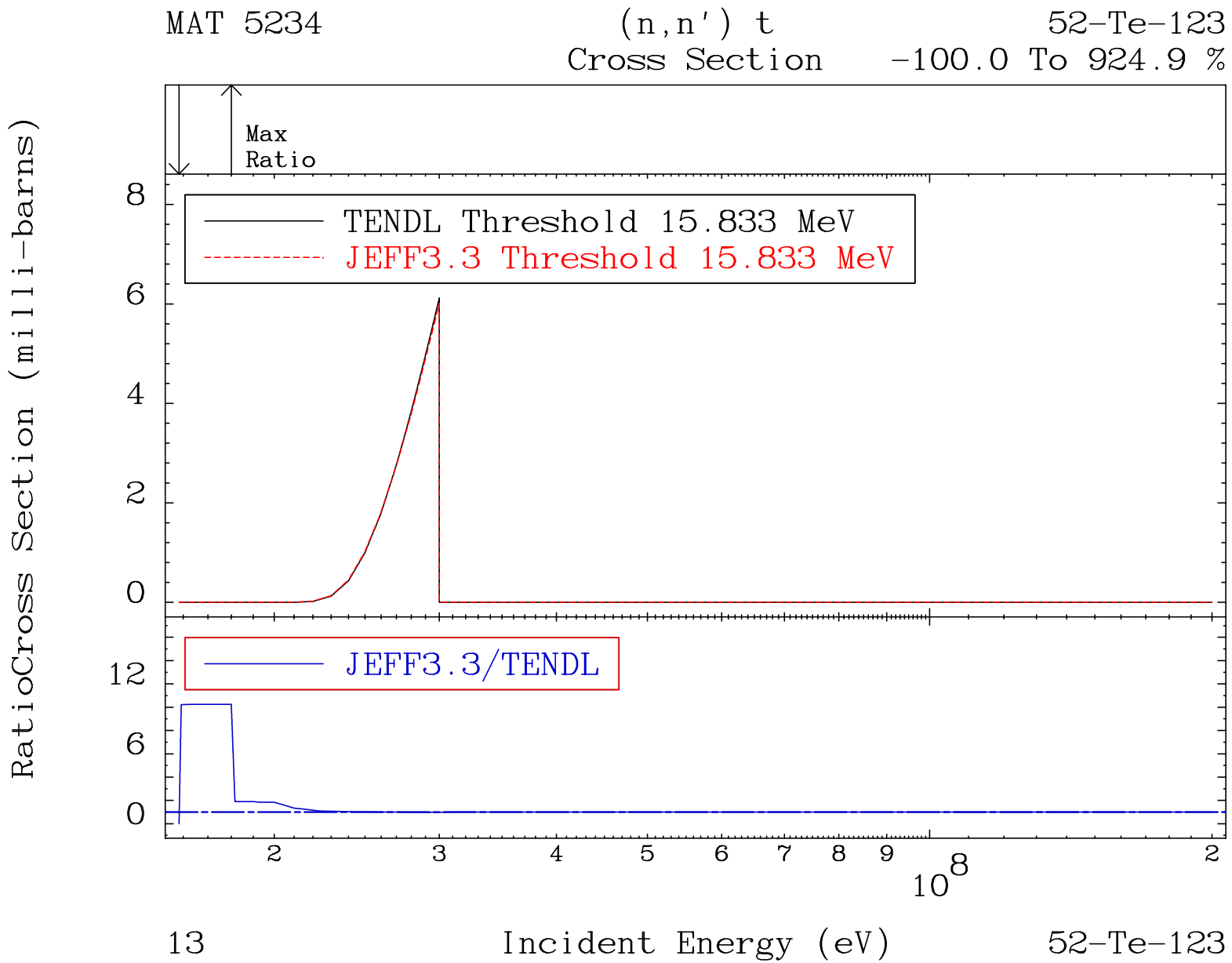

MAT 5234
(n,2n) α
52-Te-123
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 8.0801 MeV
JEFF3.3 Threshold 8.0813 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
12
6
0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
52-Te-123

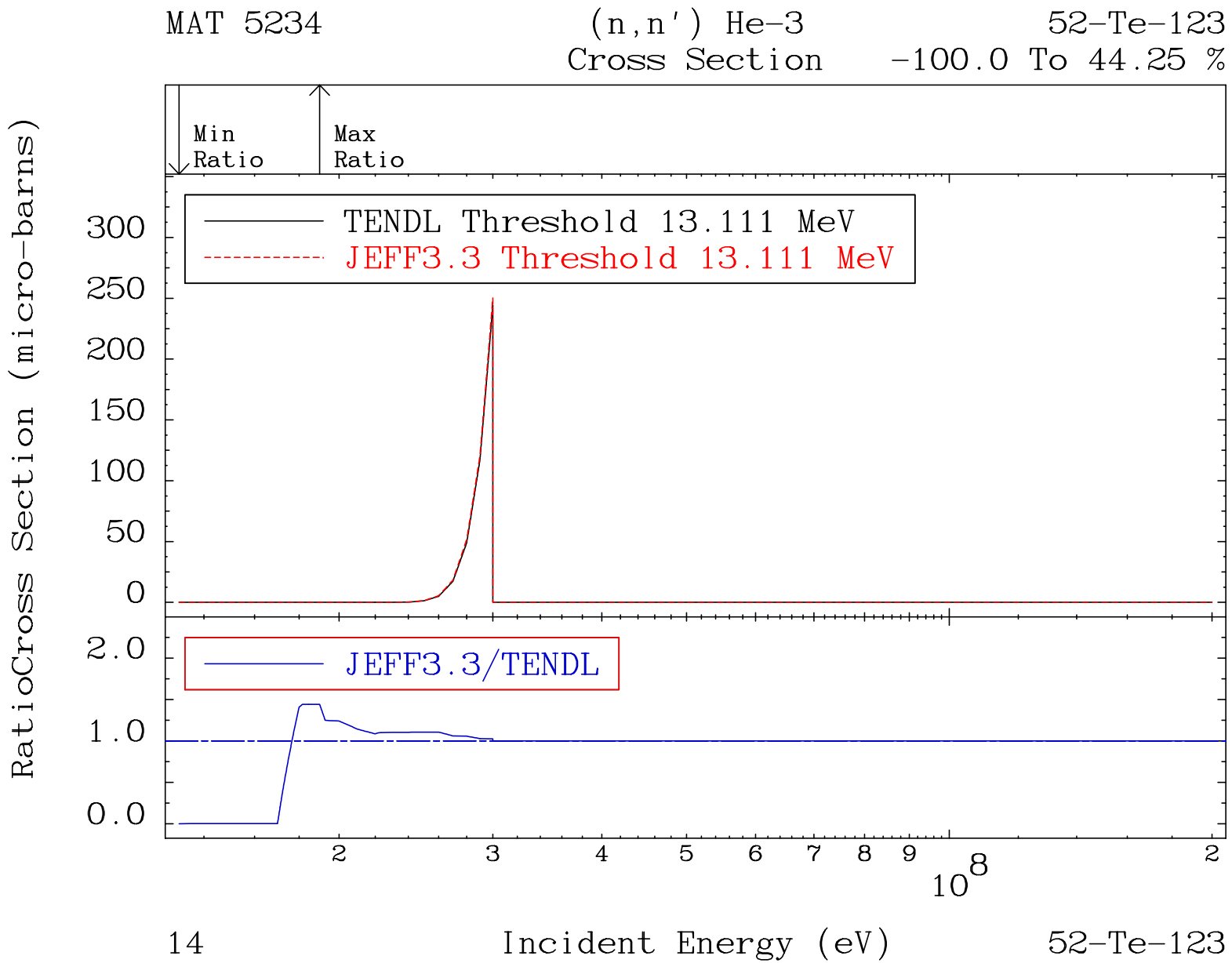

MAT 5234
(n,3n) α
Cross Section
52-Te-123
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 17.483 MeV
JEFF3.3 Threshold 17.483 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
60
50
40
30
20
10
0
10
0
2
3
4
5
6
7
8
9
2
10^8
9
Incident Energy (eV)
52-Te-123

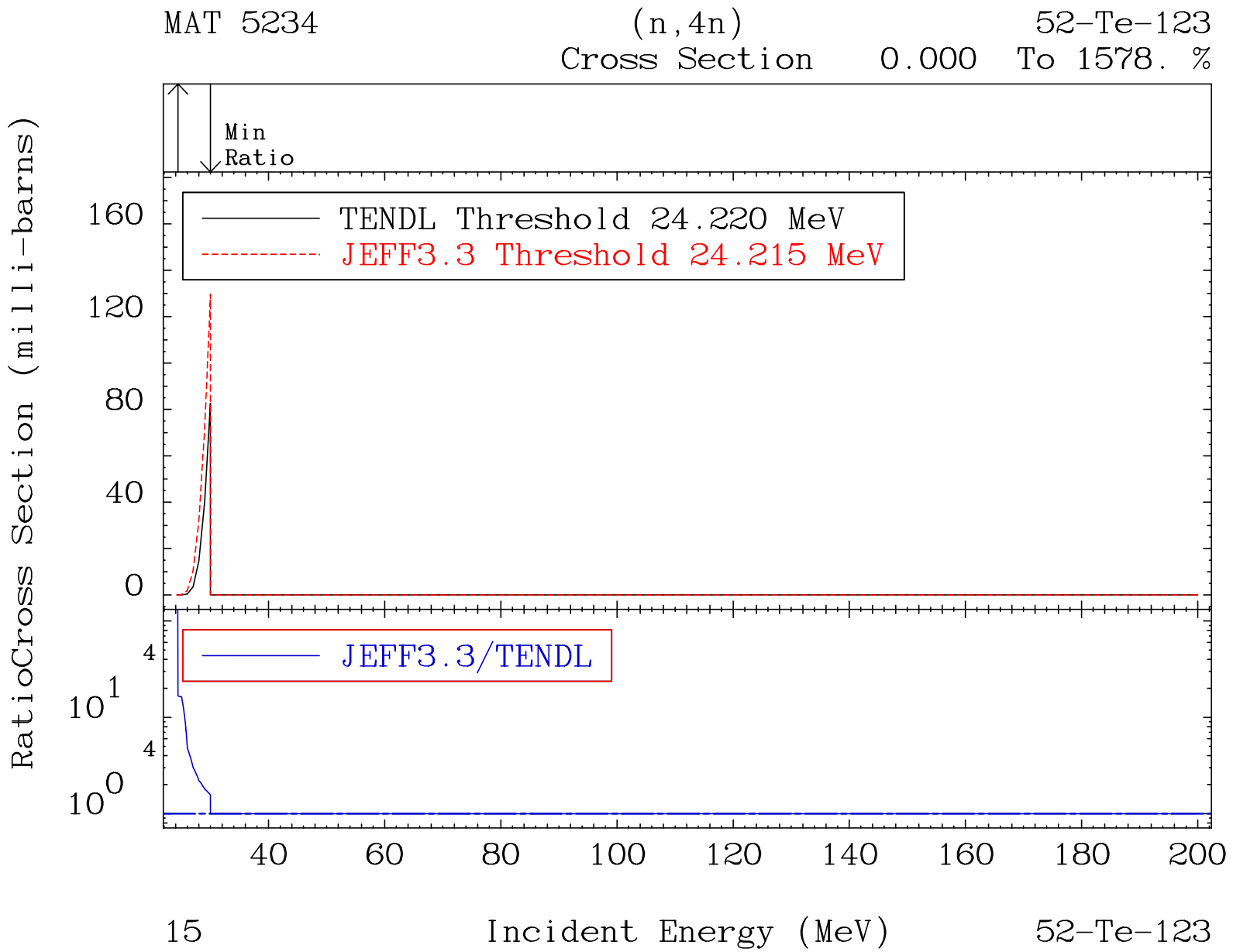

MAT 5234
(n,n') p
Cross Section
52-Te-123
-100.0 To 206.6 %
Max
Ratio
TENDL Threshold 8.1924 MeV
JEFF3.3 Threshold 8.1942 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
4
2
0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
52-Te-123

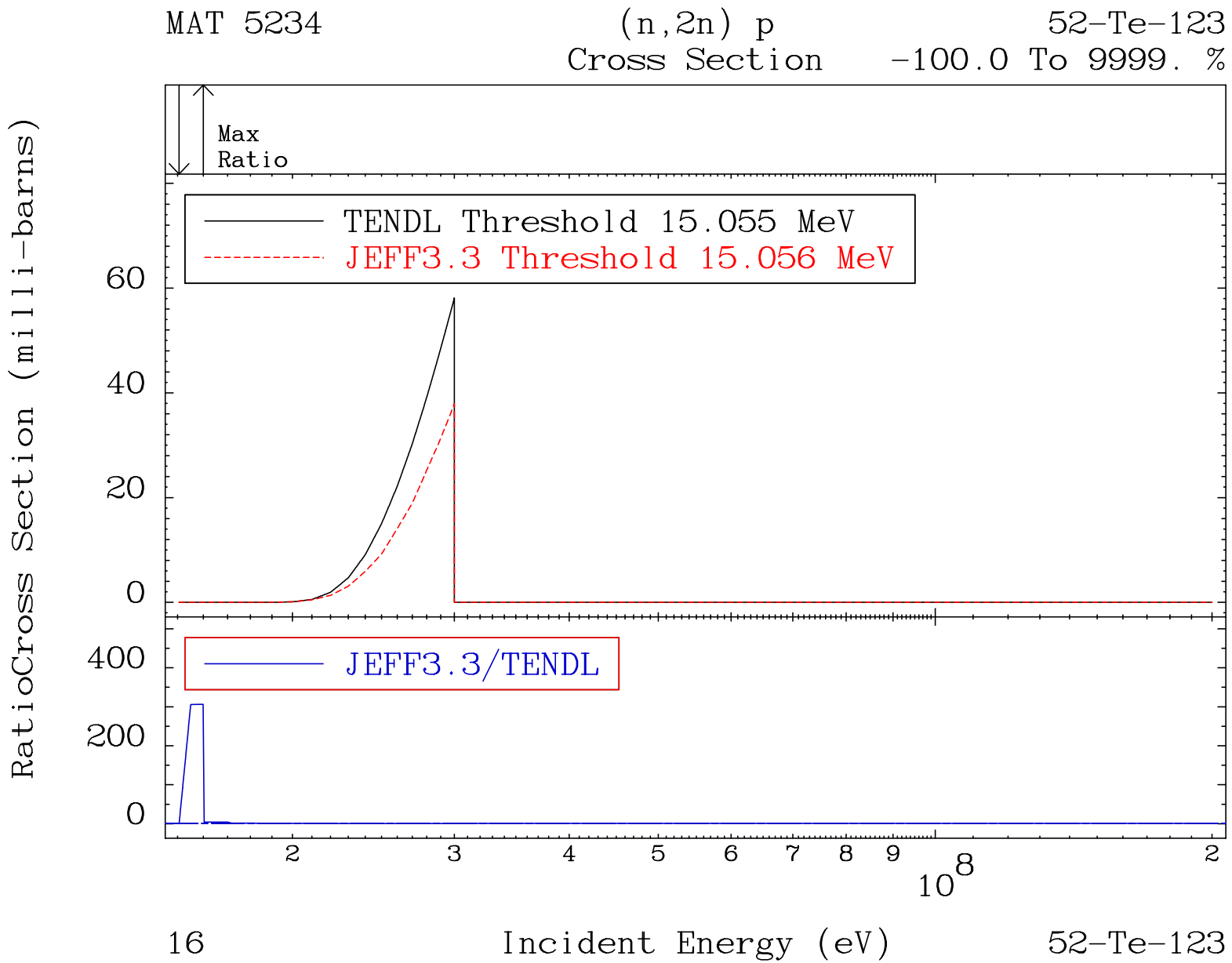

MAT 5234
(n,n') 2α
52-Te-123
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.9850 MeV
JEFF3.3 Threshold 5.9863 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
25
20
15
10
5
0
1.2
0.6
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
52-Te-123

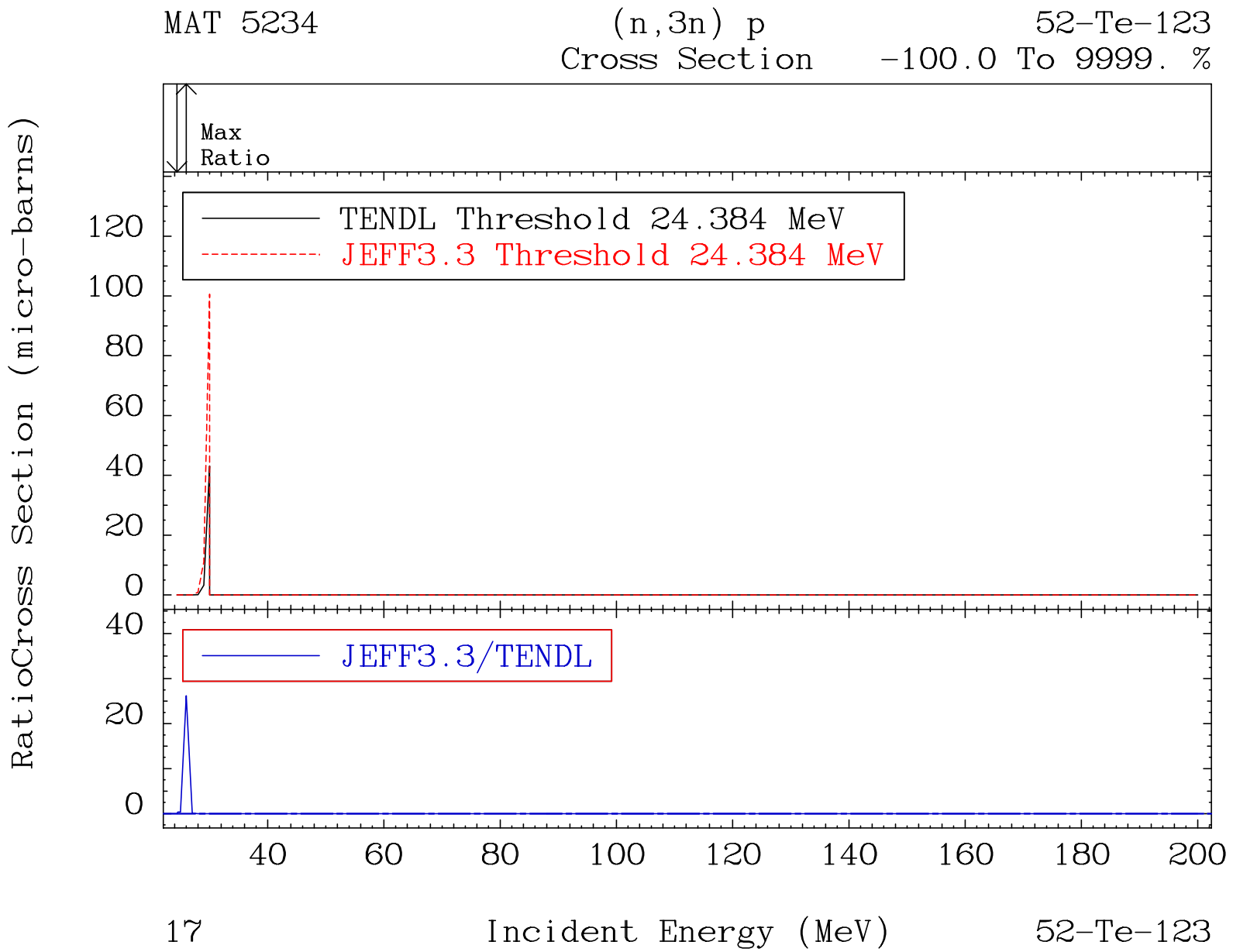

MAT 5234
(n,n') d
Cross Section
52-Te-123
-100.0 To 2962. %
Max
Ratio
TENDL Threshold 12.812 MeV
JEFF3.3 Threshold 12.814 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
40
20
0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
52-Te-123

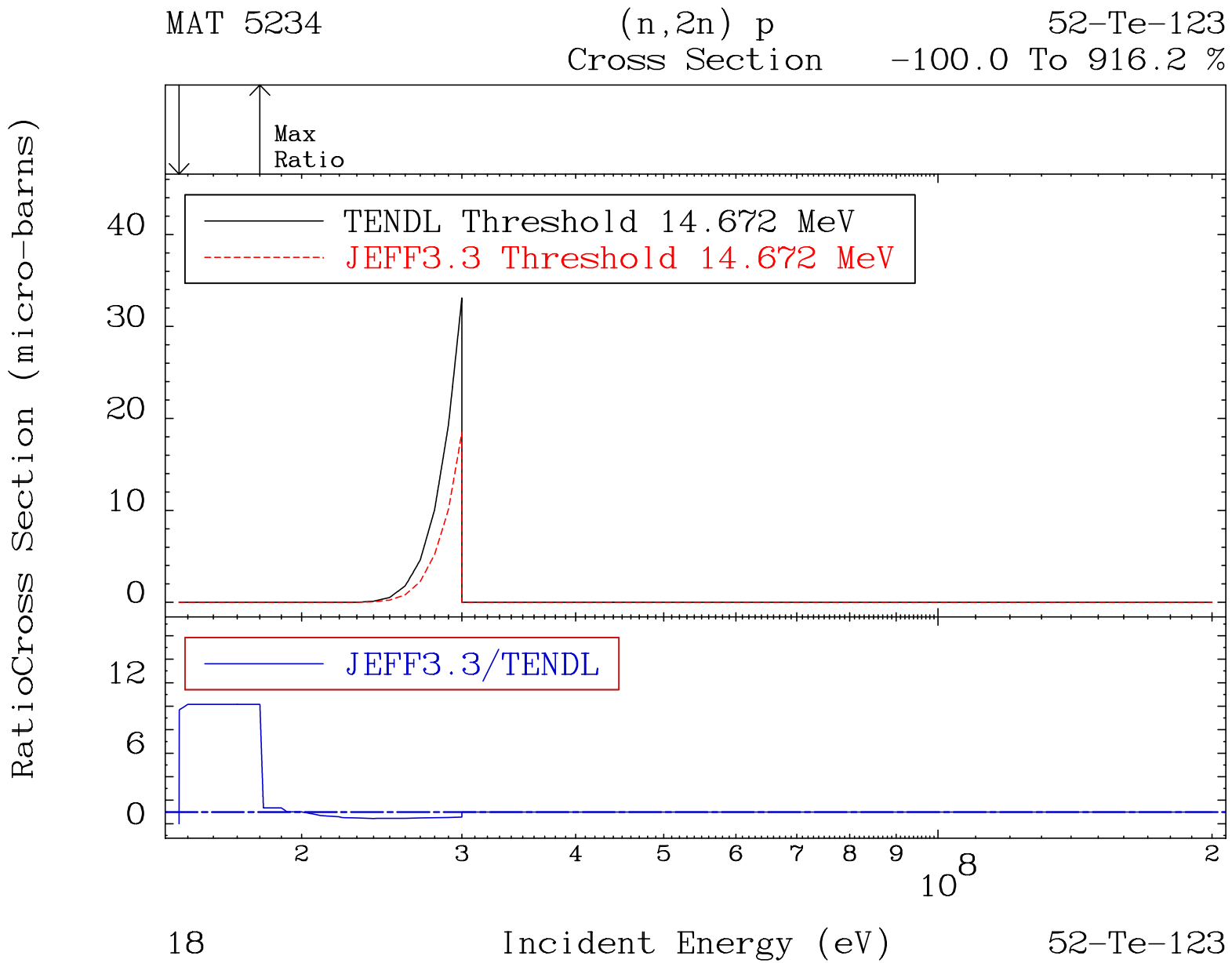

MAT 5234
(n,n') t
Cross Section
52-Te-123
-100.0 To 924.9 %
Max
Ratio
TENDL Threshold 15.833 MeV
JEFF3.3 Threshold 15.833 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
8
6
4
2
0
12
6
0
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
52-Te-123

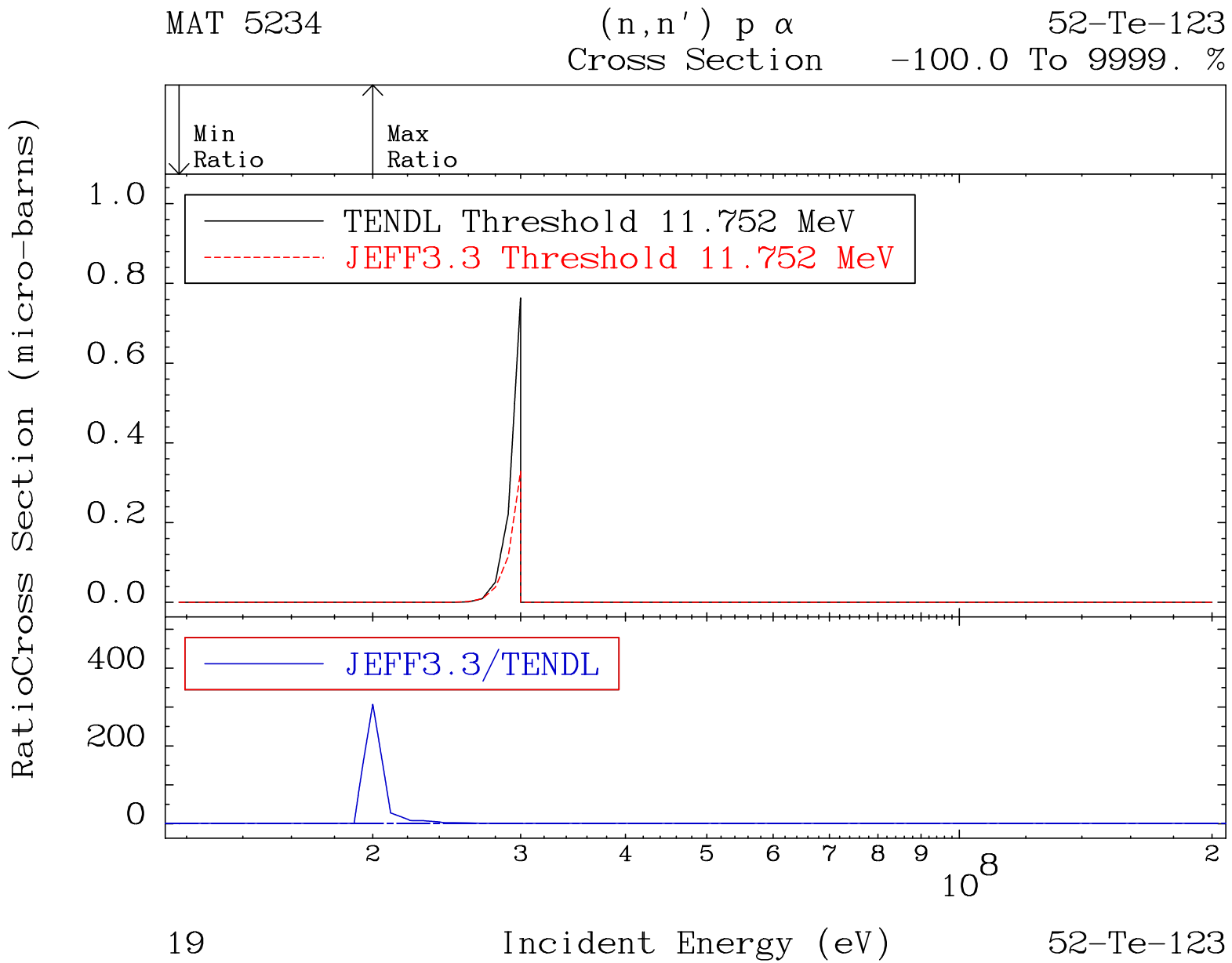

MAT 5234
(n,n') He-3
Cross Section
52-Te-123
-100.0 To 44.25 %
Min Ratio
Max Ratio
TENDL Threshold 13.111 MeV
JEFF3.3 Threshold 13.111 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
300
250
200
150
100
50
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
52-Te-123

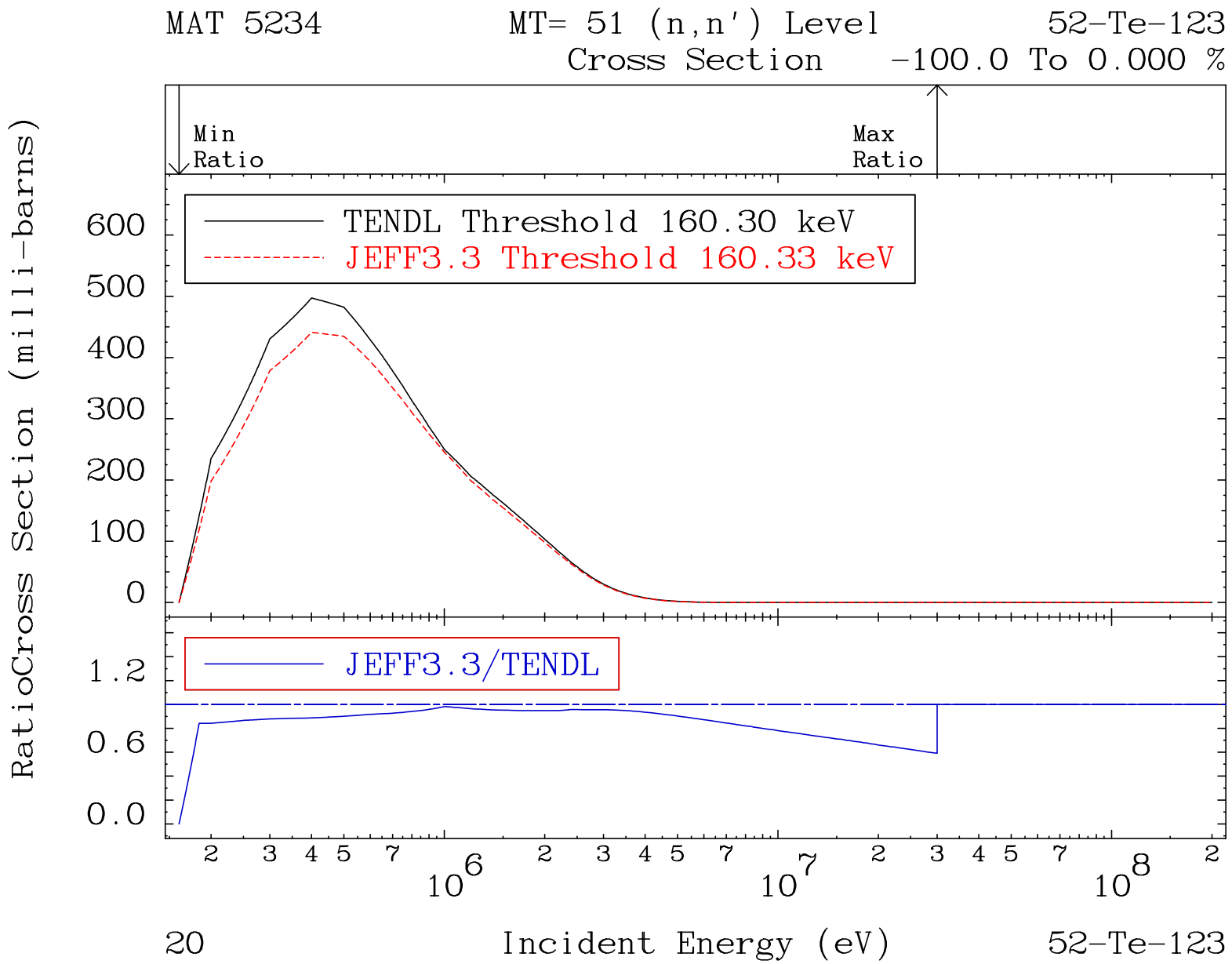

MAT 5234
(n,4n)
52-Te-123
Cross Section 0.000 To 1578. %
Min
Ratio
TENDL Threshold 24.220 MeV
JEFF3.3 Threshold 24.215 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
4
10^1
4
10^0
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
52-Te-123

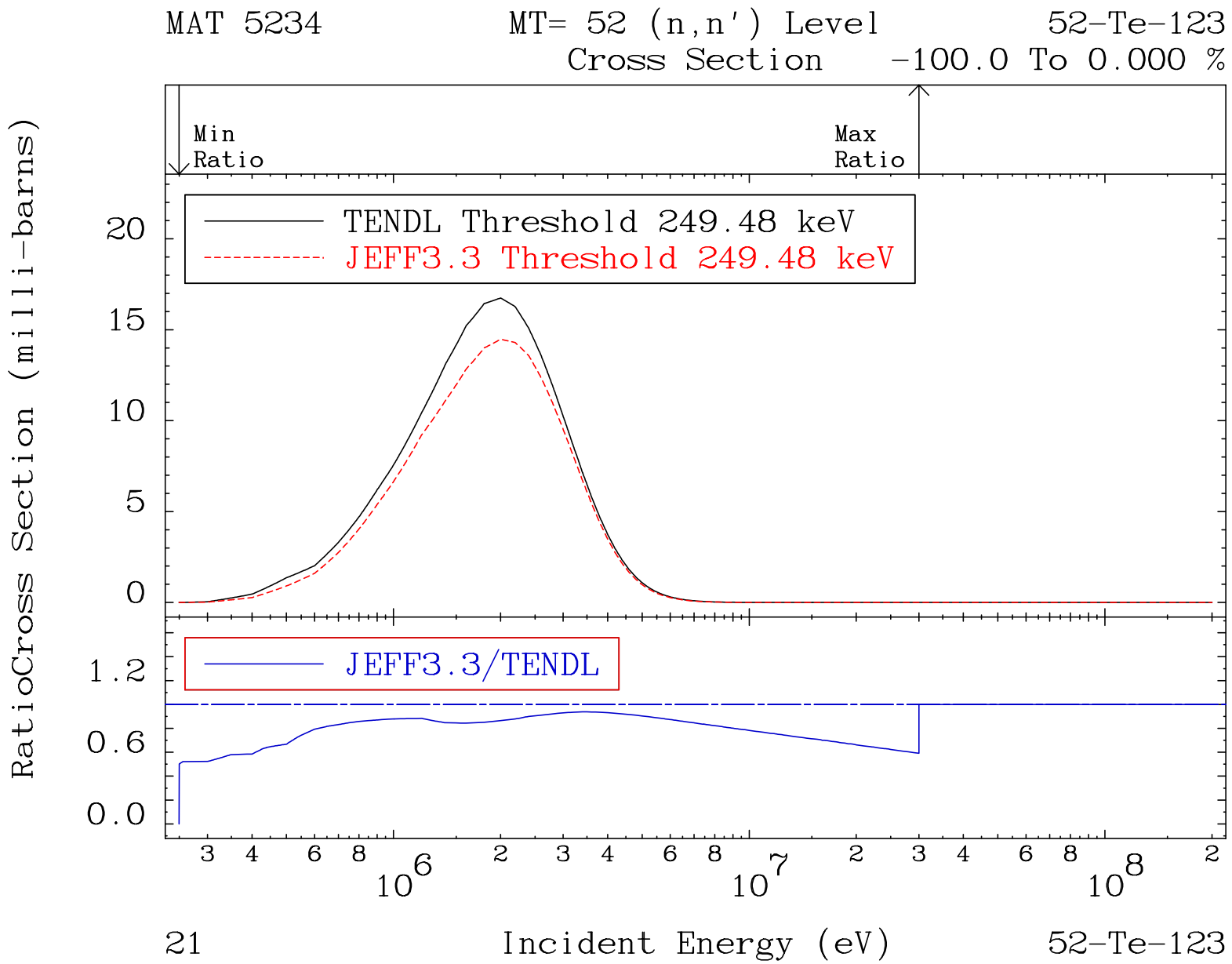

MAT 5234
(n,2n) p
Cross Section
52-Te-123
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 15.055 MeV
JEFF3.3 Threshold 15.056 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
40
20
0
400
200
0
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
52-Te-123

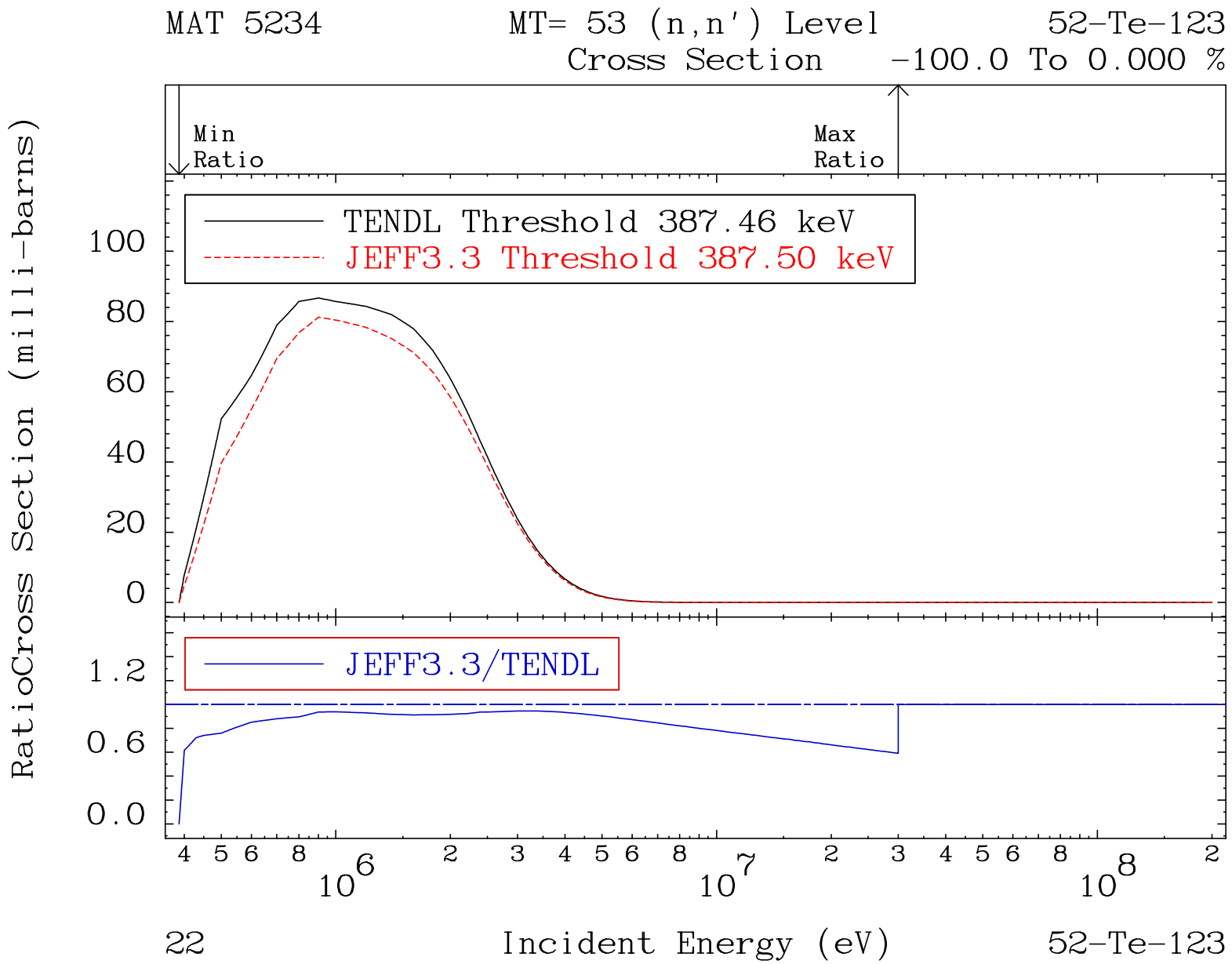

MAT 5234
(n,3n) p
52-Te-123
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 24.384 MeV
JEFF3.3 Threshold 24.384 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
120
100
80
60
40
20
0
40
20
0
40
60
80
100
120
140
160
180
200
17
Incident Energy (MeV)
52-Te-123

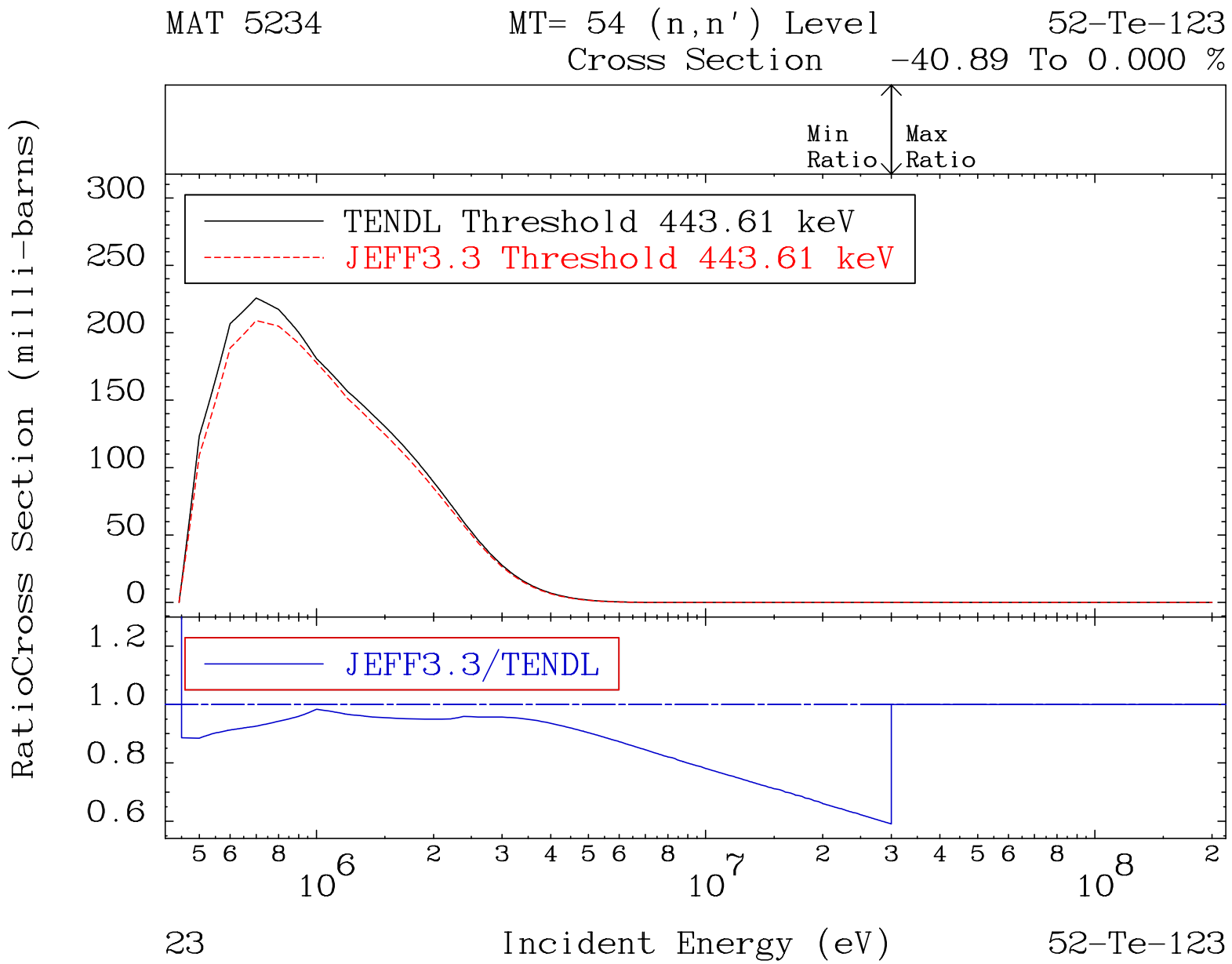

MAT 5234
(n,2n) p
Cross Section
52-Te-123
-100.0 To 916.2 %
Max
Ratio
TENDL Threshold 14.672 MeV
JEFF3.3 Threshold 14.672 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
40
30
20
10
0
12
6
0
2
3
4
5
6
7
8
9
10^8
2
18
Incident Energy (eV)
52-Te-123

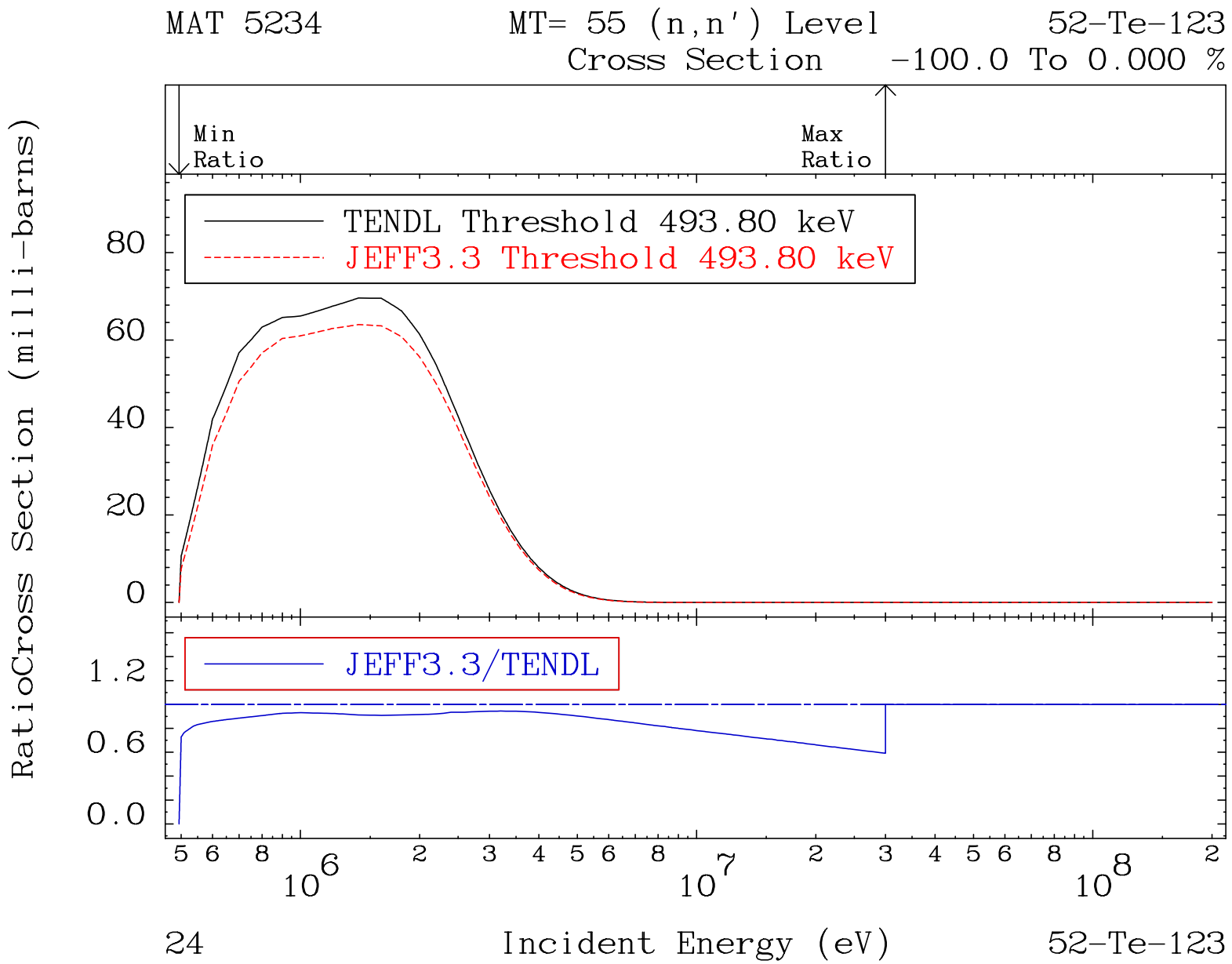

MAT 5234
(n,n') p α
52-Te-123
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.752 MeV
JEFF3.3 Threshold 11.752 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.0
0.8
0.6
0.4
0.2
0.0
400
200
0
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
52-Te-123

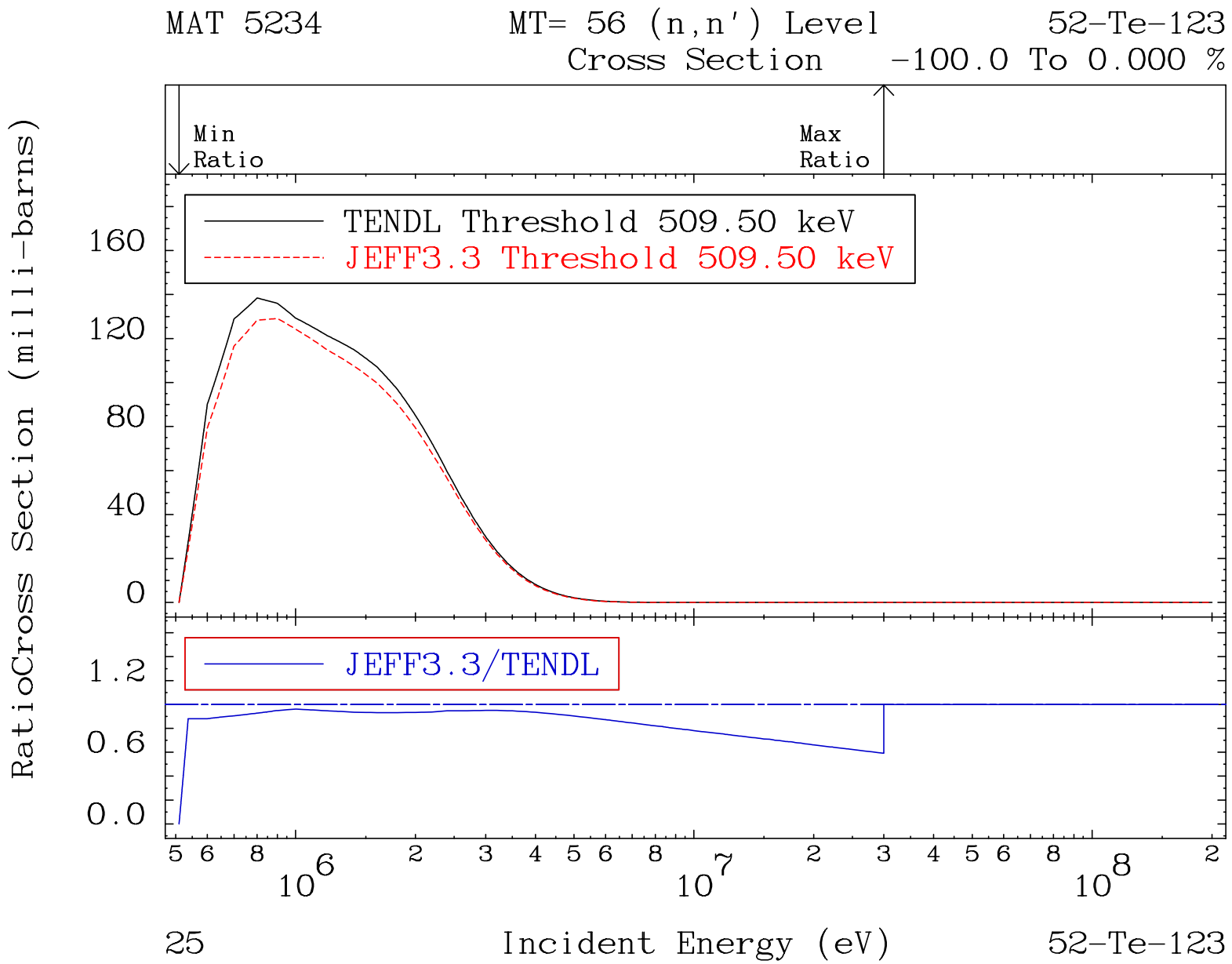

MAT 5234
MT= 51 (n,n') Level
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 160.30 keV
JEFF3.3 Threshold 160.33 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
1.2
0.6
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
20
Incident Energy (eV)
52-Te-123

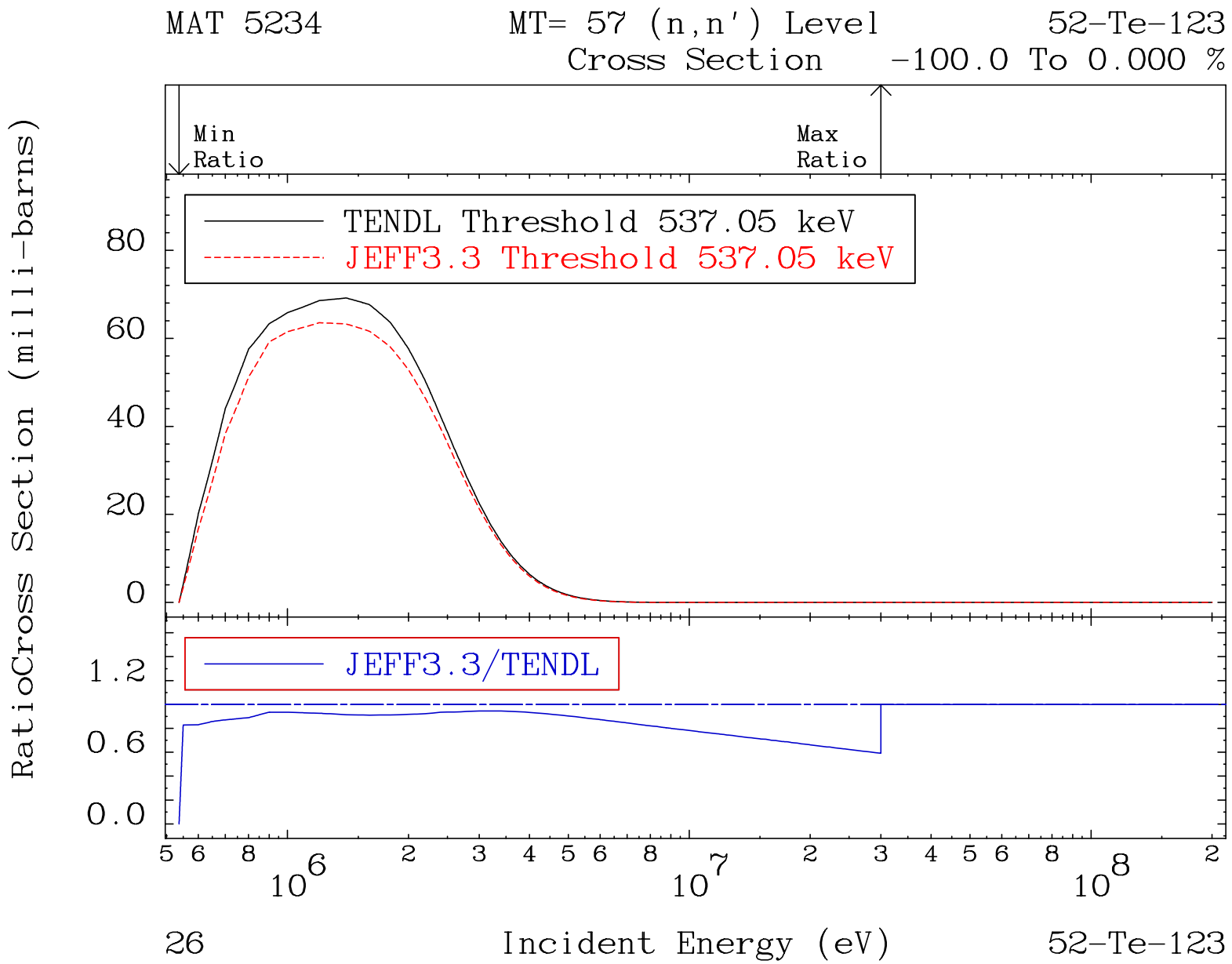

MAT 5234
MT= 52 (n,n') Level
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 249.48 keV
JEFF3.3 Threshold 249.48 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.2
0.6
0.0
3 4 6 8 10^6 2 3 4 6 8 10^7 2 3 4 6 8 10^8 2
21
Incident Energy (eV)
52-Te-123

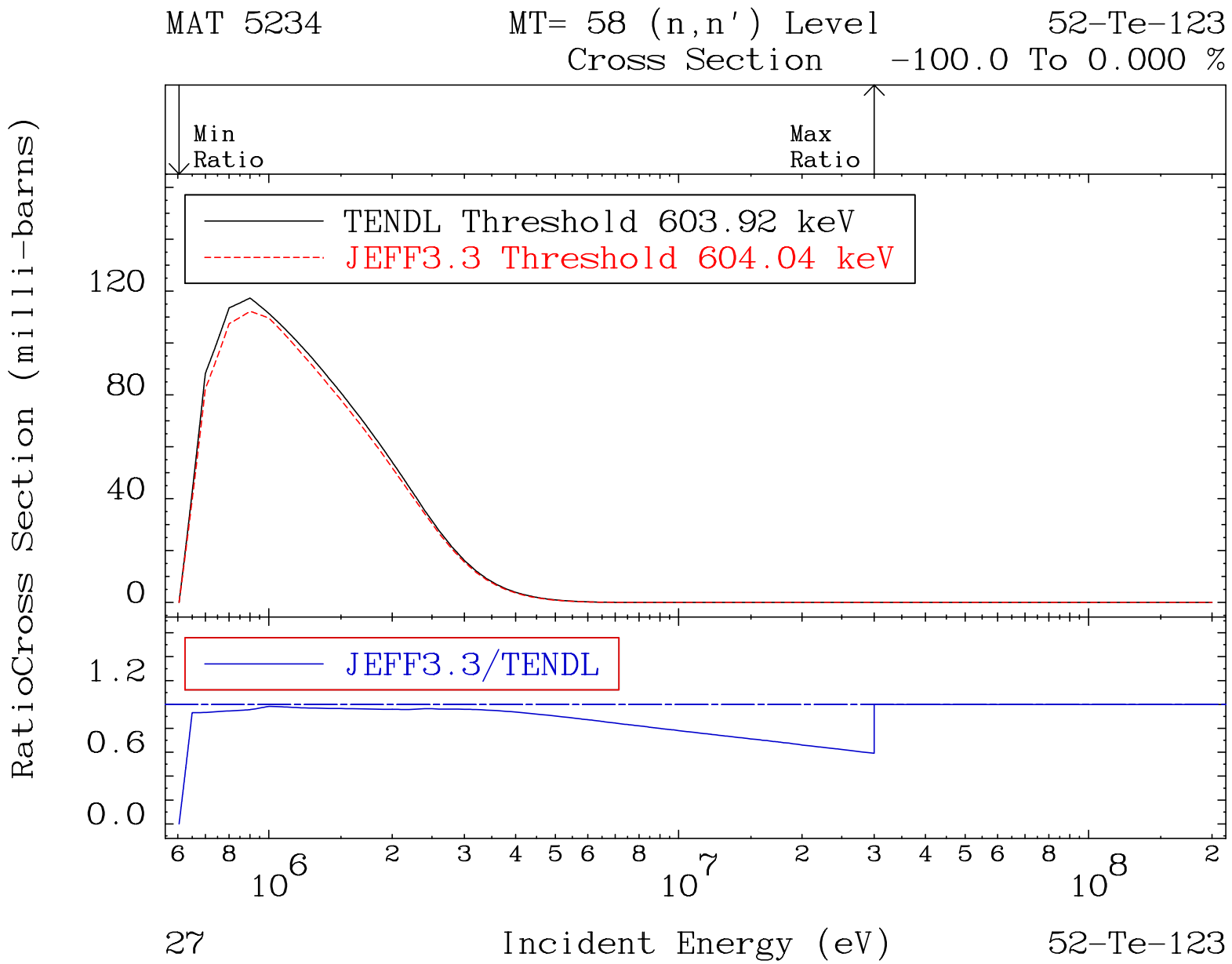

MAT 5234
MT= 53 (n,n') Level
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 387.46 keV
JEFF3.3 Threshold 387.50 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.6
0.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
22
Incident Energy (eV)
52-Te-123

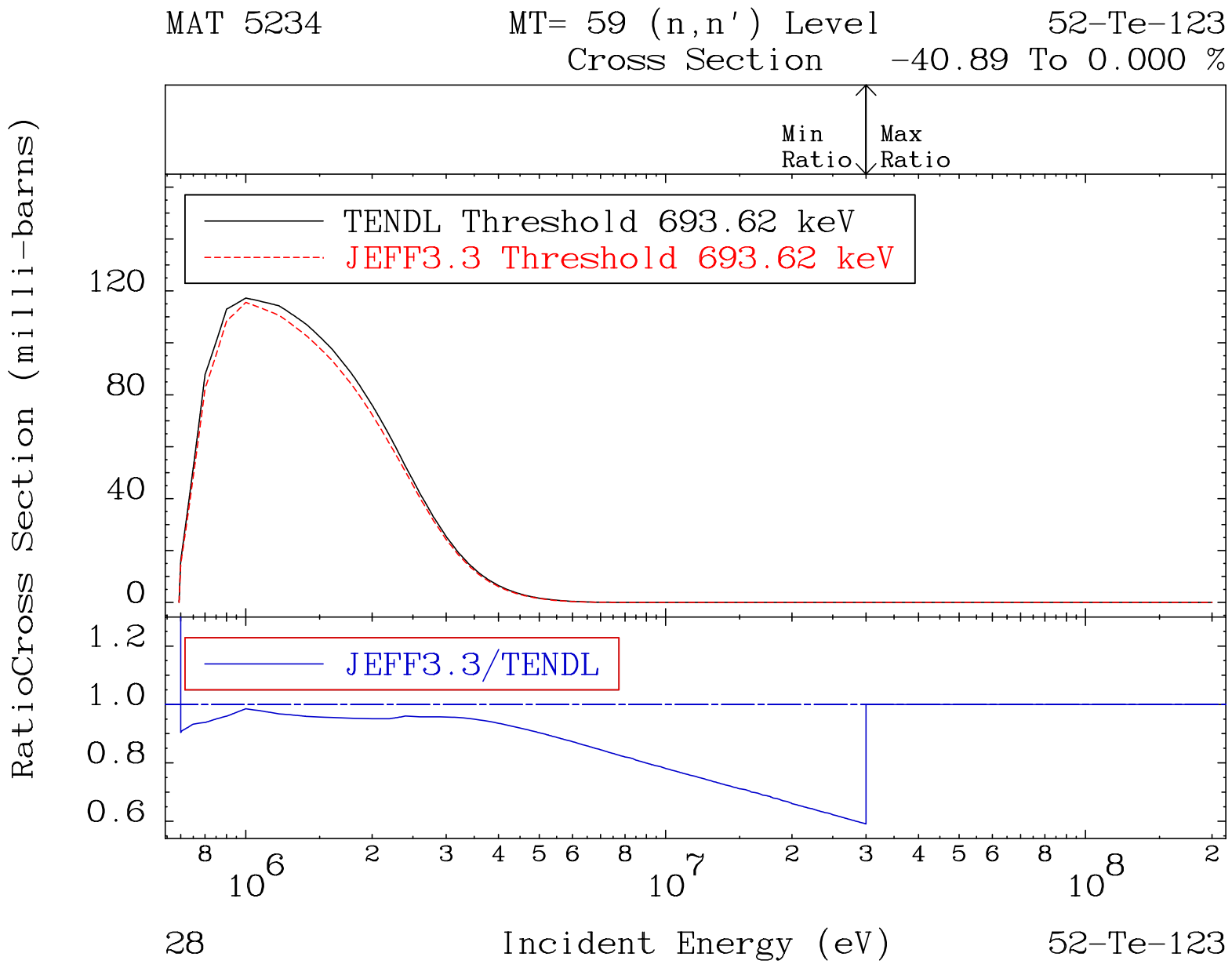

MAT 5234
MT= 54 (n,n') Level
52-Te-123
Cross Section -40.89 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 443.61 keV
JEFF3.3 Threshold 443.61 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
1.2
1.0
0.8
0.6
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
23
Incident Energy (eV)
52-Te-123

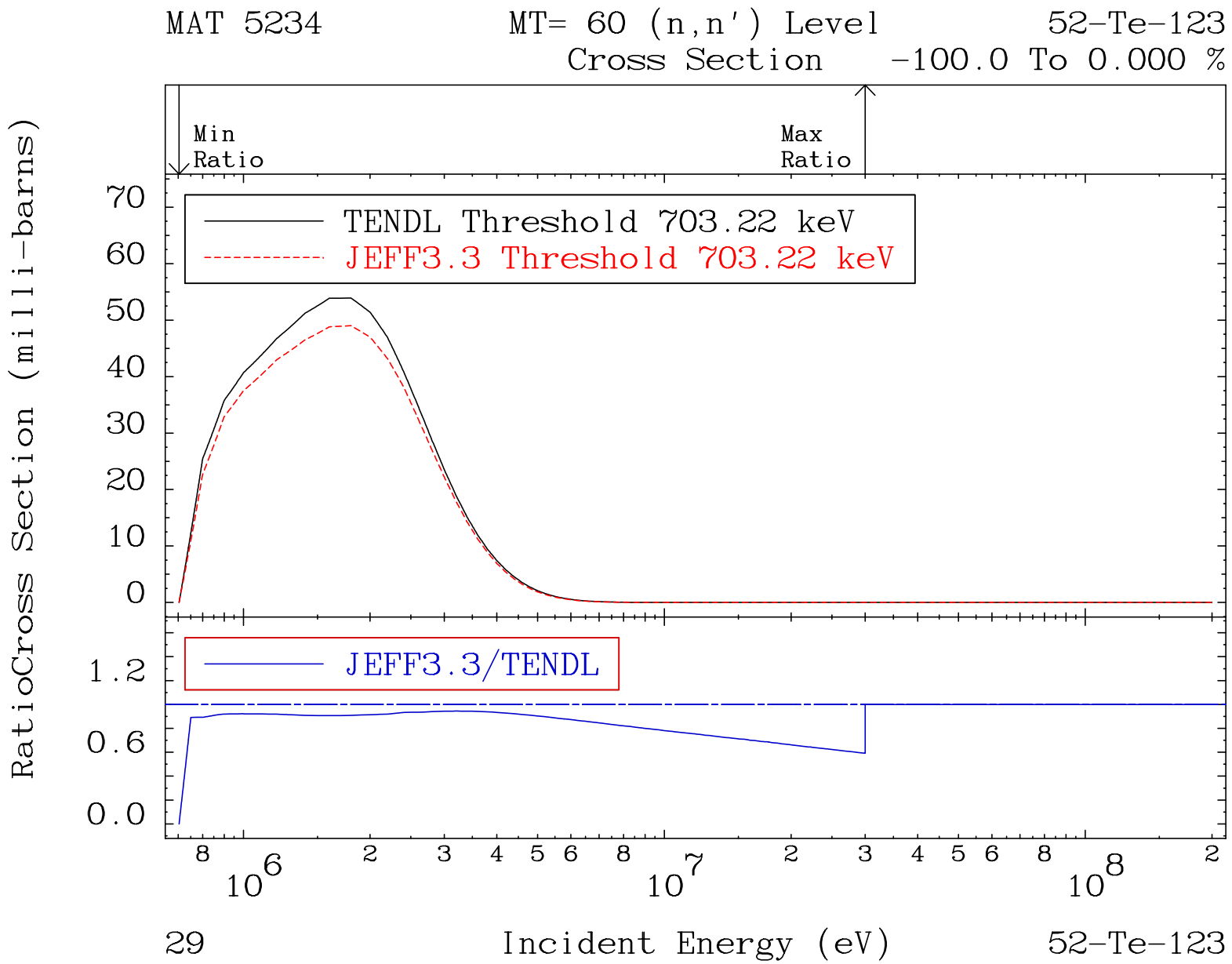

MAT 5234
MT= 55 (n,n') Level
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 493.80 keV
JEFF3.3 Threshold 493.80 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
24
Incident Energy (eV)
52-Te-123

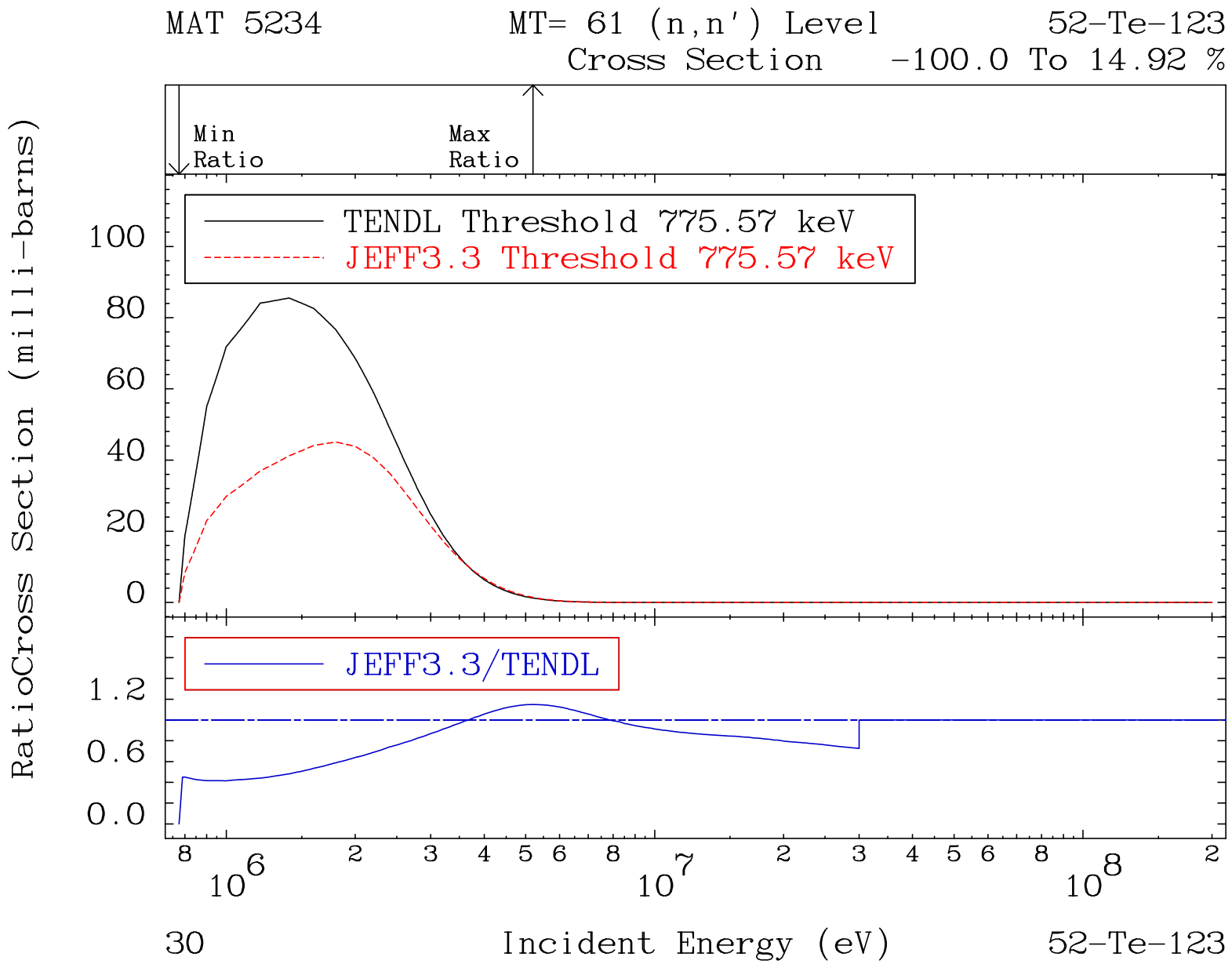

MAT 5234
MT= 56 (n,n') Level
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 509.50 keV
JEFF3.3 Threshold 509.50 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
1.2
0.6
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
25
52-Te-123

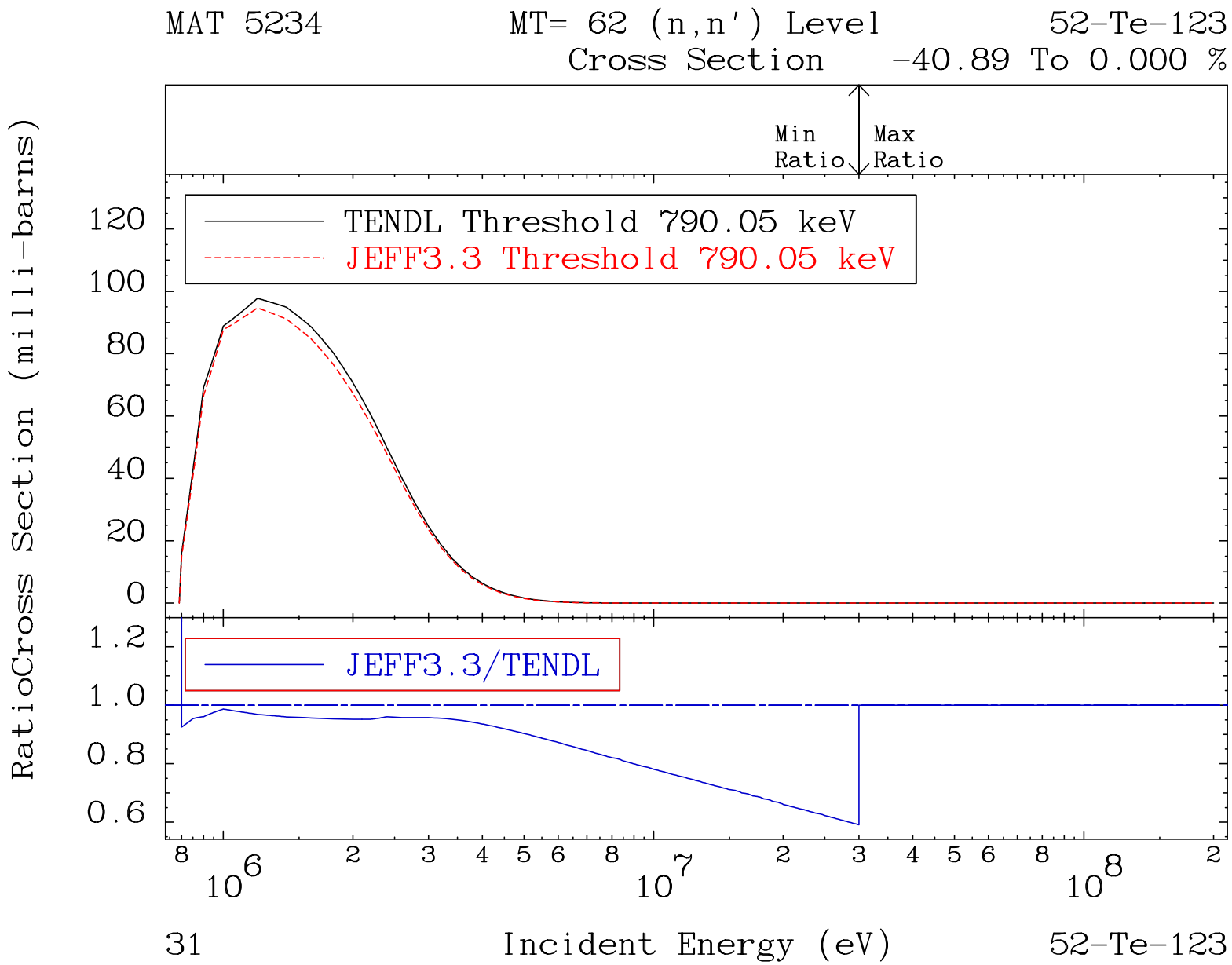

MAT 5234
MT= 57 (n,n') Level
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 537.05 keV
JEFF3.3 Threshold 537.05 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
26
Incident Energy (eV)
52-Te-123

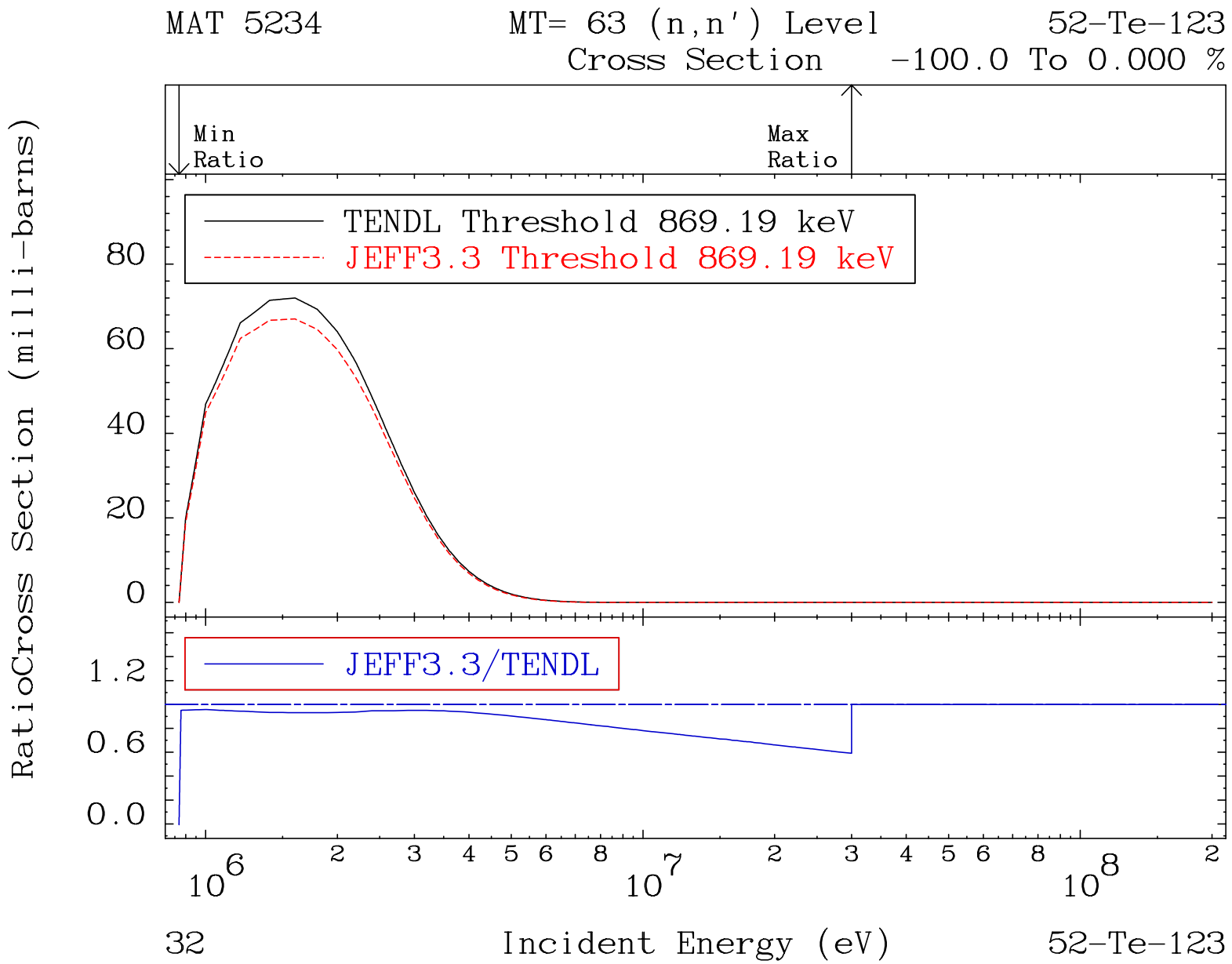

MAT 5234
MT= 58 (n,n') Level
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 603.92 keV
JEFF3.3 Threshold 604.04 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
80
40
0
1.2
0.6
0.0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
27
Incident Energy (eV)
52-Te-123

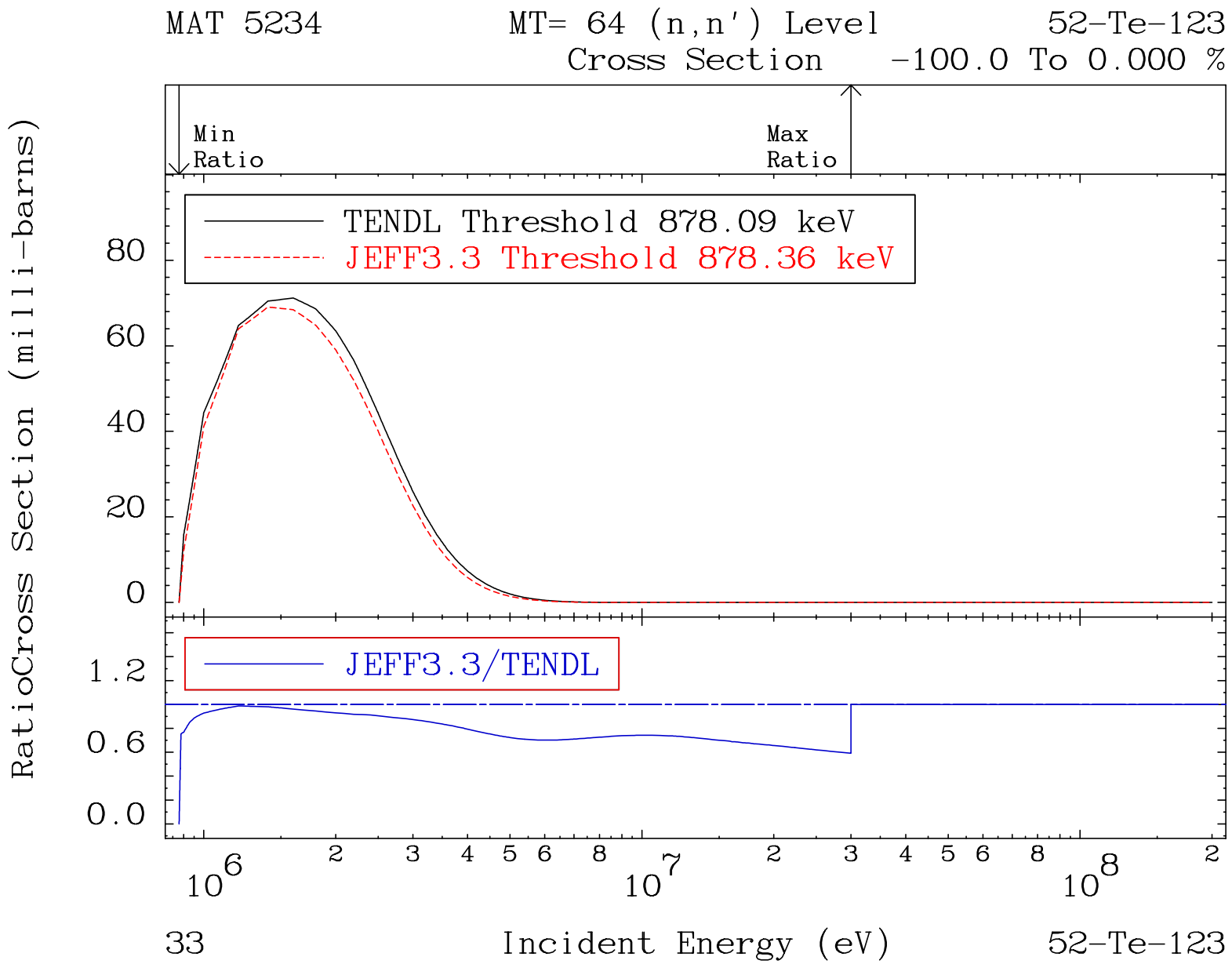

MAT 5234
MT= 59 (n,n') Level
52-Te-123
Cross Section
-40.89 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 693.62 keV
JEFF3.3 Threshold 693.62 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
80
40
0
1.2
1.0
0.8
0.6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
28
Incident Energy (eV)
52-Te-123

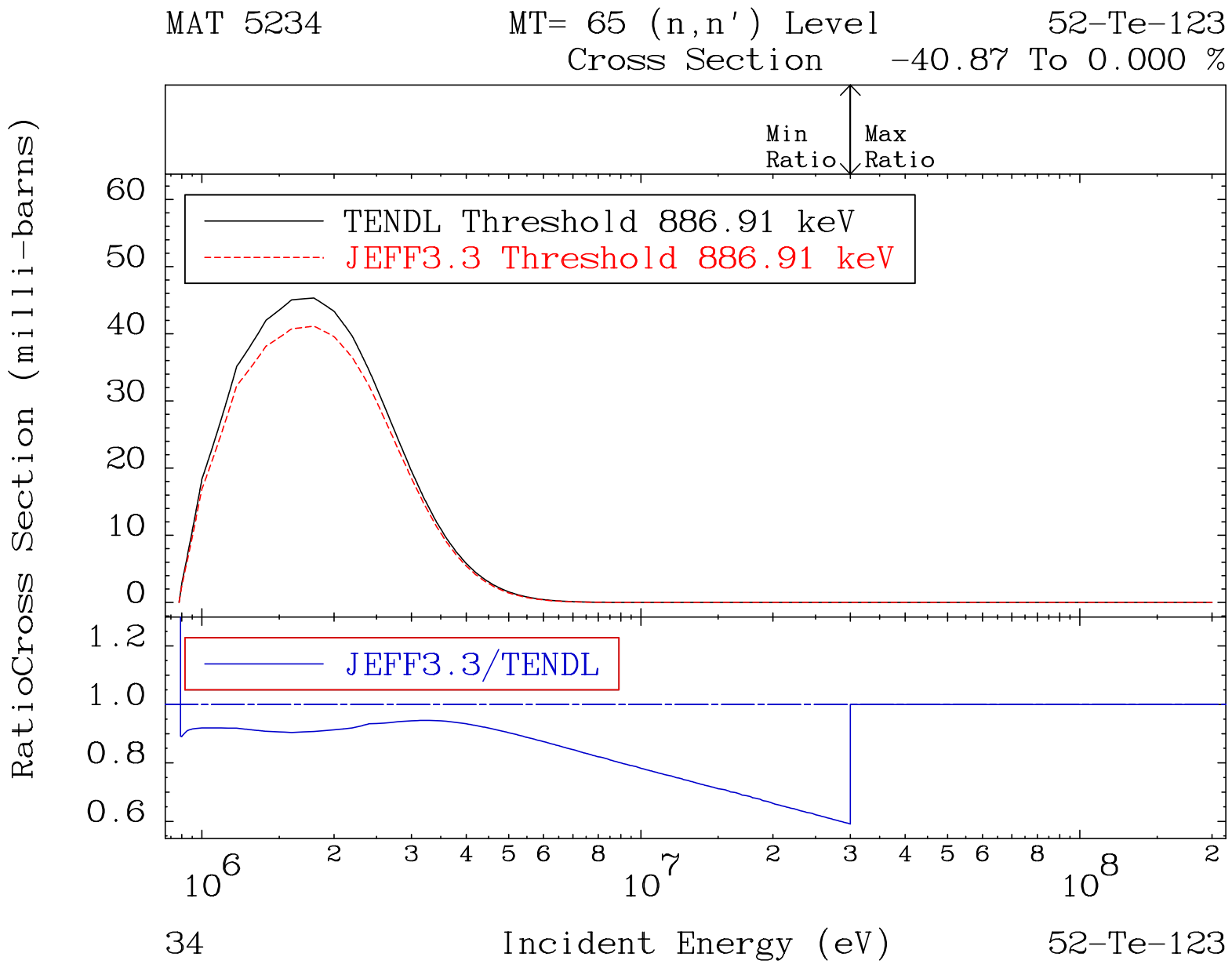

MAT 5234
MT= 60 (n,n') Level
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 703.22 keV
JEFF3.3 Threshold 703.22 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
29
Incident Energy (eV)
52-Te-123

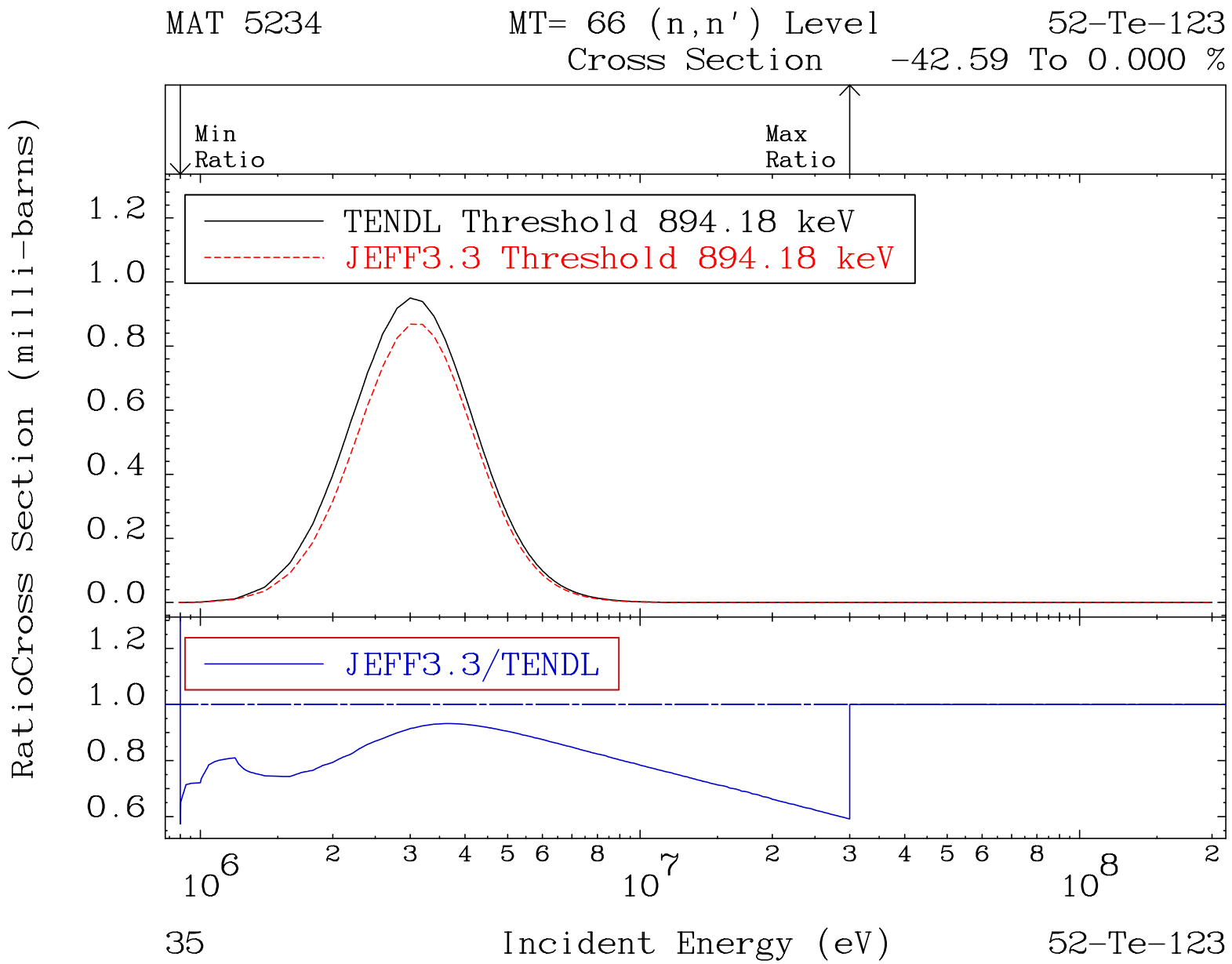

MAT 5234
MT= 61 (n,n') Level
52-Te-123
Cross Section
-100.0 To 14.92 %
Min Ratio
Max Ratio
TENDL Threshold 775.57 keV
JEFF3.3 Threshold 775.57 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
30
Incident Energy (eV)
52-Te-123

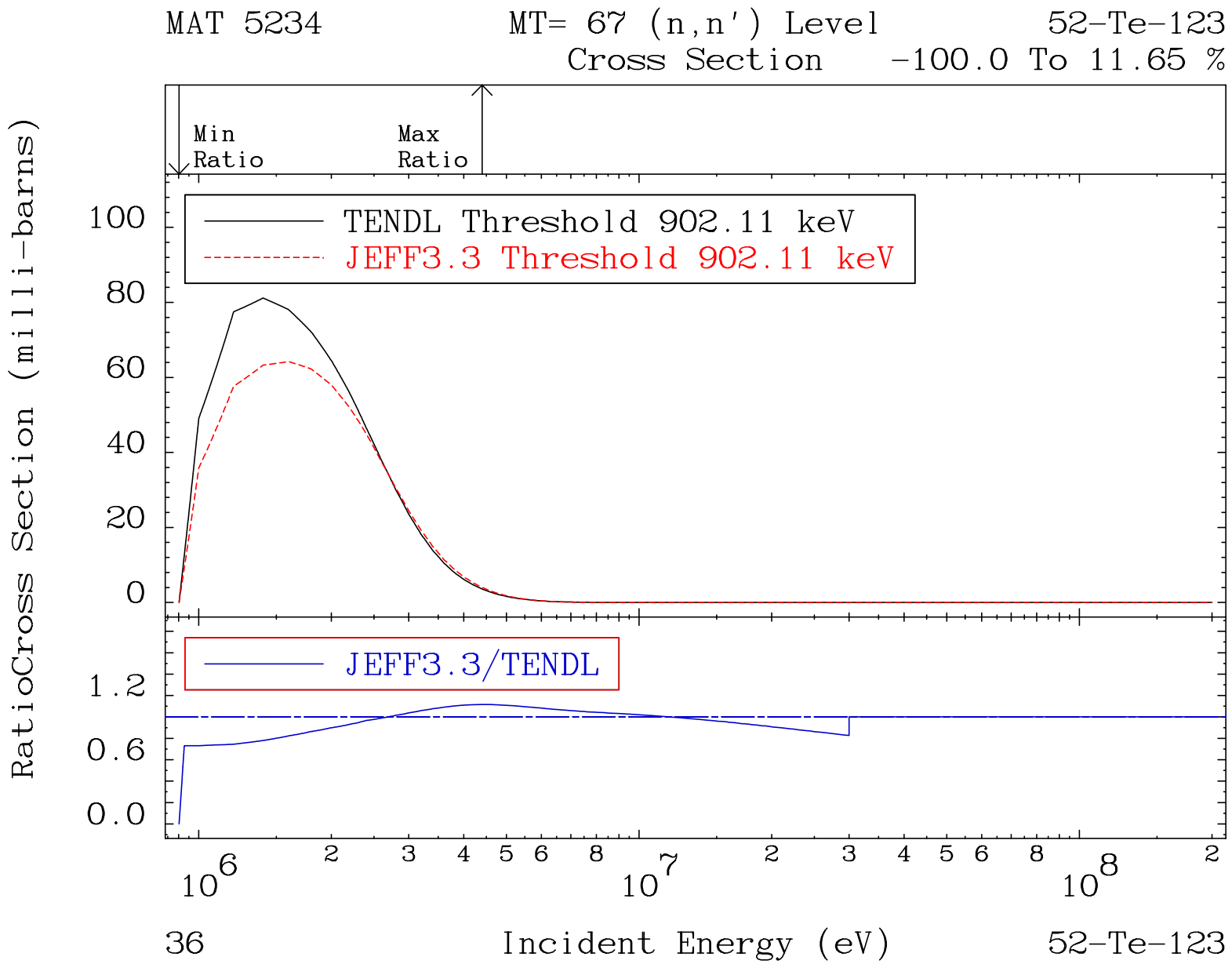

MAT 5234
MT= 62 (n,n') Level
52-Te-123
Cross Section
-40.89 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 790.05 keV
JEFF3.3 Threshold 790.05 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
1.2
1.0
0.8
0.6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
31
Incident Energy (eV)
52-Te-123

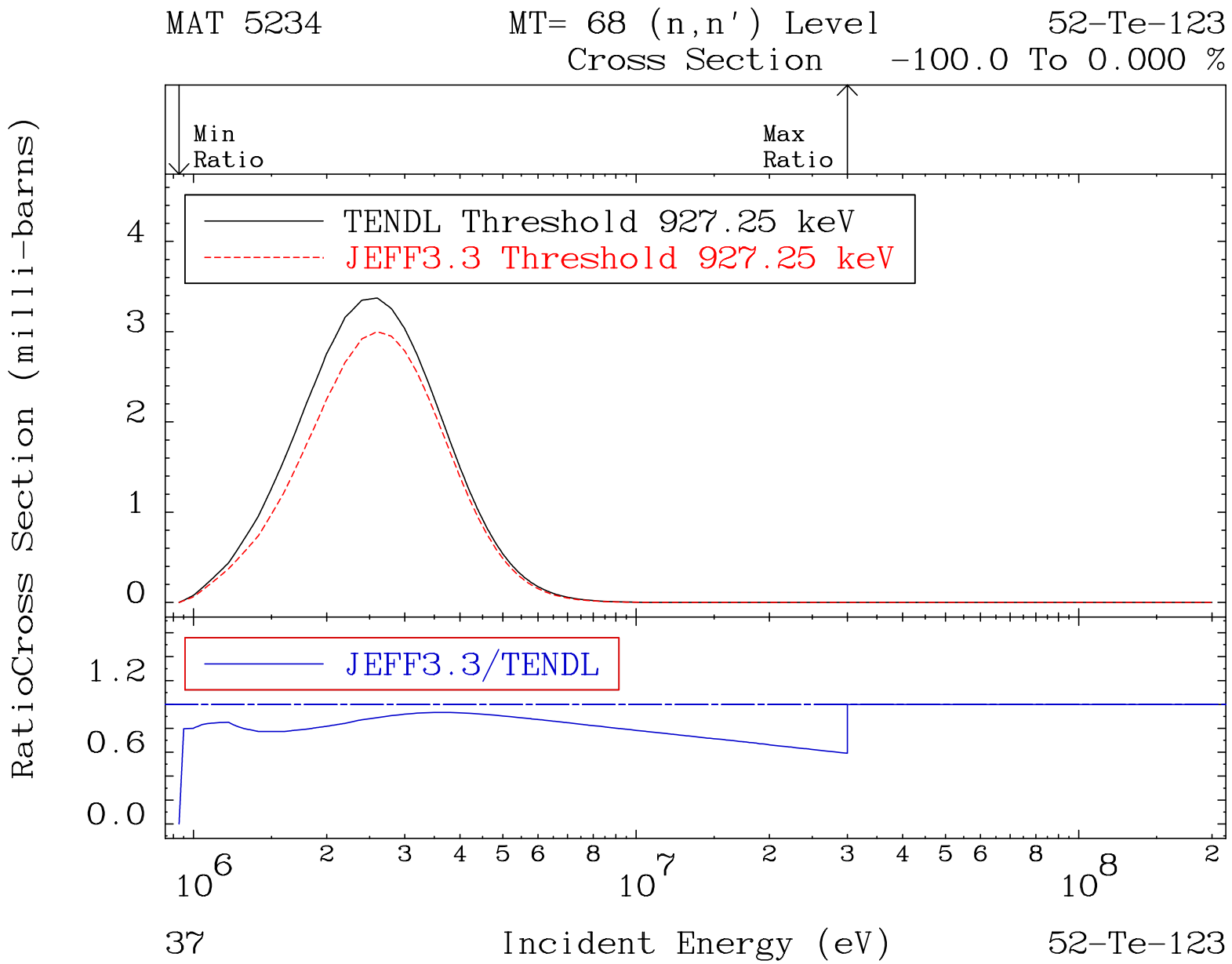

MAT 5234
MT= 63 (n,n') Level
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 869.19 keV
JEFF3.3 Threshold 869.19 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
32
Incident Energy (eV)
52-Te-123

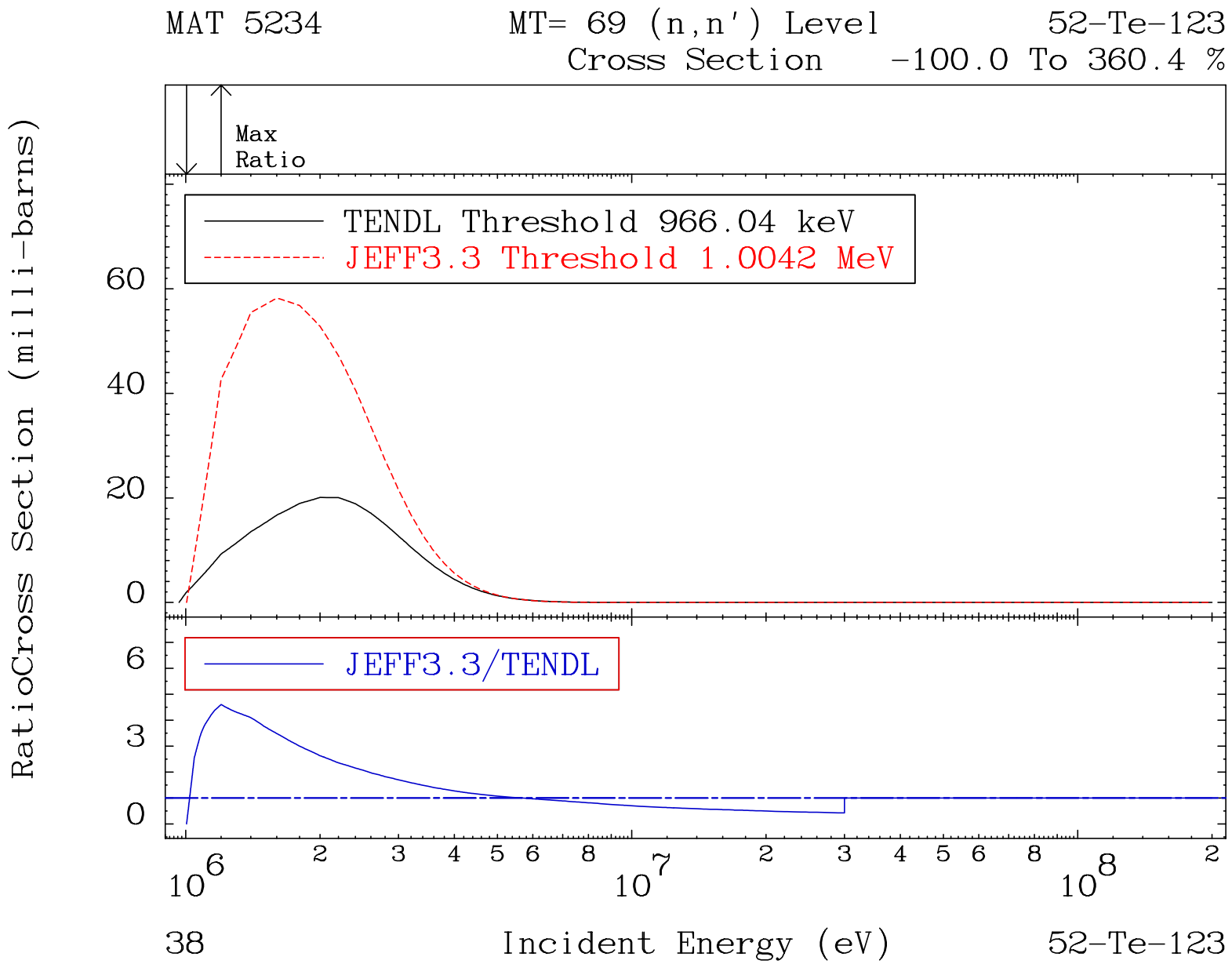

MAT 5234
MT= 64 (n,n') Level
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 878.09 keV
JEFF3.3 Threshold 878.36 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
33
Incident Energy (eV)
52-Te-123

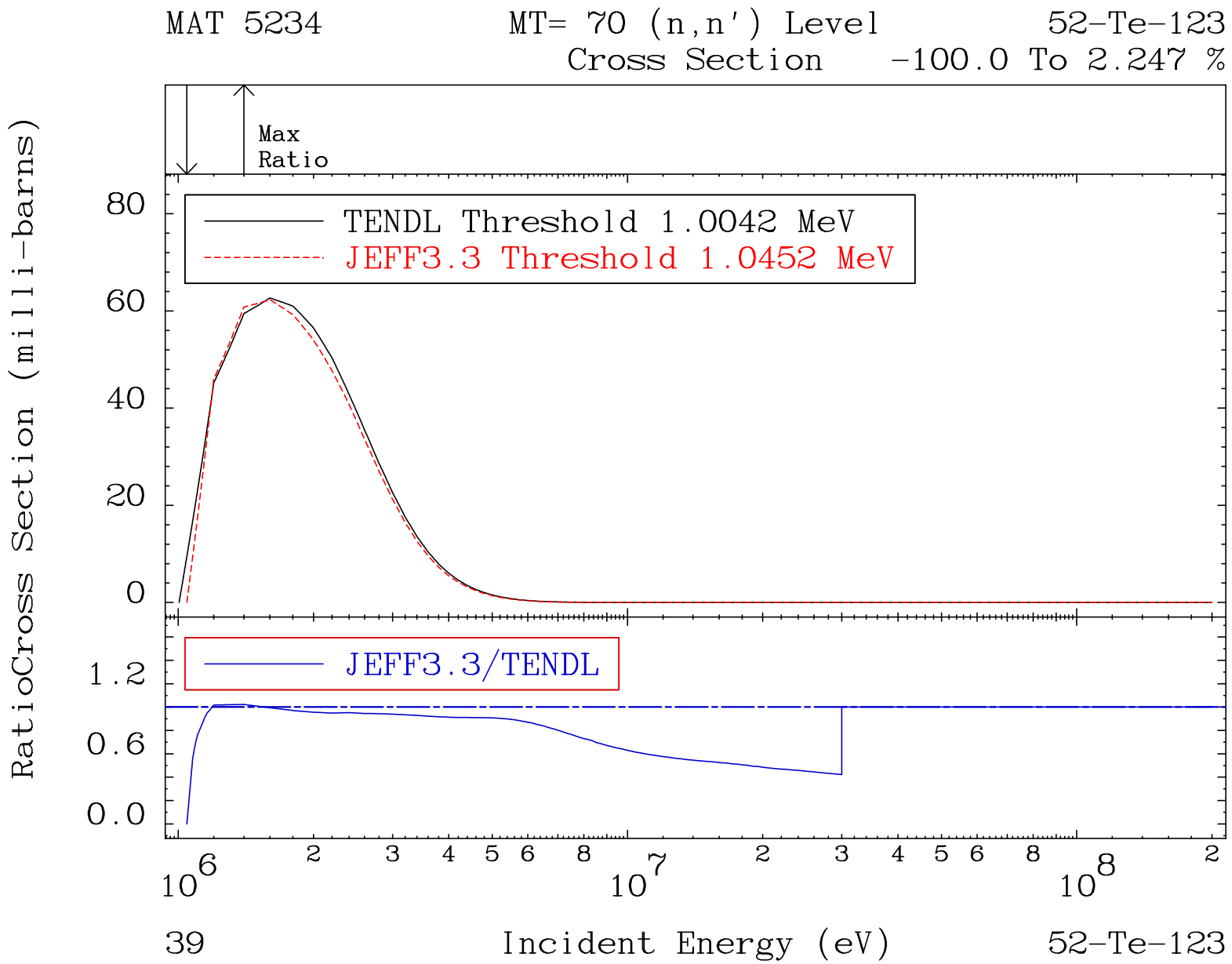

MAT 5234
MT= 65 (n,n') Level
52-Te-123
Cross Section
-40.87 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 886.91 keV
JEFF3.3 Threshold 886.91 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
1.2
1.0
0.8
0.6
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
34
Incident Energy (eV)
52-Te-123

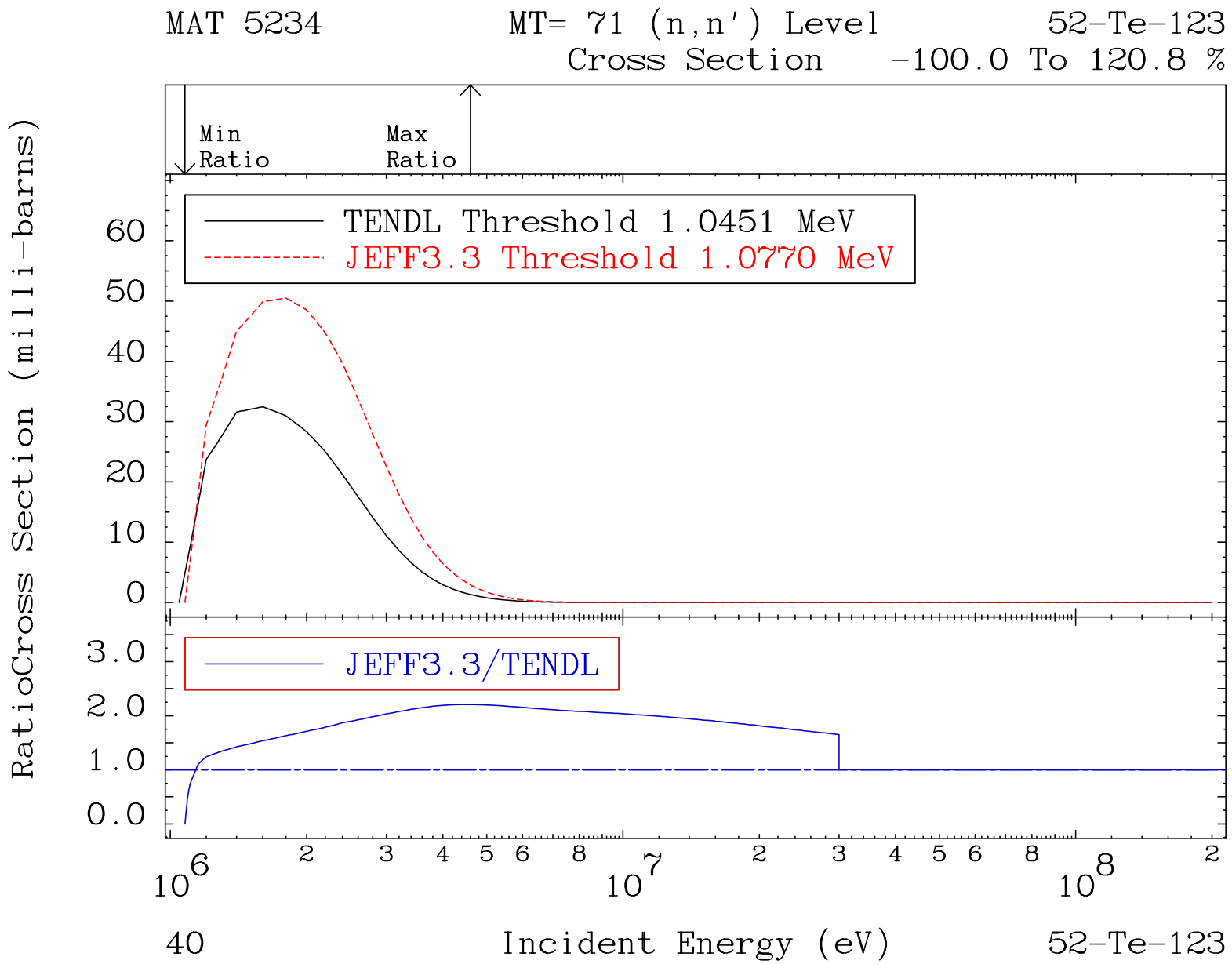

MAT 5234
MT= 66 (n,n') Level
52-Te-123
Cross Section
-42.59 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 894.18 keV
JEFF3.3 Threshold 894.18 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10^6
10^7
10^8
2
3
4
5
6
8
35
Incident Energy (eV)
52-Te-123

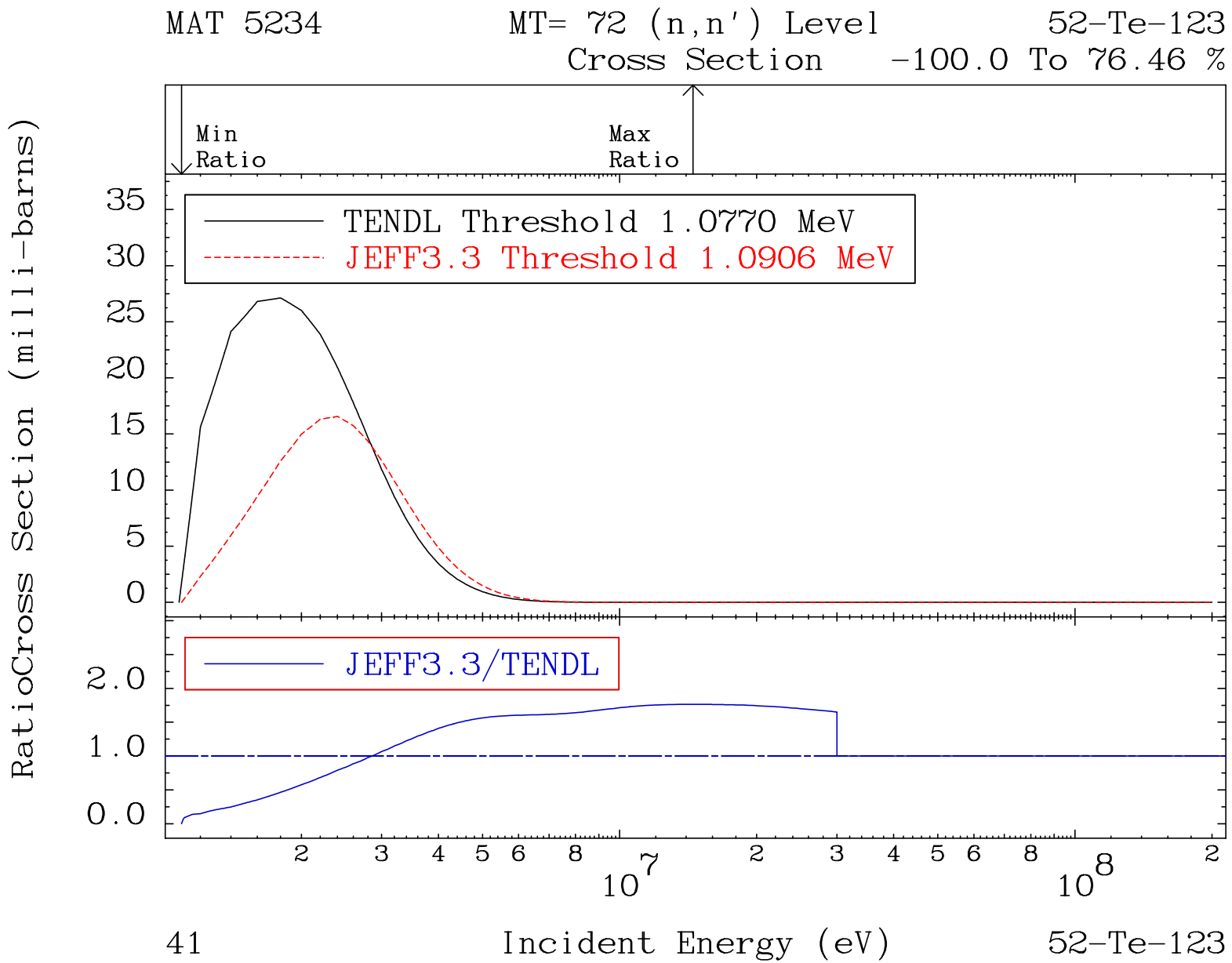

MAT 5234
MT= 67 (n,n') Level
52-Te-123
Cross Section
-100.0 To 11.65 %
Min Ratio
Max Ratio
TENDL Threshold 902.11 keV
JEFF3.3 Threshold 902.11 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.6
0.0
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
36
Incident Energy (eV)
52-Te-123

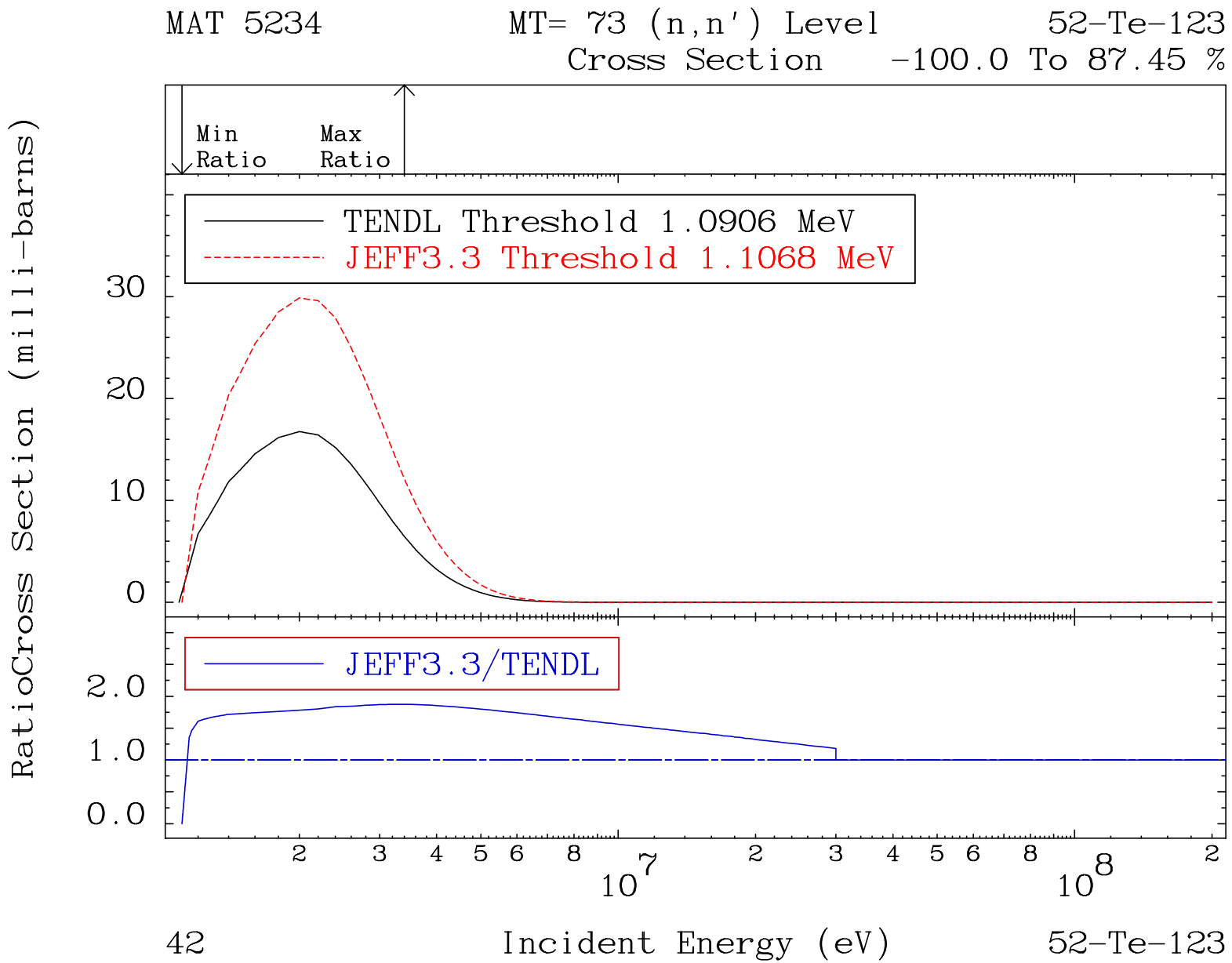

MAT 5234
MT= 68 (n,n') Level
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 927.25 keV
JEFF3.3 Threshold 927.25 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
37
52-Te-123

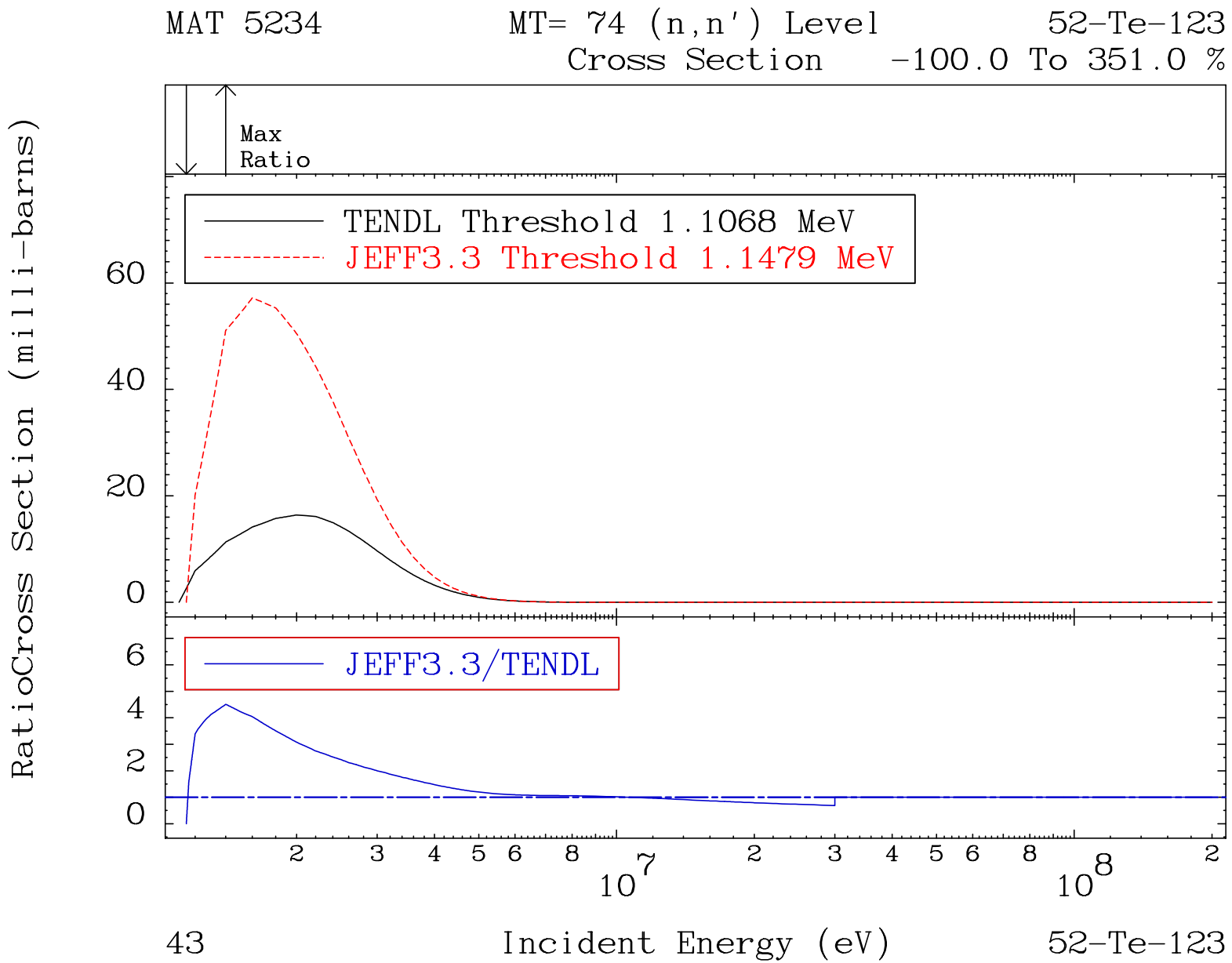

MAT 5234
MT= 69 (n,n') Level
52-Te-123
Cross Section
-100.0 To 360.4 %
Max
Ratio
TENDL Threshold 966.04 keV
JEFF3.3 Threshold 1.0042 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
40
20
0
6
3
0
10^6
10^7
10^8
Incident Energy (eV)
38
52-Te-123

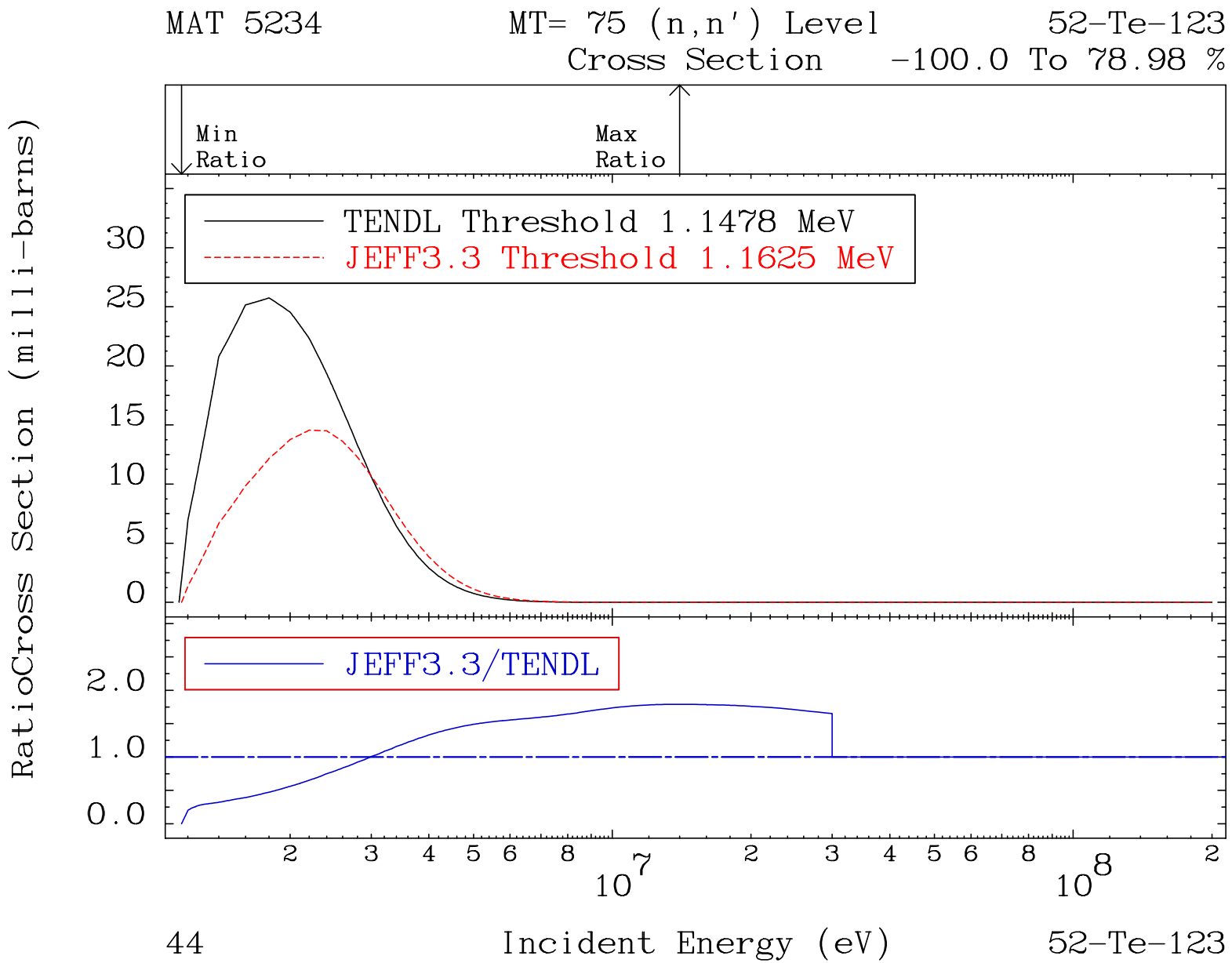

MAT 5234
MT= 70 (n,n') Level
52-Te-123
Cross Section
-100.0 To 2.247 %
Max
Ratio
TENDL Threshold 1.0042 MeV
JEFF3.3 Threshold 1.0452 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
10^6
10^7
10^8
2
3
4
5
6
8
39
Incident Energy (eV)
52-Te-123

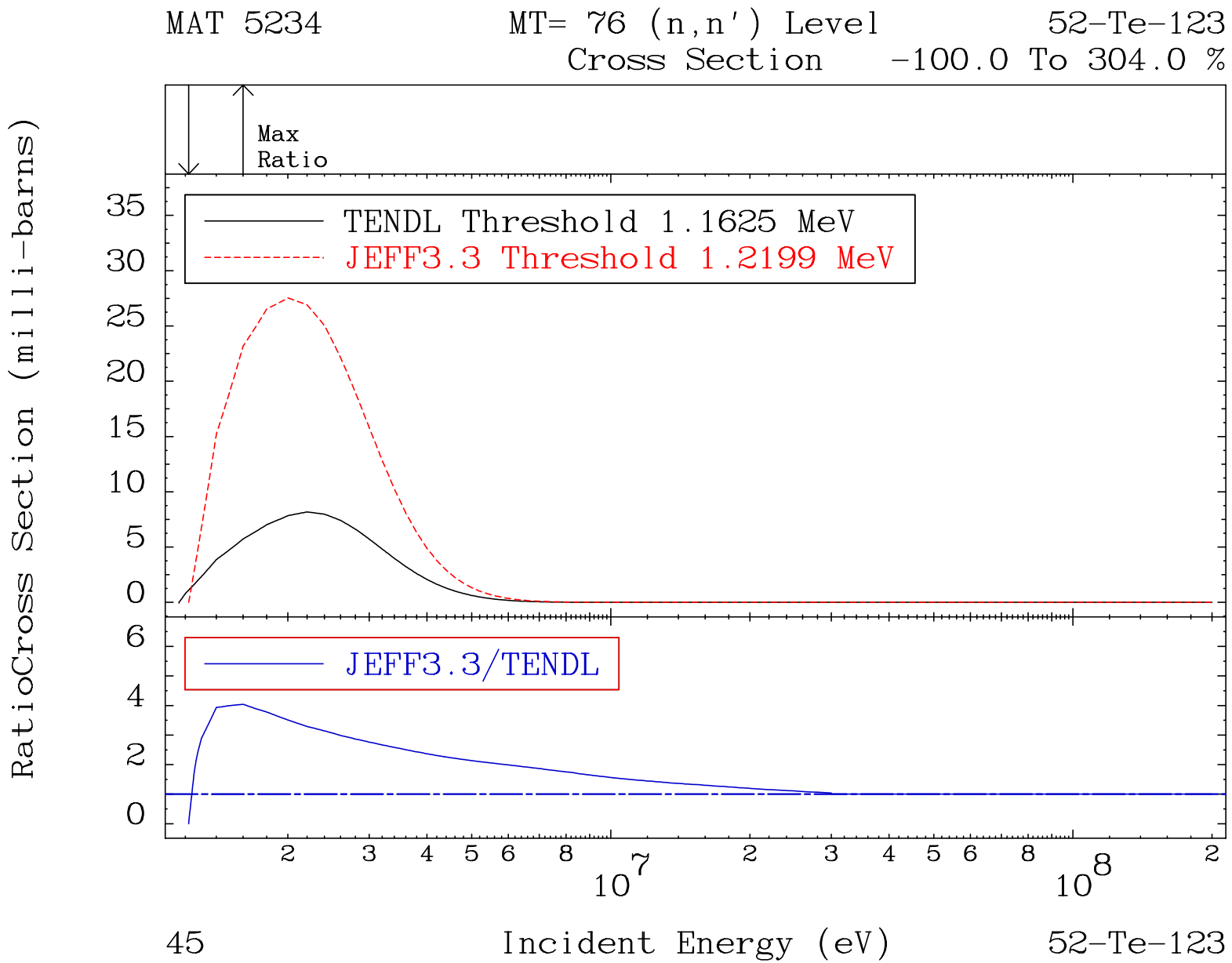

MAT 5234
MT= 71 (n,n') Level
52-Te-123
Cross Section
-100.0 To 120.8 %
Min Ratio
Max Ratio
TENDL Threshold 1.0451 MeV
JEFF3.3 Threshold 1.0770 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
3.0
2.0
1.0
0.0
10^6
10^7
10^8
Incident Energy (eV)
40
52-Te-123

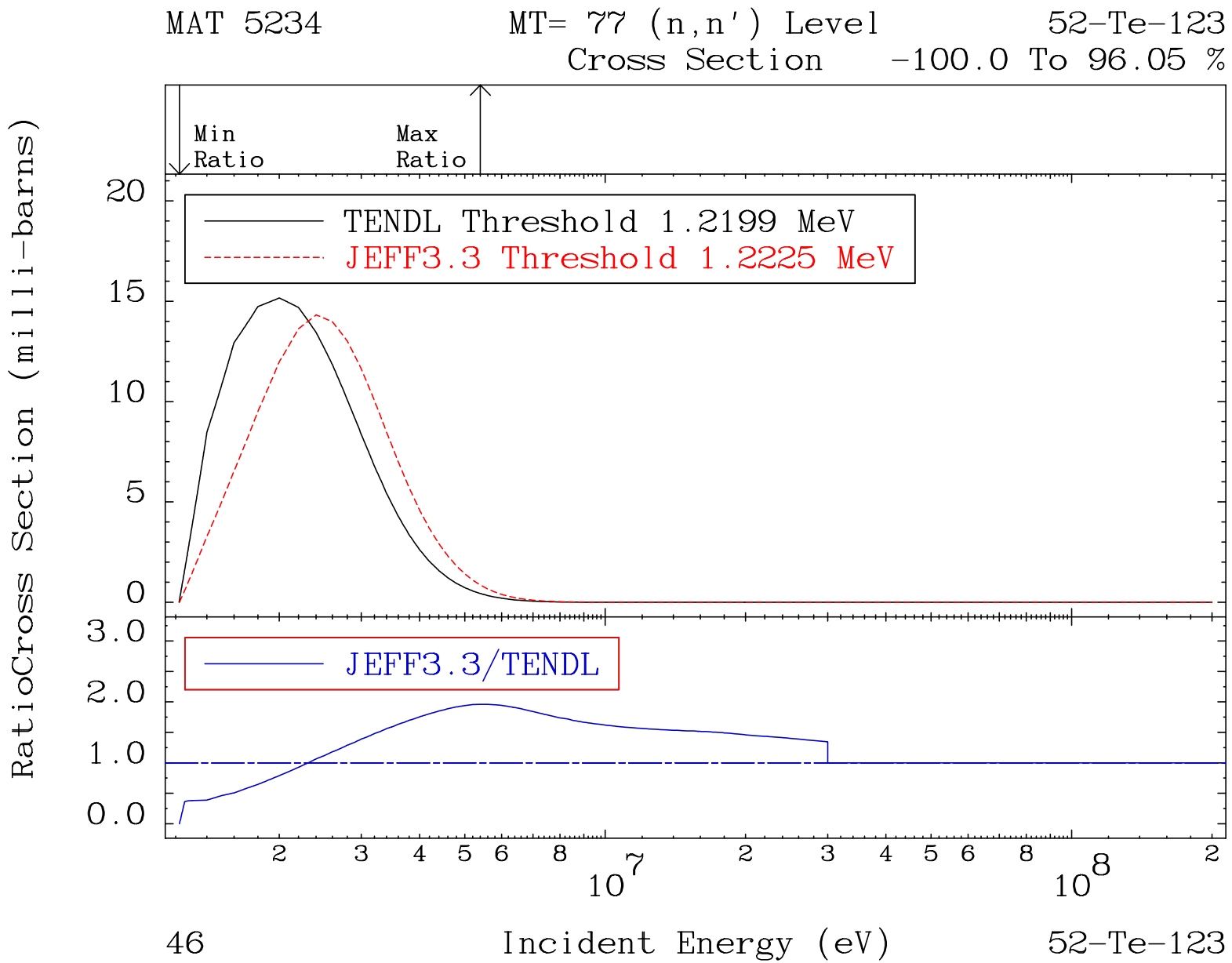

MAT 5234
MT= 72 (n,n') Level
52-Te-123
Cross Section
-100.0 To 76.46 %
Min Ratio
Max Ratio
TENDL Threshold 1.0770 MeV
JEFF3.3 Threshold 1.0906 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
41
Incident Energy (eV)
52-Te-123

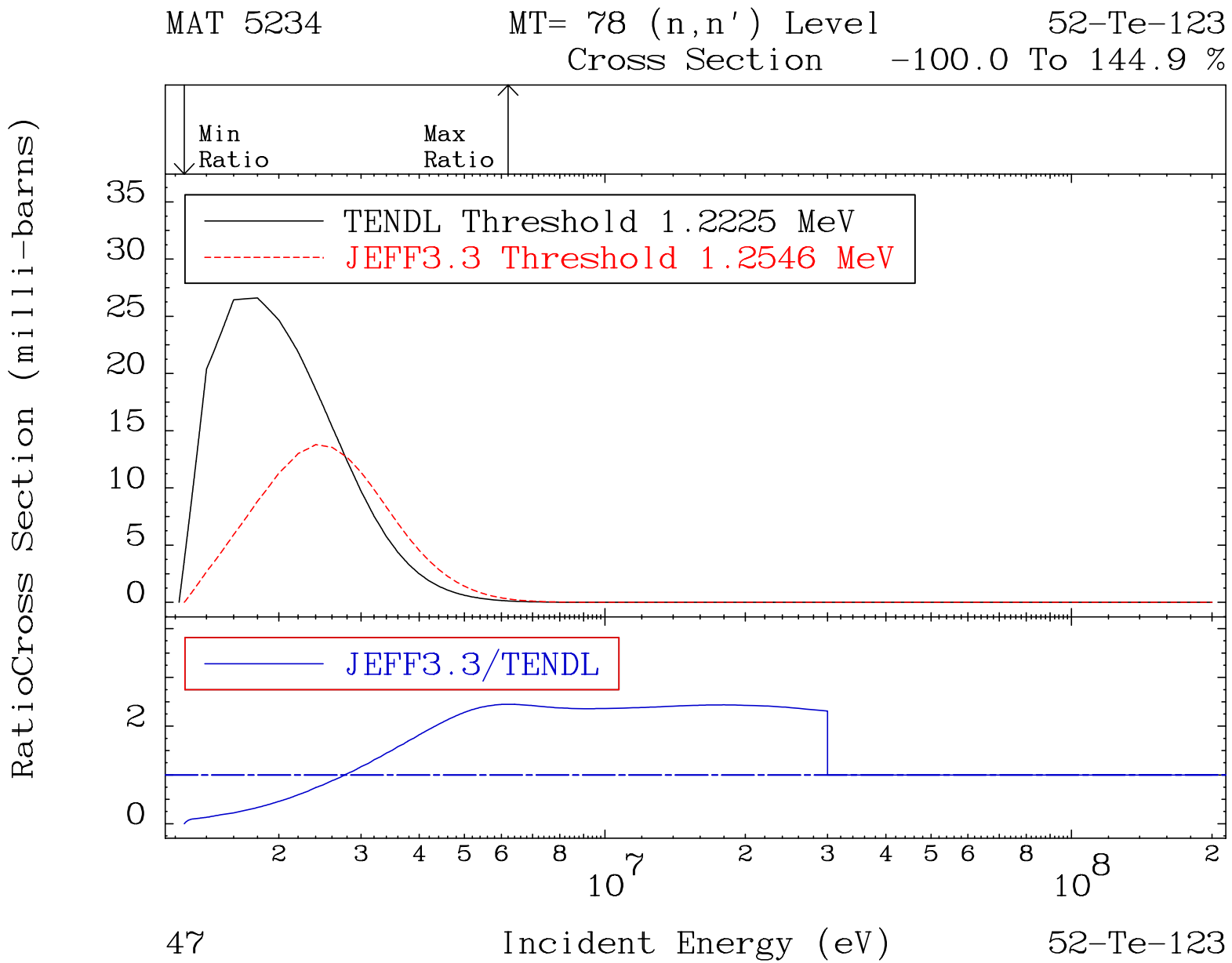

MAT 5234
MT= 73 (n,n') Level
52-Te-123
Cross Section -100.0 To 87.45 %
Min Ratio
Max Ratio
TENDL Threshold 1.0906 MeV
JEFF3.3 Threshold 1.1068 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
20
10
0
2.0
1.0
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
42
Incident Energy (eV)
52-Te-123

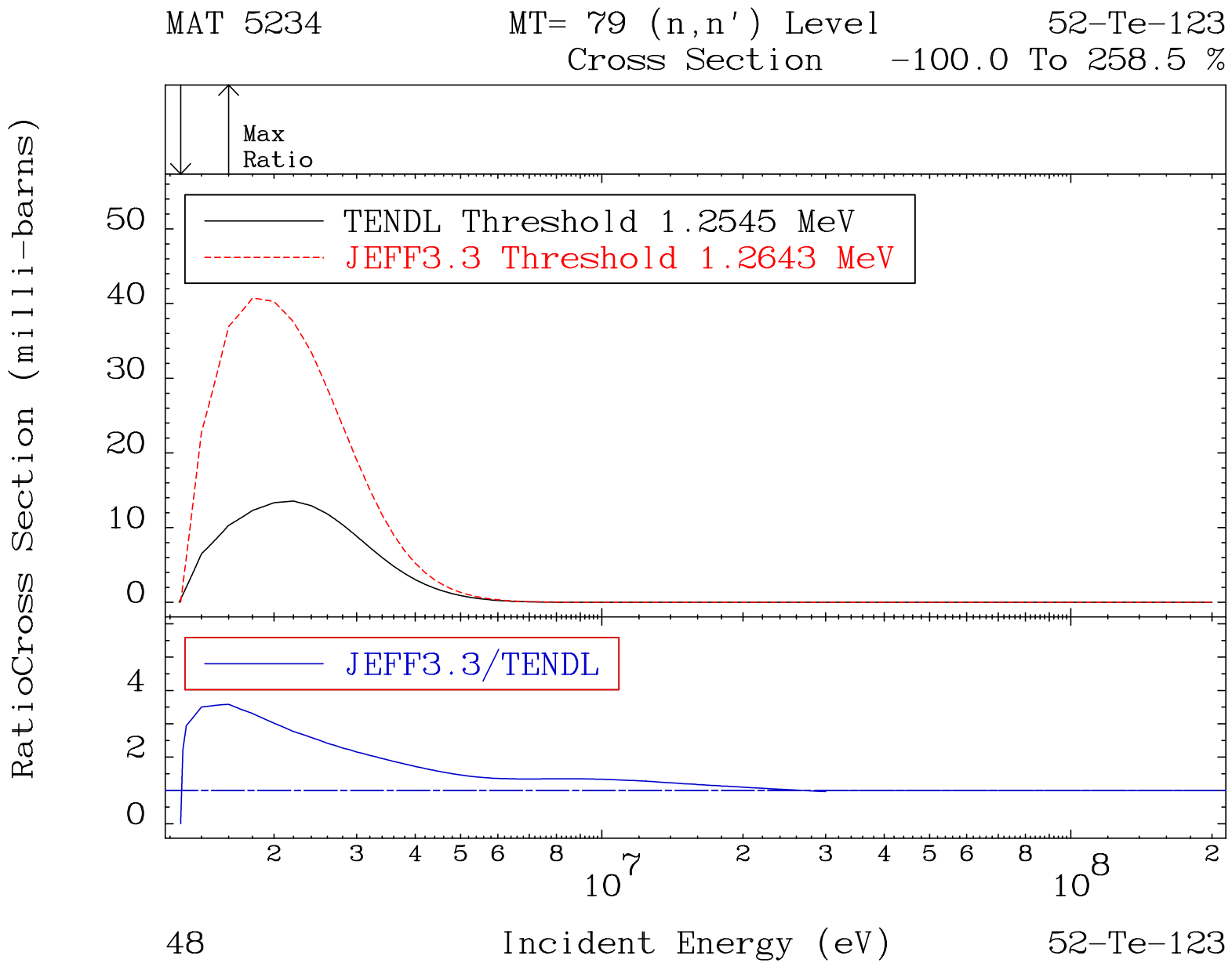

MAT 5234
MT= 74 (n,n') Level
52-Te-123
Cross Section
-100.0 To 351.0 %
Max
Ratio
TENDL Threshold 1.1068 MeV
JEFF3.3 Threshold 1.1479 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
60
40
20
0
6
4
2
0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
43
Incident Energy (eV)
52-Te-123

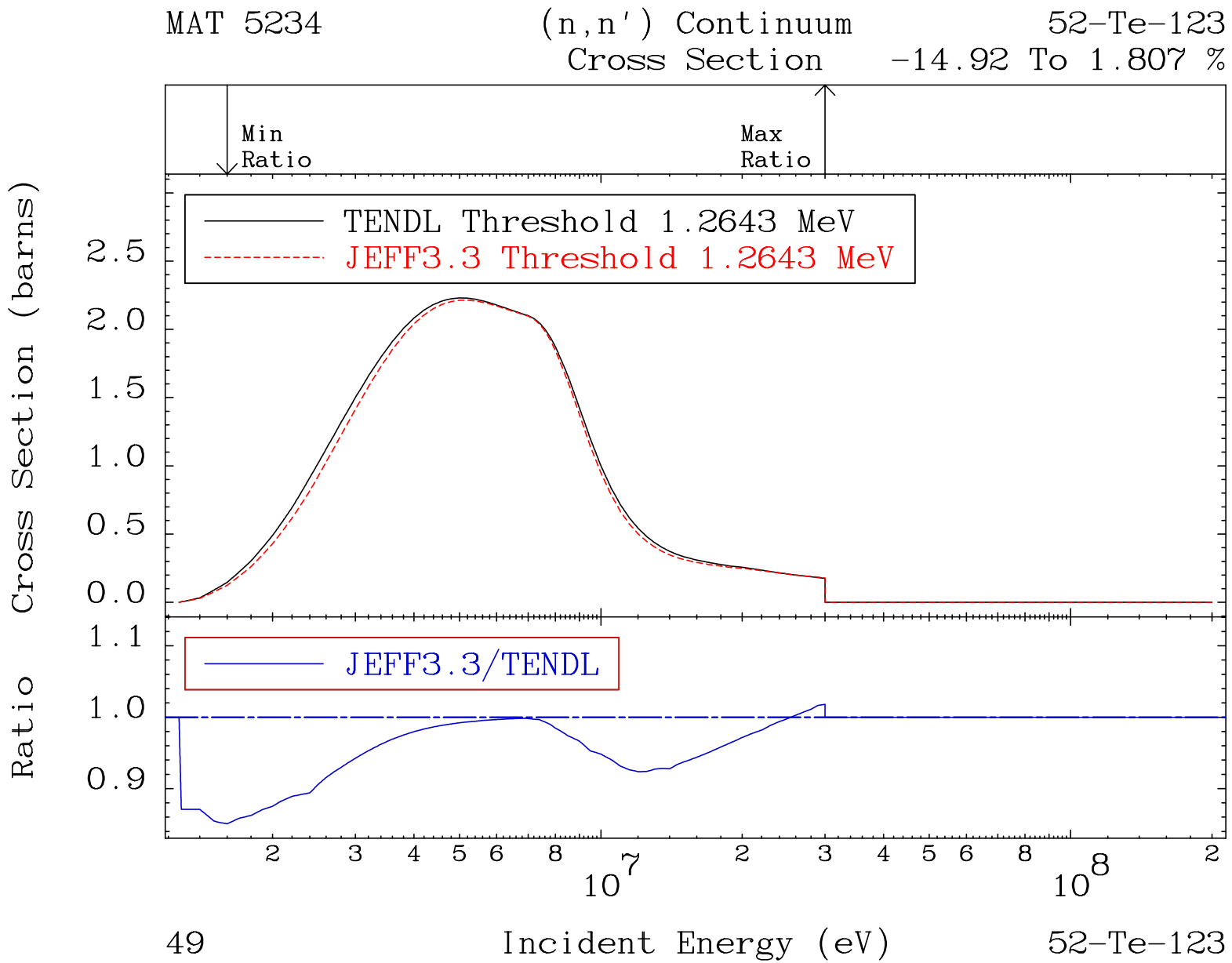

MAT 5234
MT= 75 (n,n') Level
52-Te-123
Cross Section
-100.0 To 78.98 %
Min Ratio
Max Ratio
TENDL Threshold 1.1478 MeV
JEFF3.3 Threshold 1.1625 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
44
Incident Energy (eV)
52-Te-123

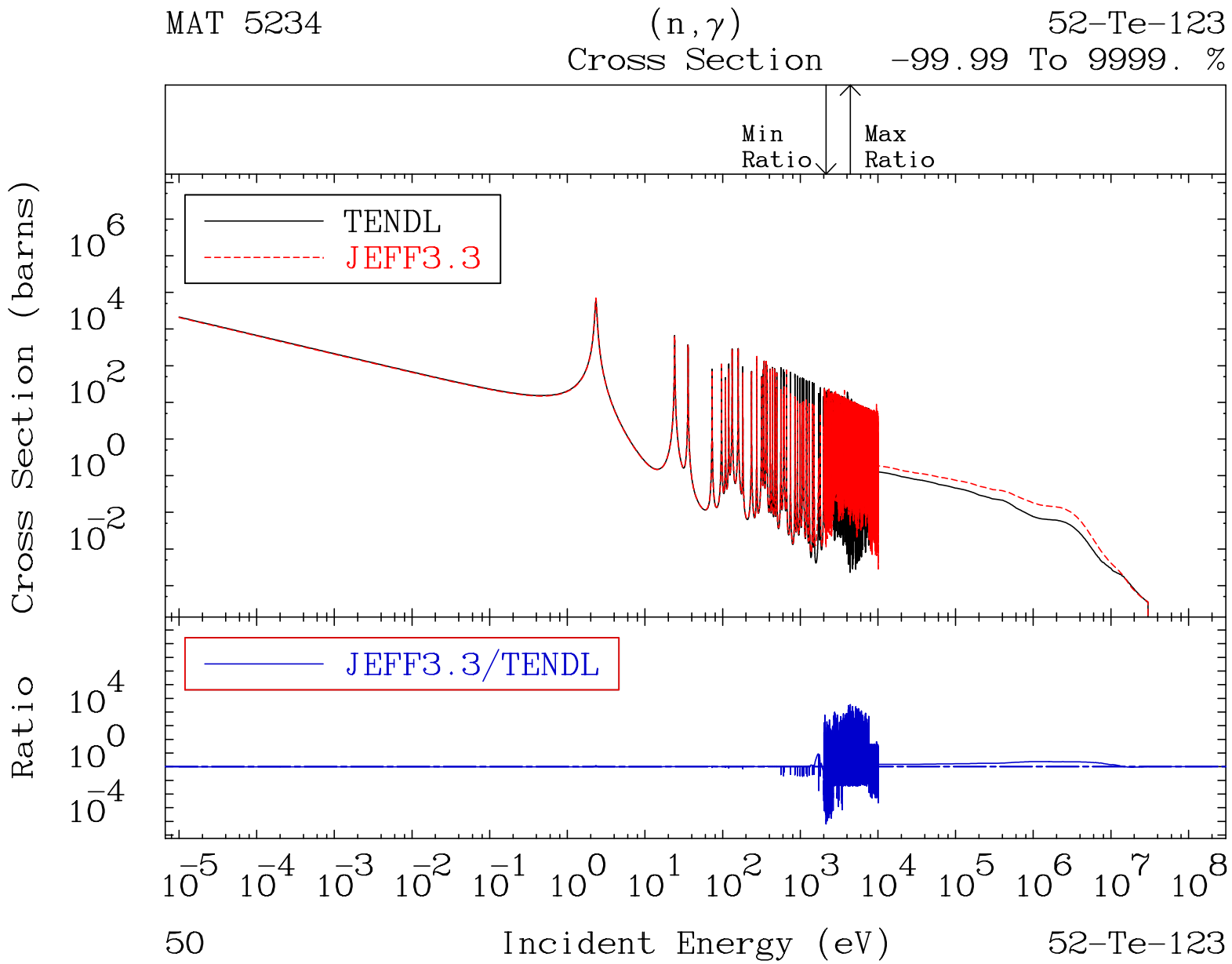

MAT 5234
MT= 76 (n,n') Level
52-Te-123
Cross Section
-100.0 To 304.0 %
Max
Ratio
TENDL Threshold 1.1625 MeV
JEFF3.3 Threshold 1.2199 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
6
4
2
0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
45
Incident Energy (eV)
52-Te-123

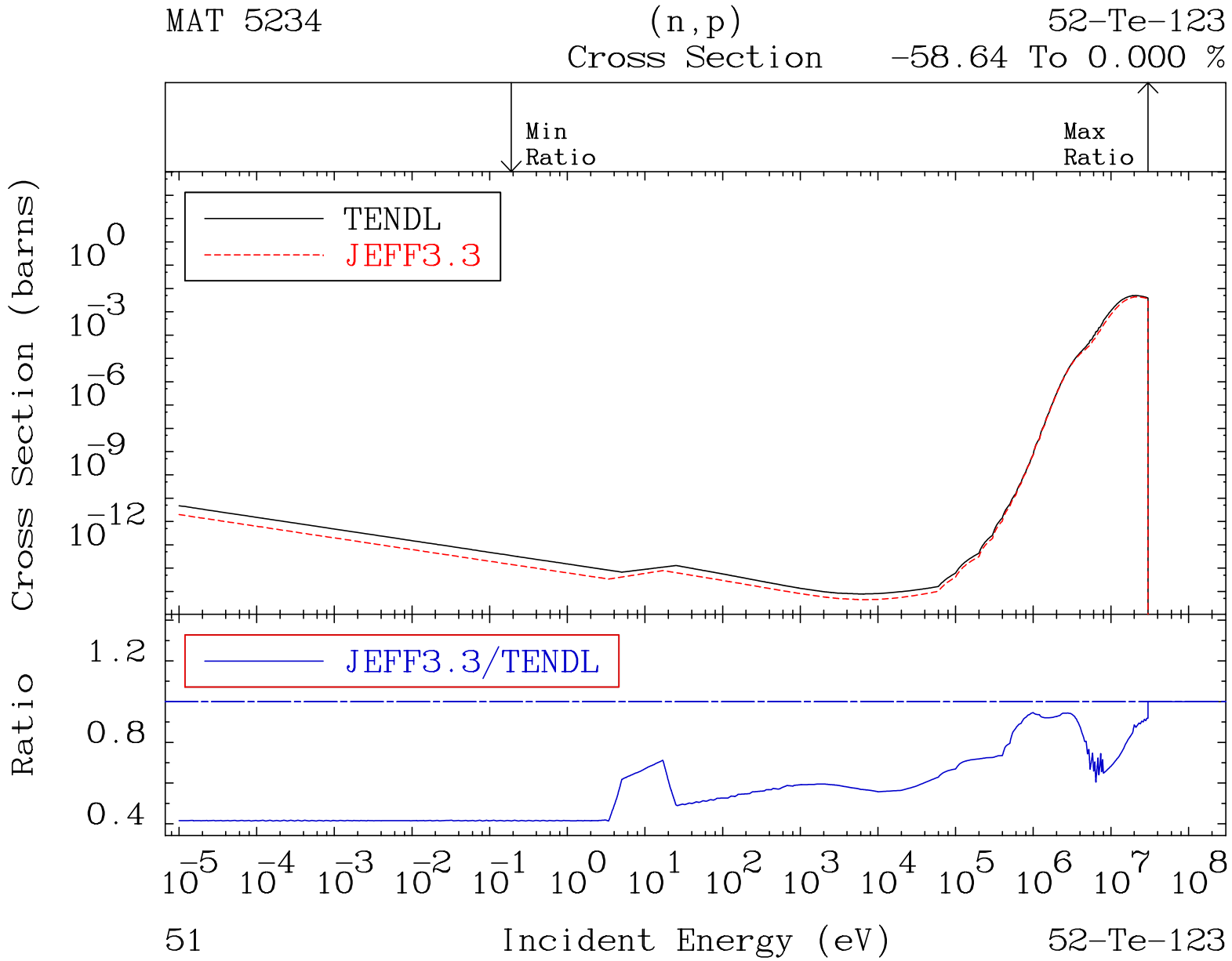

MAT 5234
MT= 77 (n,n') Level
52-Te-123
Cross Section
-100.0 To 96.05 %
Min Ratio
Max Ratio
TENDL Threshold 1.2199 MeV
JEFF3.3 Threshold 1.2225 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
3.0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
46
Incident Energy (eV)
52-Te-123

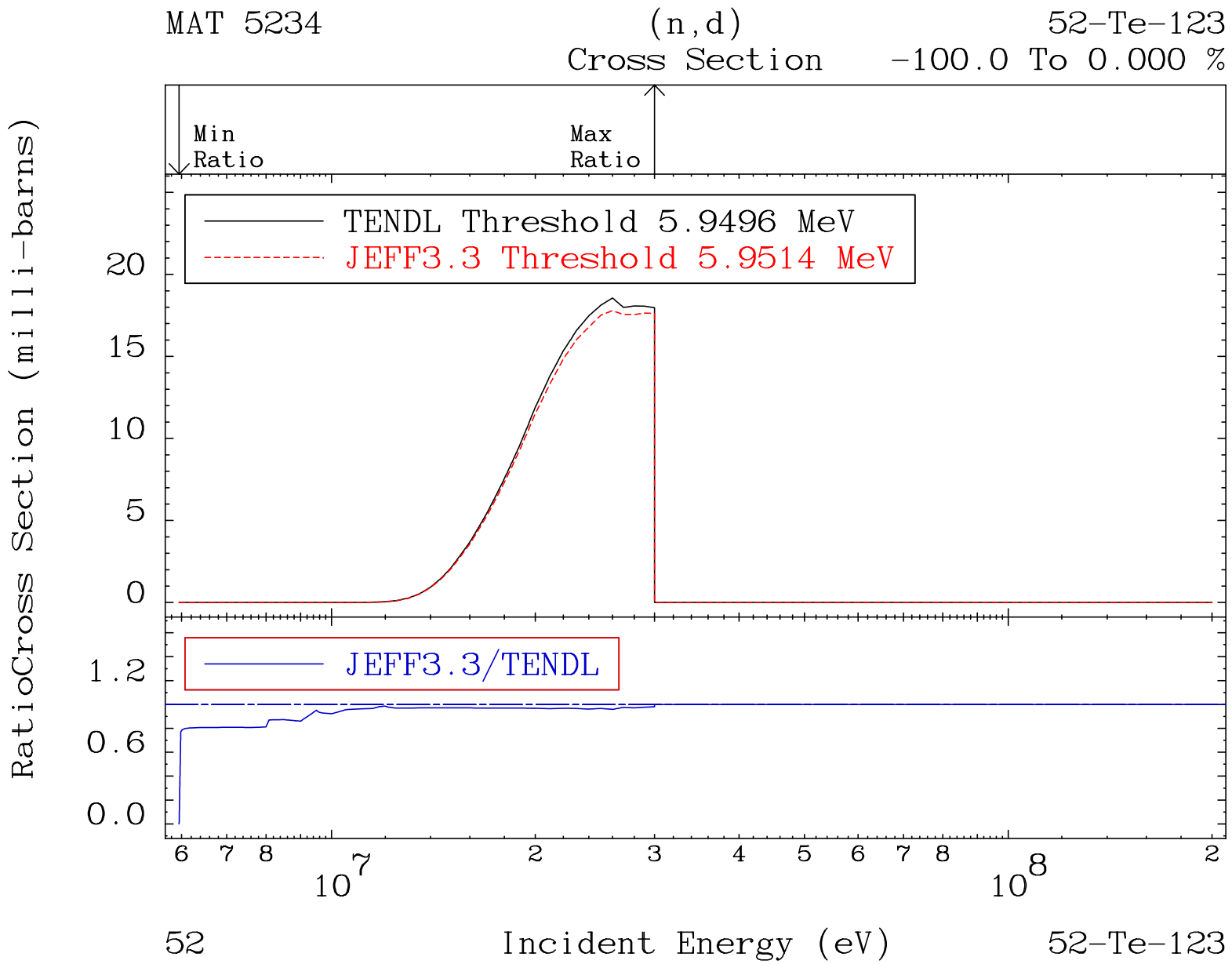

MAT 5234
MT= 78 (n,n') Level
52-Te-123
Cross Section
-100.0 To 144.9 %
Min Ratio
Max Ratio
TENDL Threshold 1.2225 MeV
JEFF3.3 Threshold 1.2546 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
2
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
47
Incident Energy (eV)
52-Te-123

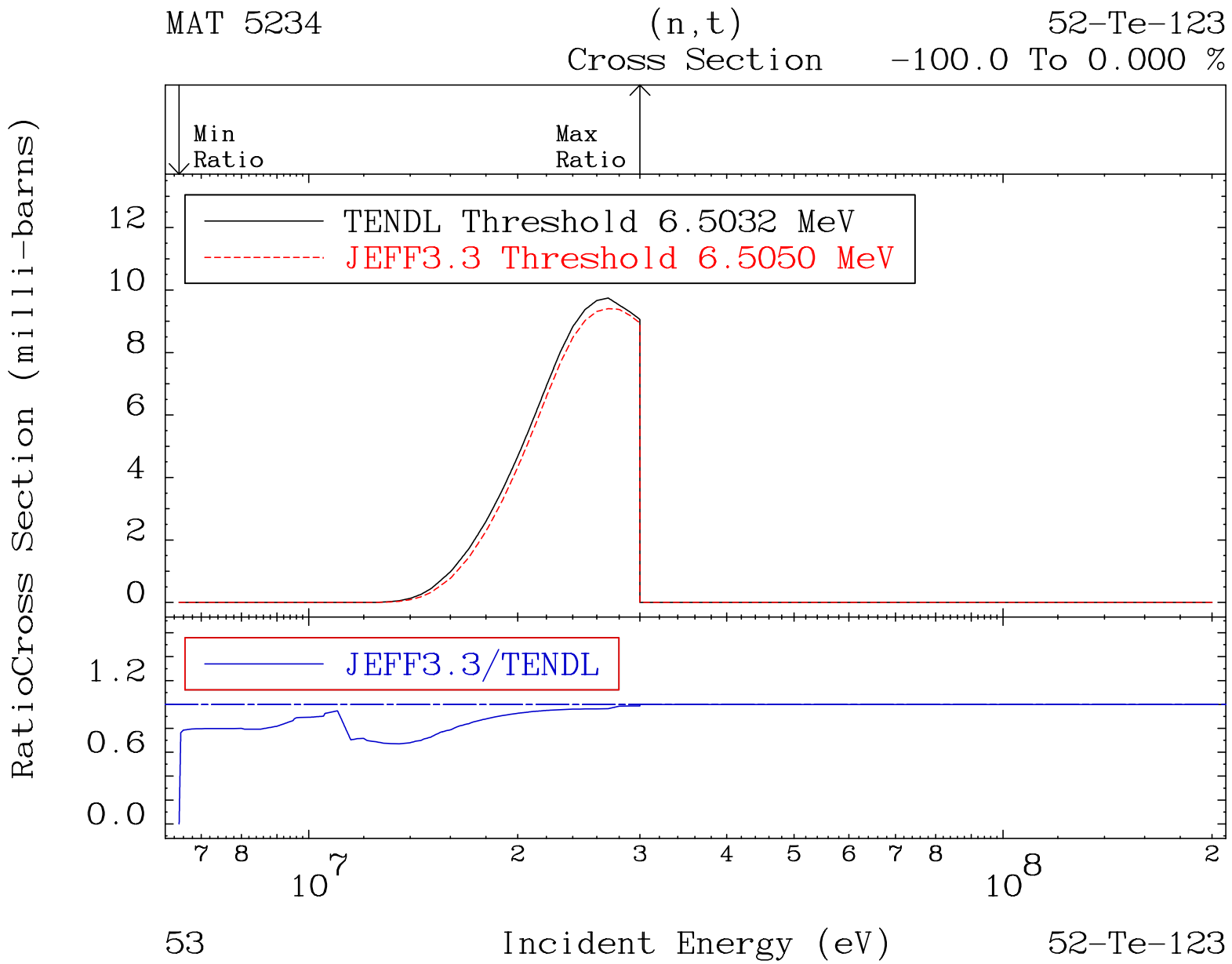

MAT 5234
MT= 79 (n,n') Level
52-Te-123
Cross Section
-100.0 To 258.5 %
Max
Ratio
TENDL Threshold 1.2545 MeV
JEFF3.3 Threshold 1.2643 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
4
2
0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
48
Incident Energy (eV)
52-Te-123

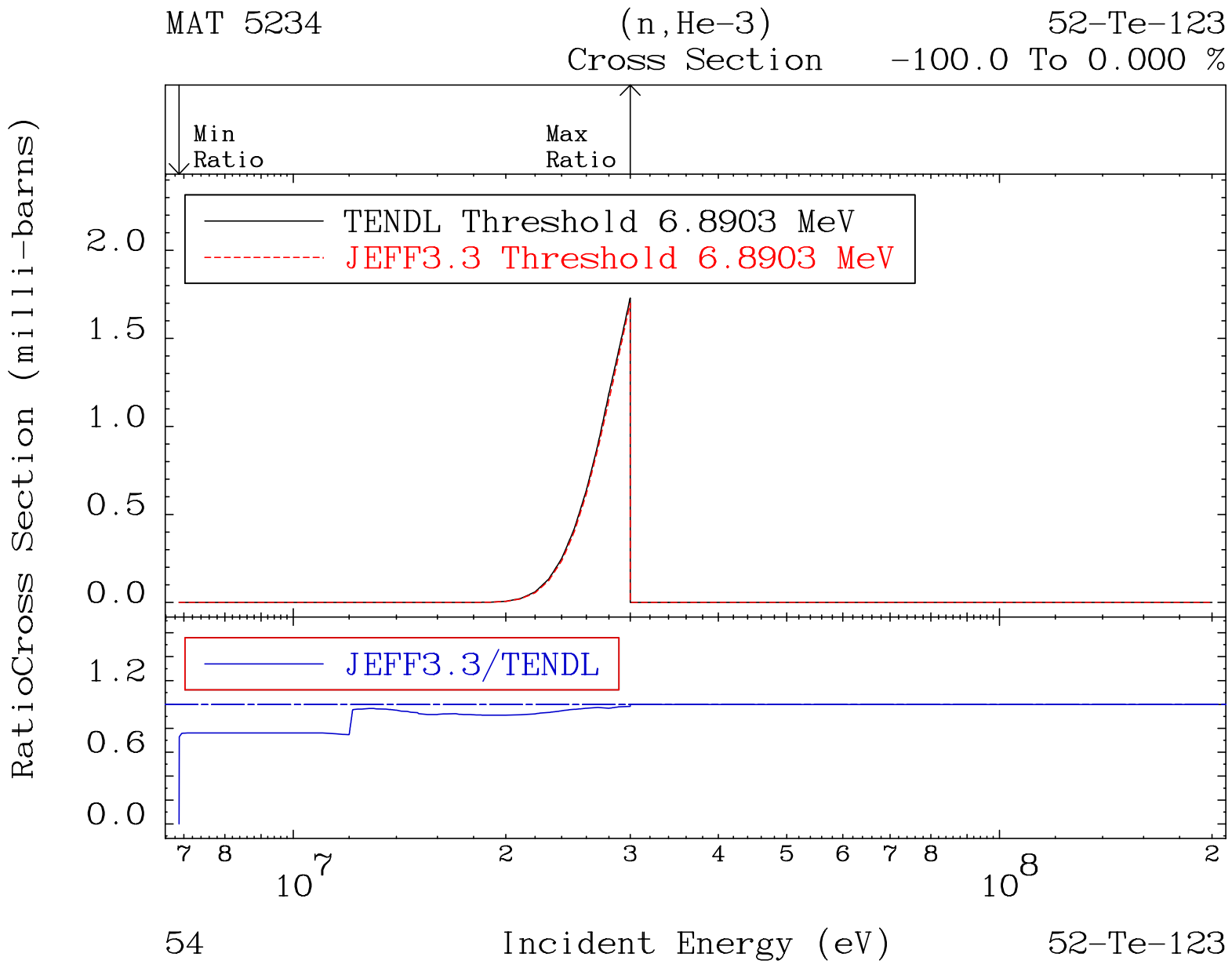

MAT 5234
(n,n') Continuum
Cross Section
52-Te-123
-14.92 To 1.807 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.2643 MeV
JEFF3.3 Threshold 1.2643 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.1
1.0
0.9
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
49
Incident Energy (eV)
52-Te-123

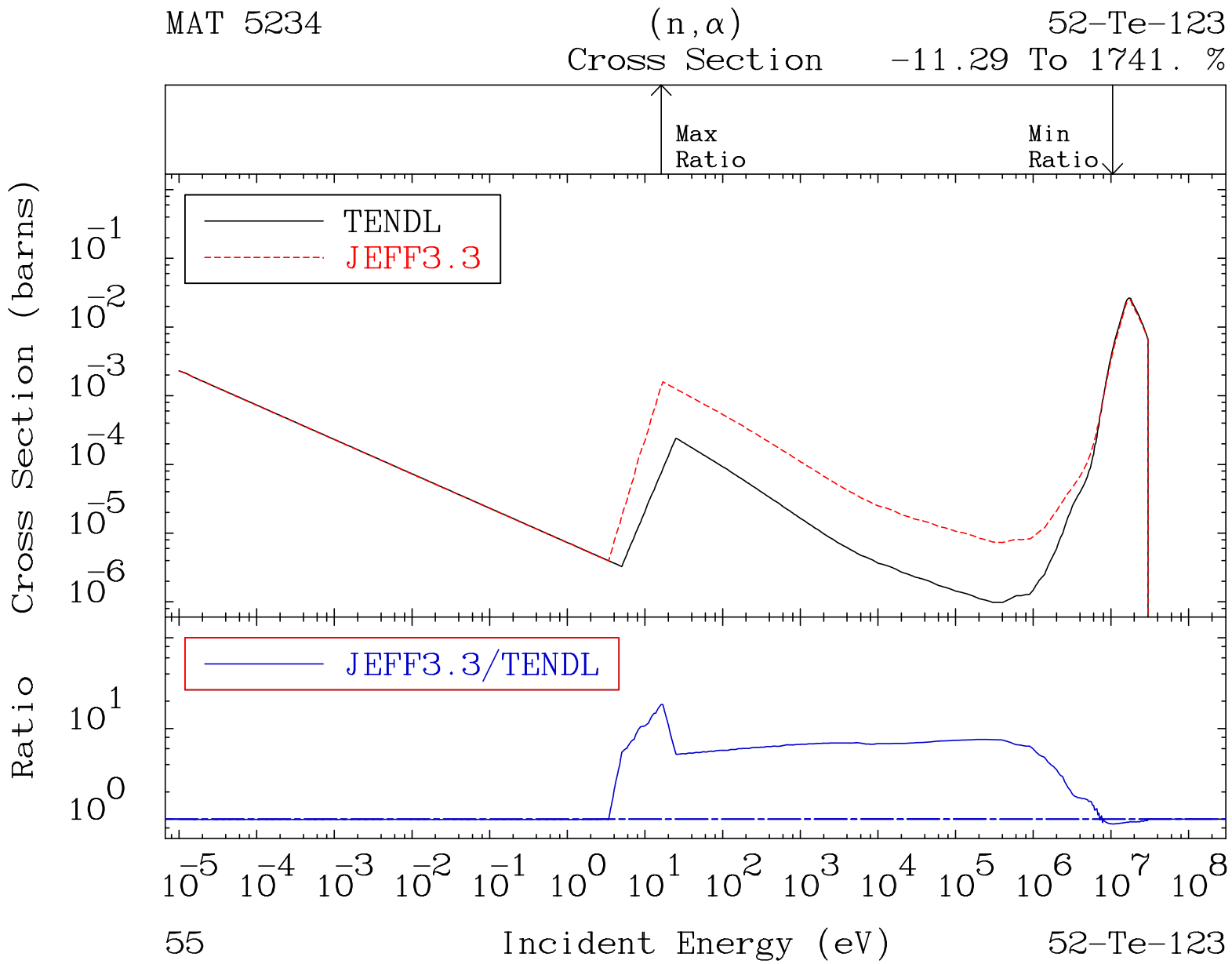

MAT 5234
(n,γ)
Cross Section
52-Te-123
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
52-Te-123

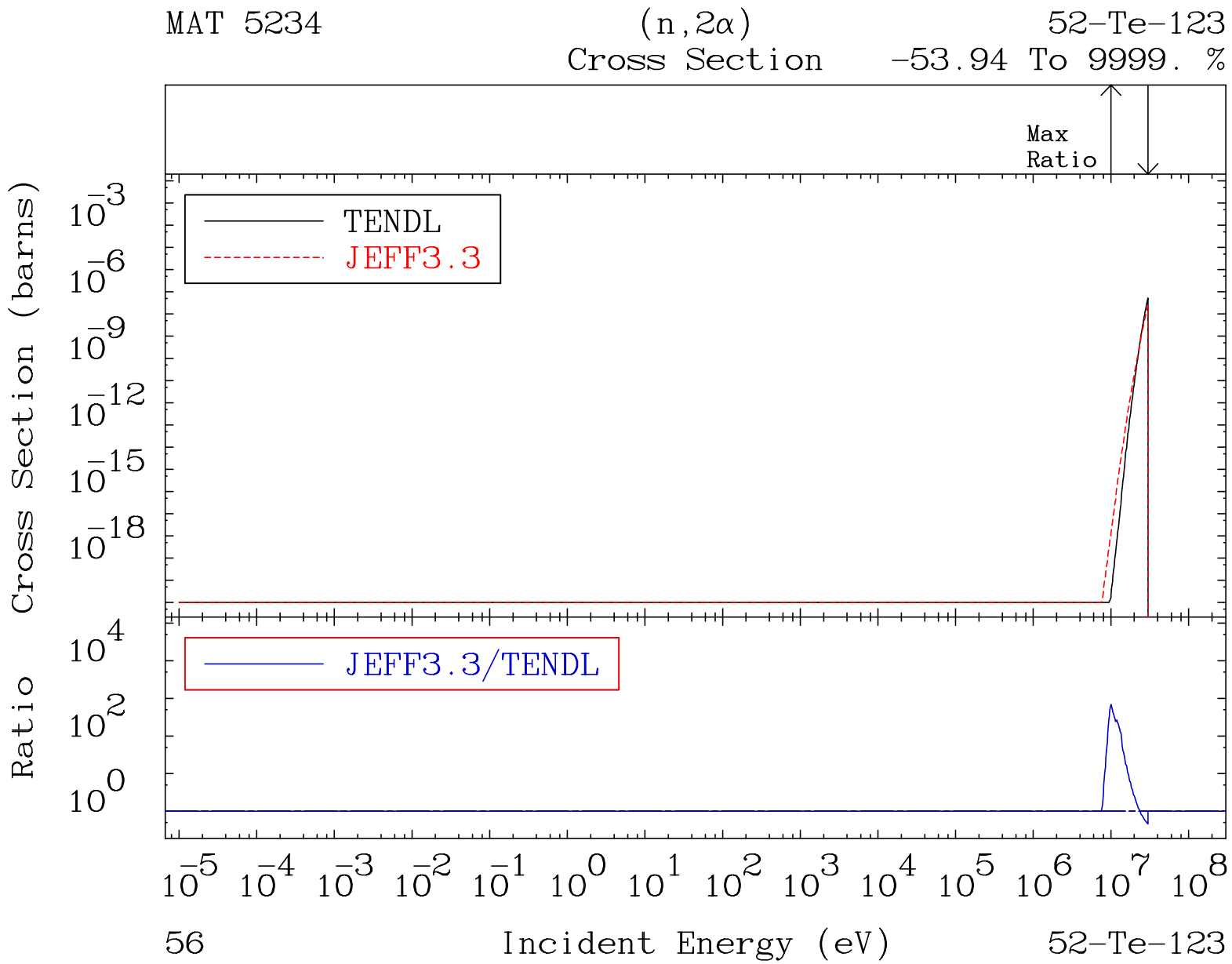

MAT 5234
(n,p)
Cross Section
52-Te-123
-58.64 To 0.000 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
52-Te-123

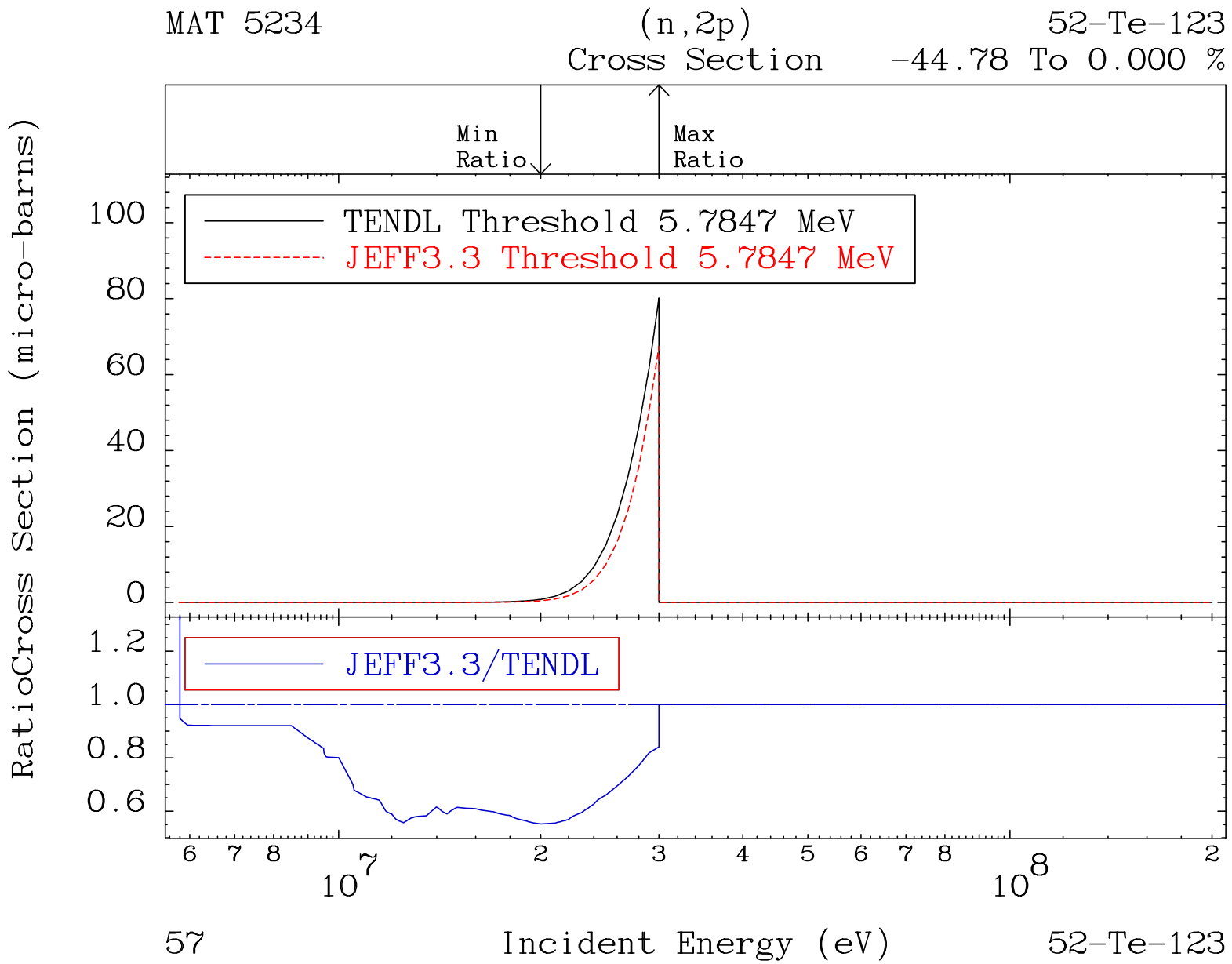

MAT 5234
(n,d)
52-Te-123
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 5.9496 MeV
JEFF3.3 Threshold 5.9514 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.2
0.6
0.0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
52
Incident Energy (eV)
52-Te-123

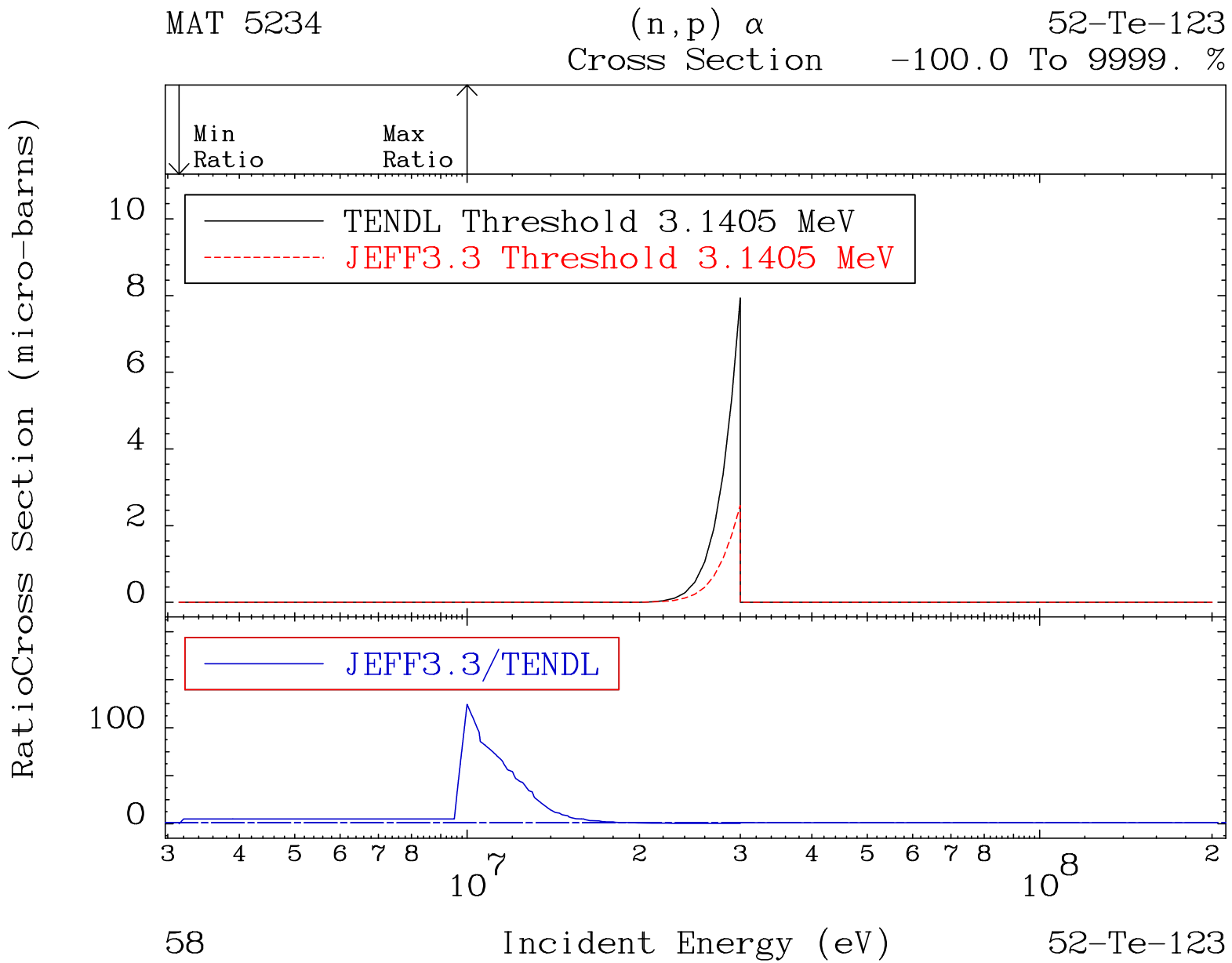

MAT 5234
(n,t)
Cross Section
52-Te-123
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 6.5032 MeV
JEFF3.3 Threshold 6.5050 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
53
52-Te-123

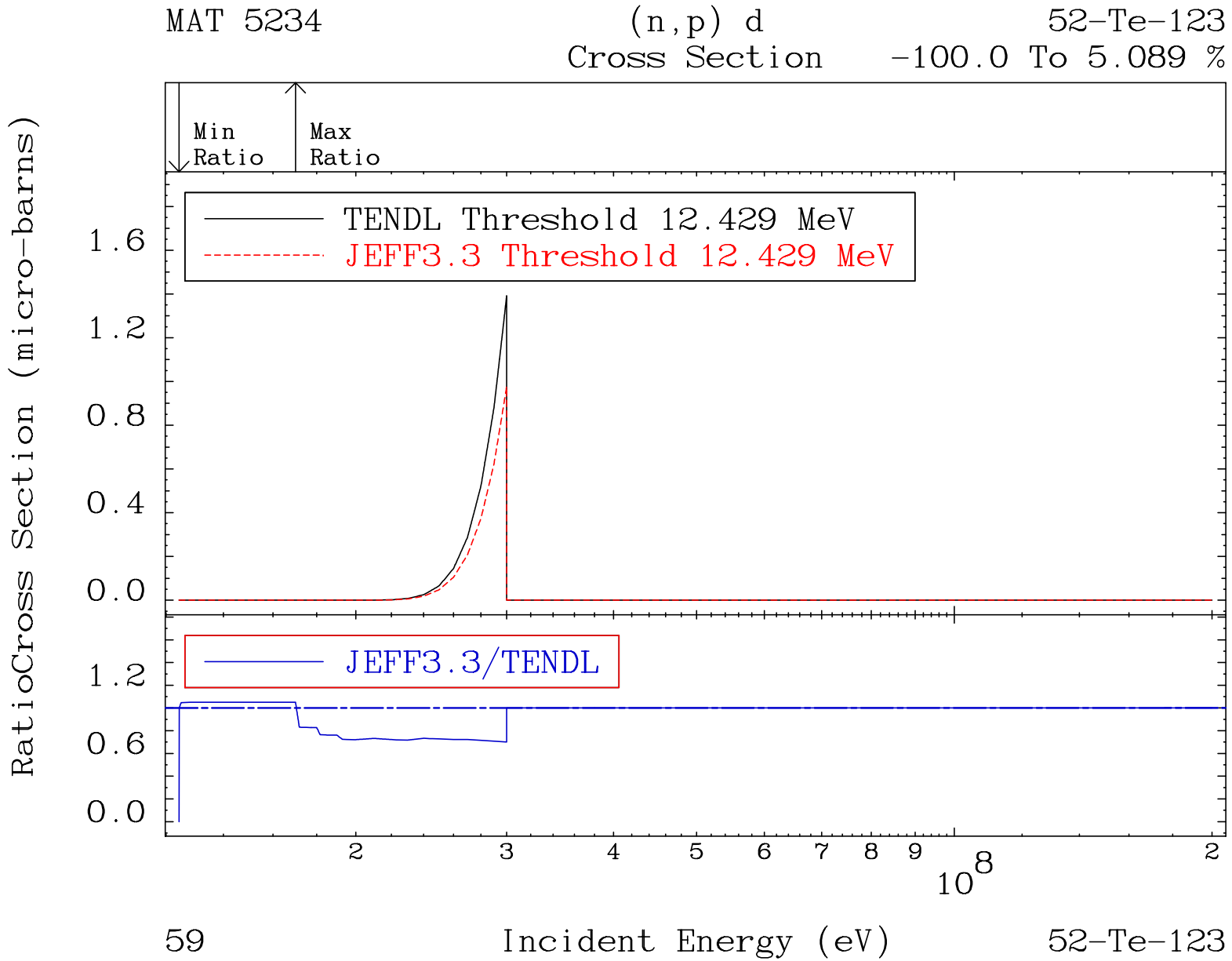

MAT 5234
(n,He-3)
Cross Section
52-Te-123
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 6.8903 MeV
JEFF3.3 Threshold 6.8903 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
1.2
0.6
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
54
Incident Energy (eV)
52-Te-123

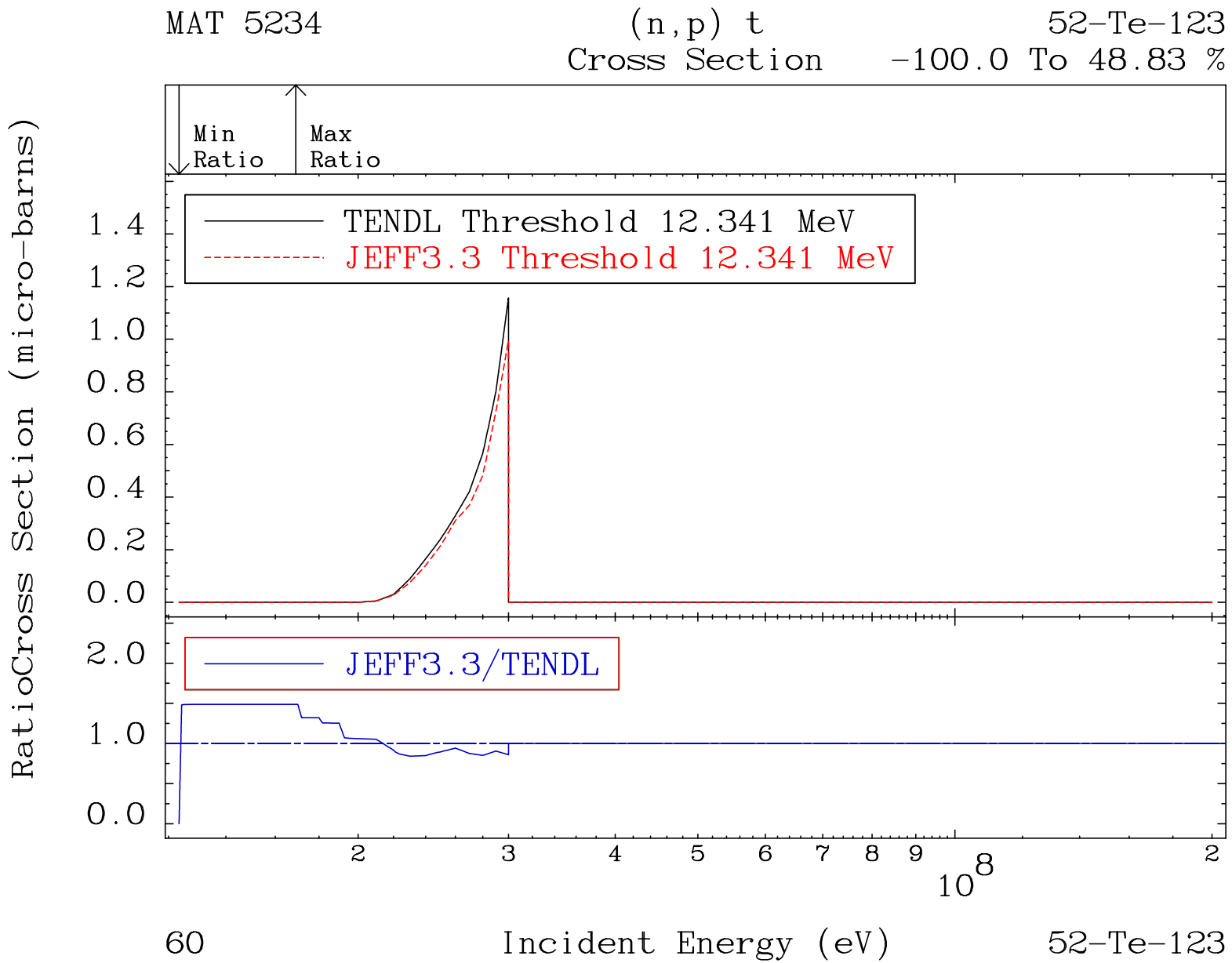

MAT 5234
(n,α)
52-Te-123
Cross Section
-11.29 To 1741. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
55
52-Te-123

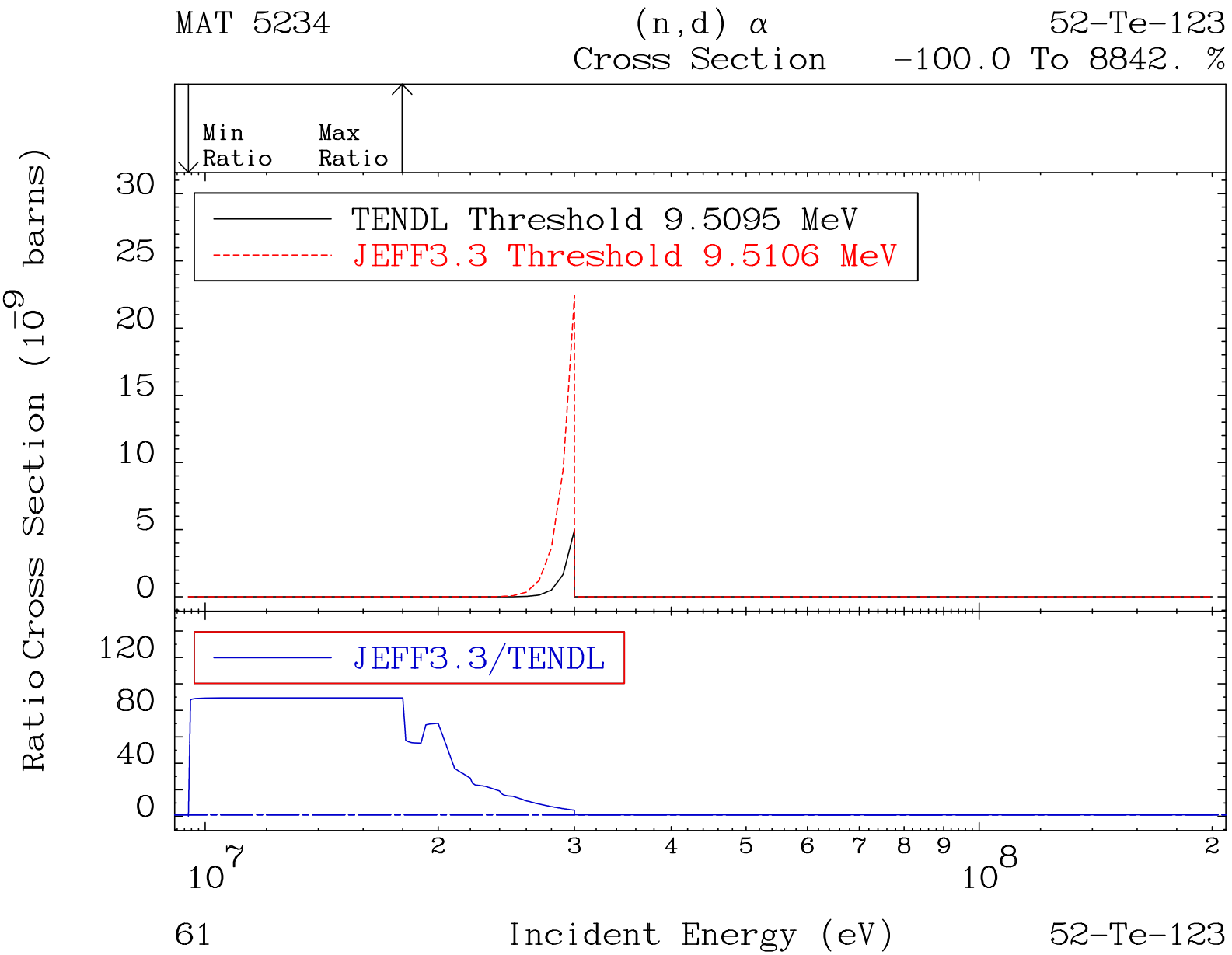

MAT 5234
(n,2α)
52-Te-123
Cross Section
-53.94 To 9999. %
Max
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
56
52-Te-123

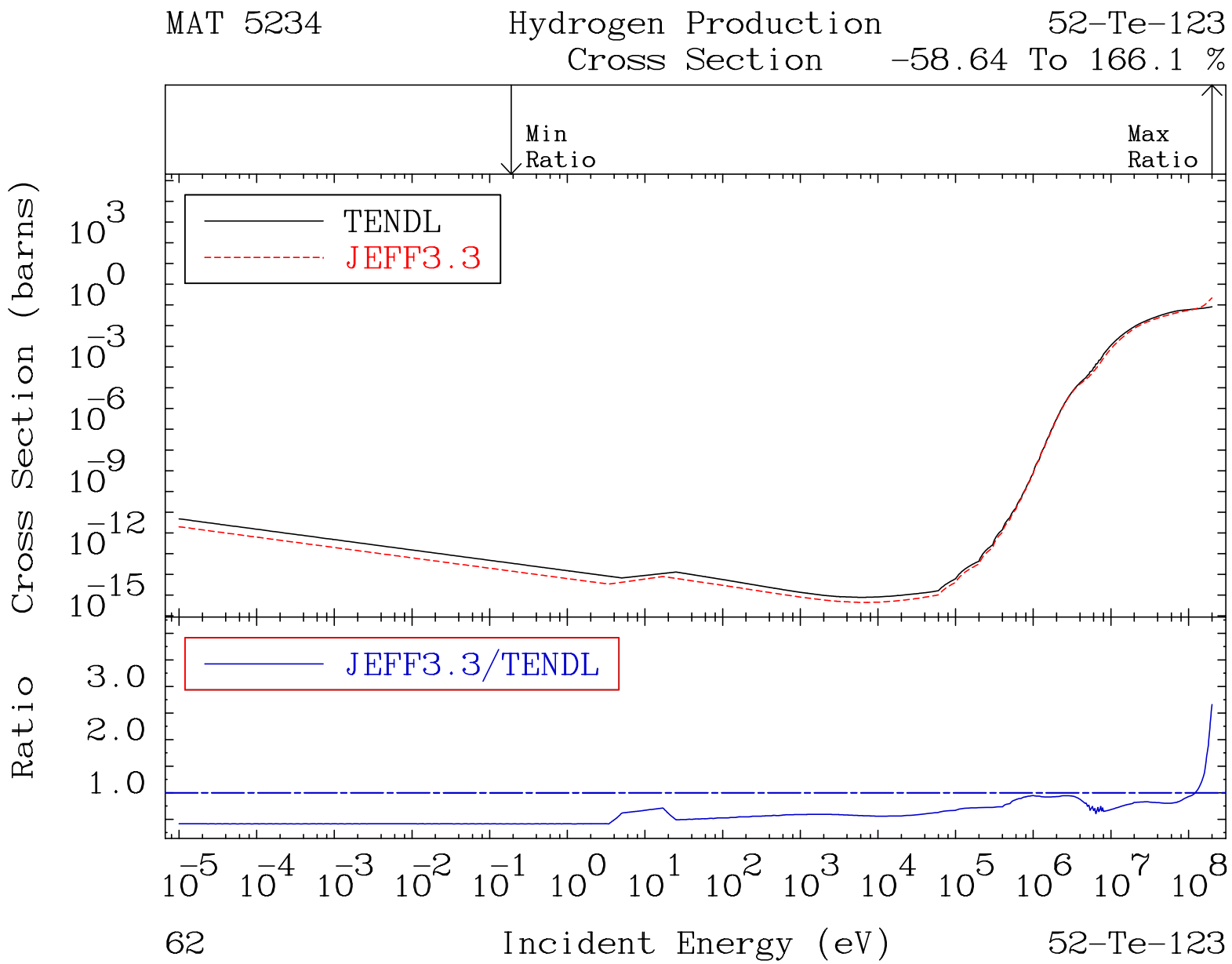

MAT 5234
(n,2p)
Cross Section
52-Te-123
-44.78 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 5.7847 MeV
JEFF3.3 Threshold 5.7847 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
1.2
1.0
0.8
0.6
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
57
Incident Energy (eV)
52-Te-123

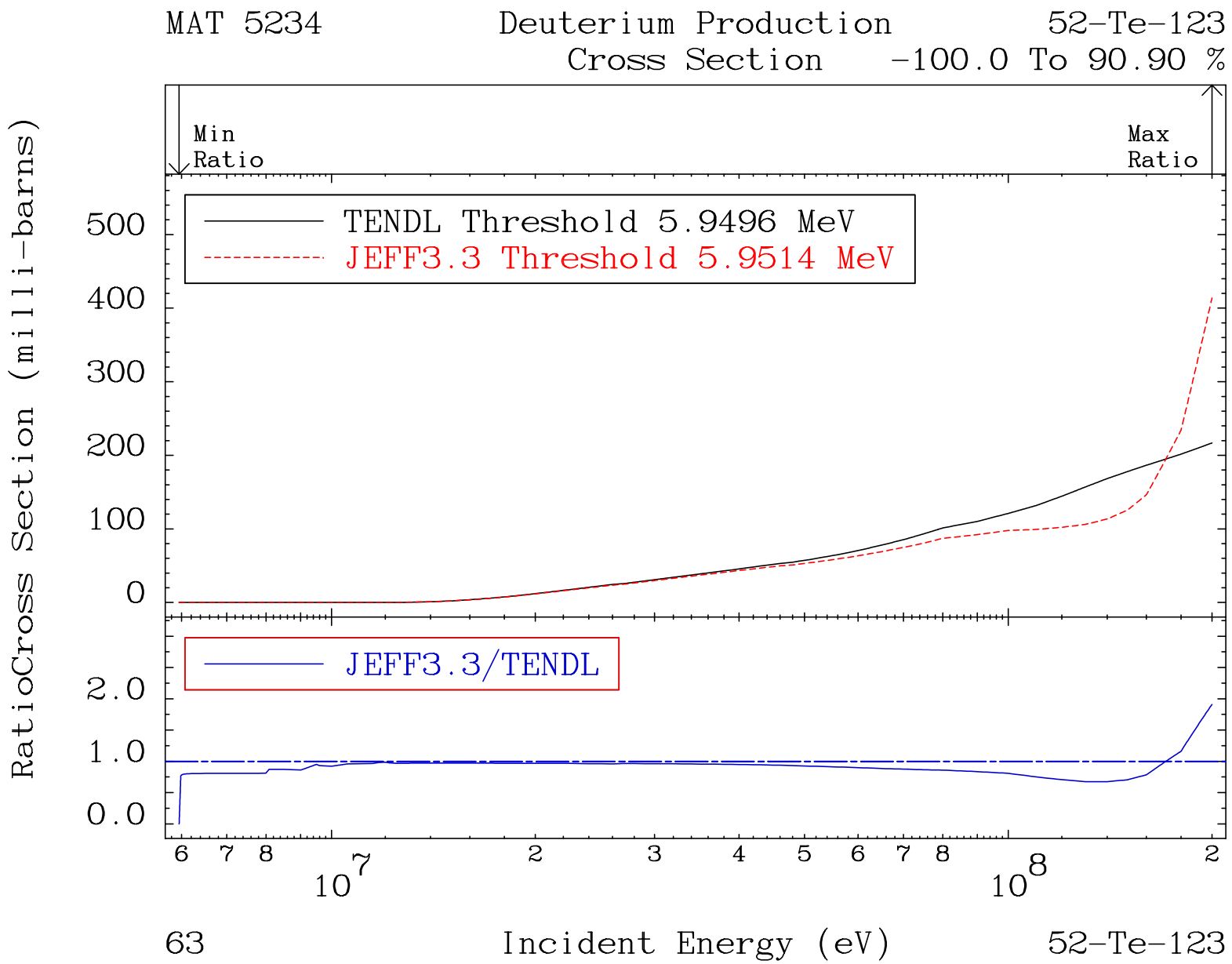

MAT 5234
(n,p) α
52-Te-123
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.1405 MeV
JEFF3.3 Threshold 3.1405 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
10
8
6
4
2
0
100
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
58
Incident Energy (eV)
52-Te-123

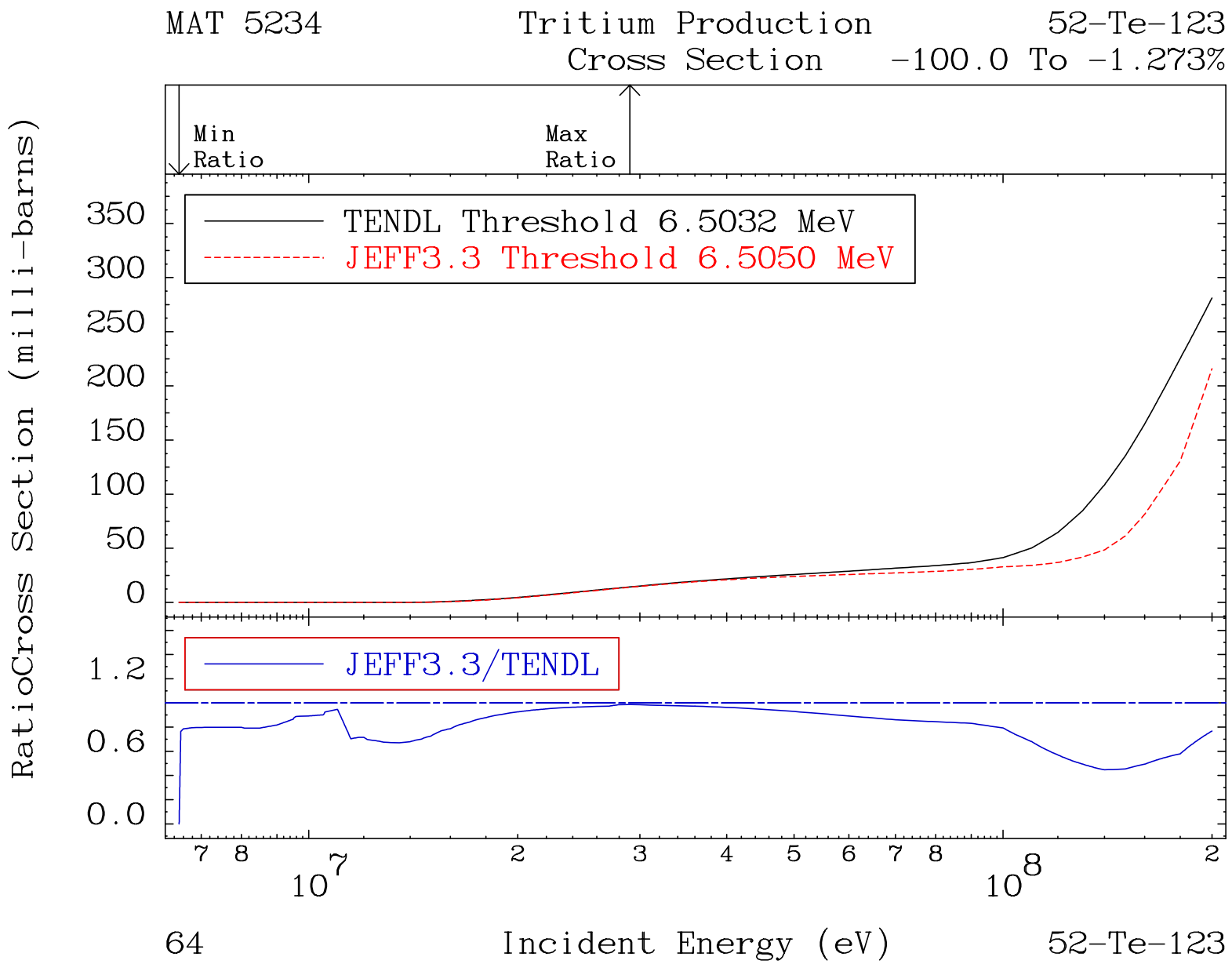

MAT 5234
(n,p) d
Cross Section
52-Te-123
-100.0 To 5.089 %
Min Ratio
Max Ratio
TENDL Threshold 12.429 MeV
JEFF3.3 Threshold 12.429 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.6
1.2
0.8
0.4
0.0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
52-Te-123

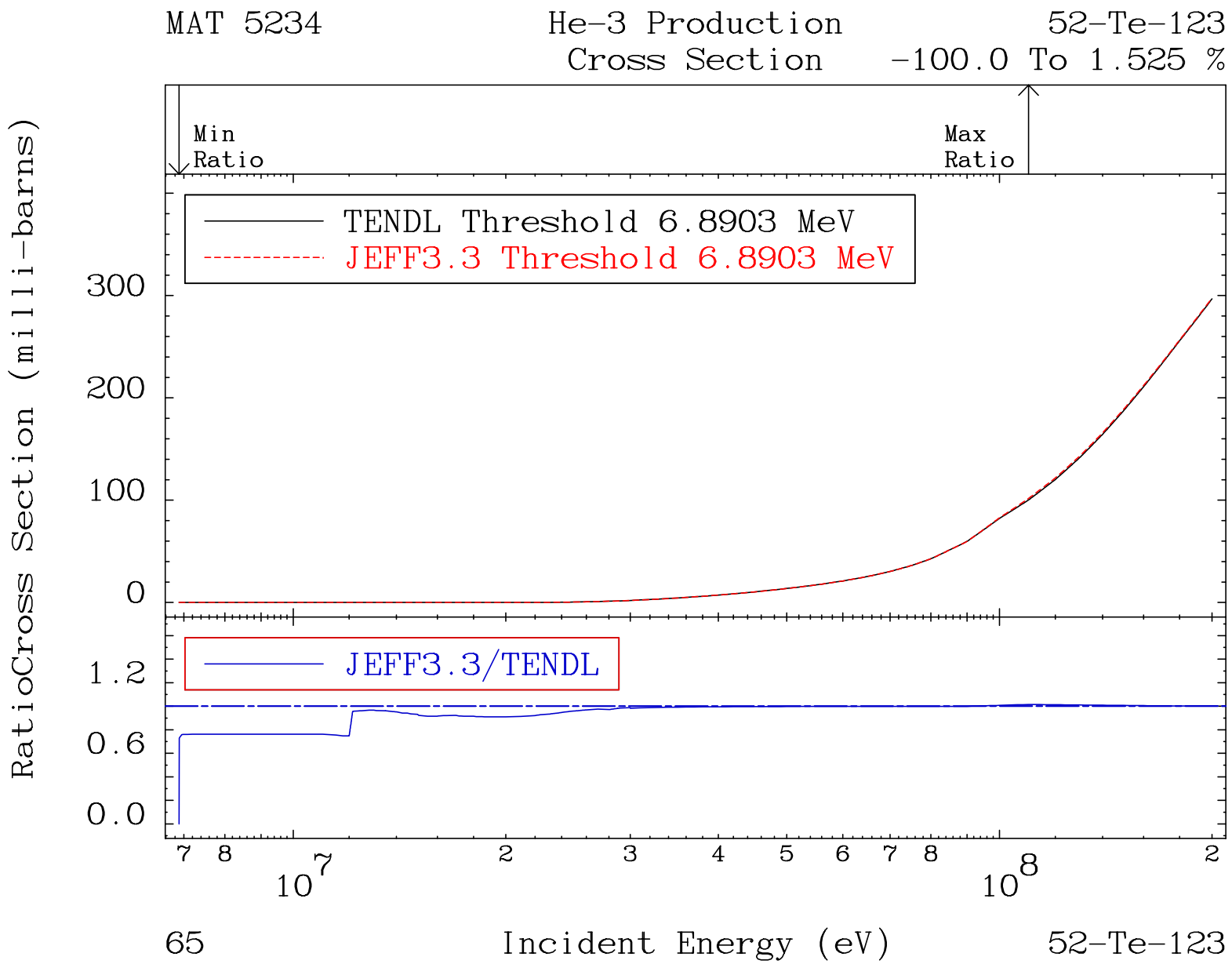

MAT 5234
(n,p) t
52-Te-123
Cross Section
-100.0 To 48.83 %
Min Ratio
Max Ratio
TENDL Threshold 12.341 MeV
JEFF3.3 Threshold 12.341 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
52-Te-123

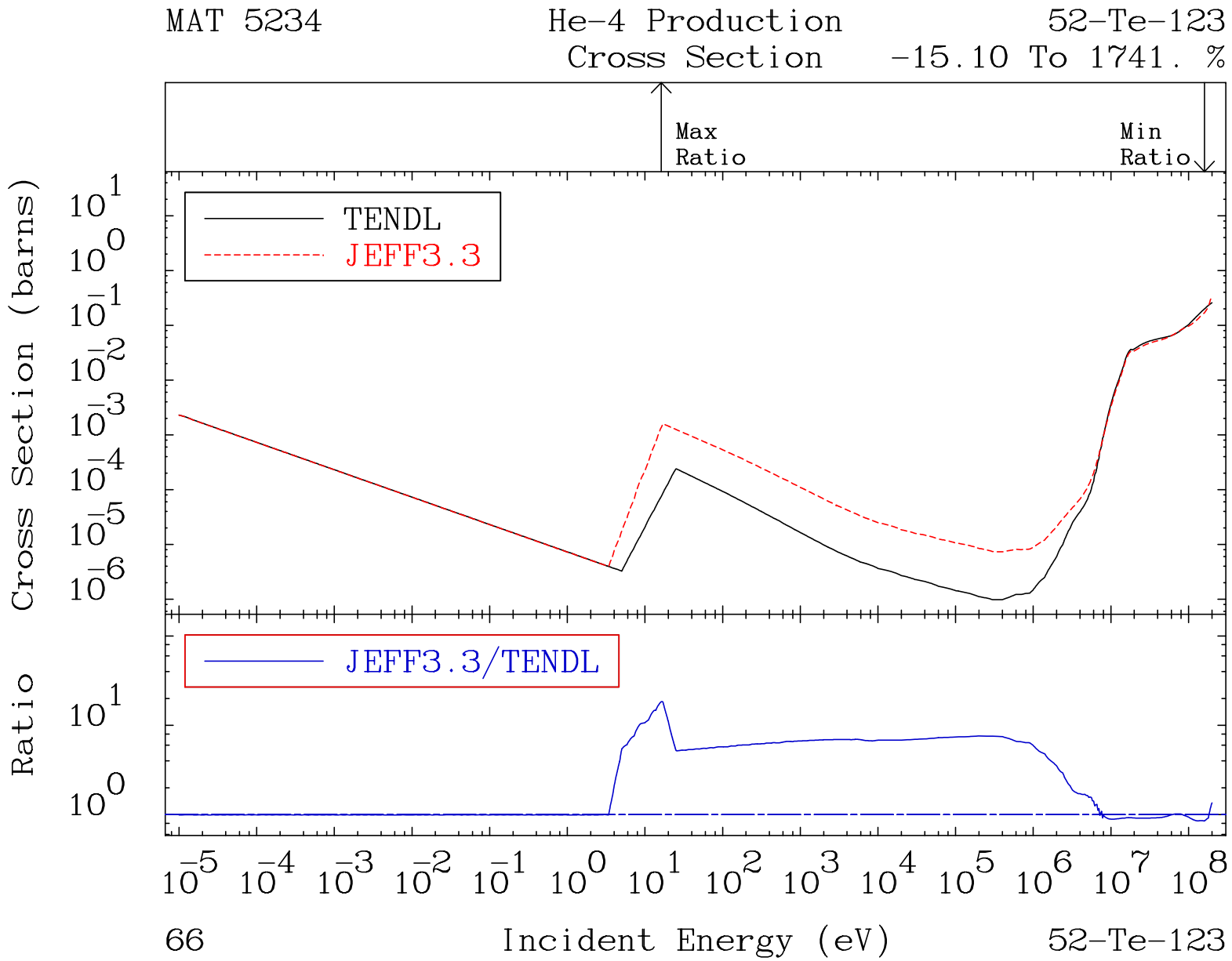

MAT 5234
(n,d) α
Cross Section
52-Te-123
-100.0 To 8842. %
Min Ratio
Max Ratio
TENDL Threshold 9.5095 MeV
JEFF3.3 Threshold 9.5106 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
30
25
20
15
10
5
0
120
80
40
0
10^{7}
2
3
4
5
6
7
8
9
10^{8}
2
61
Incident Energy (eV)
52-Te-123

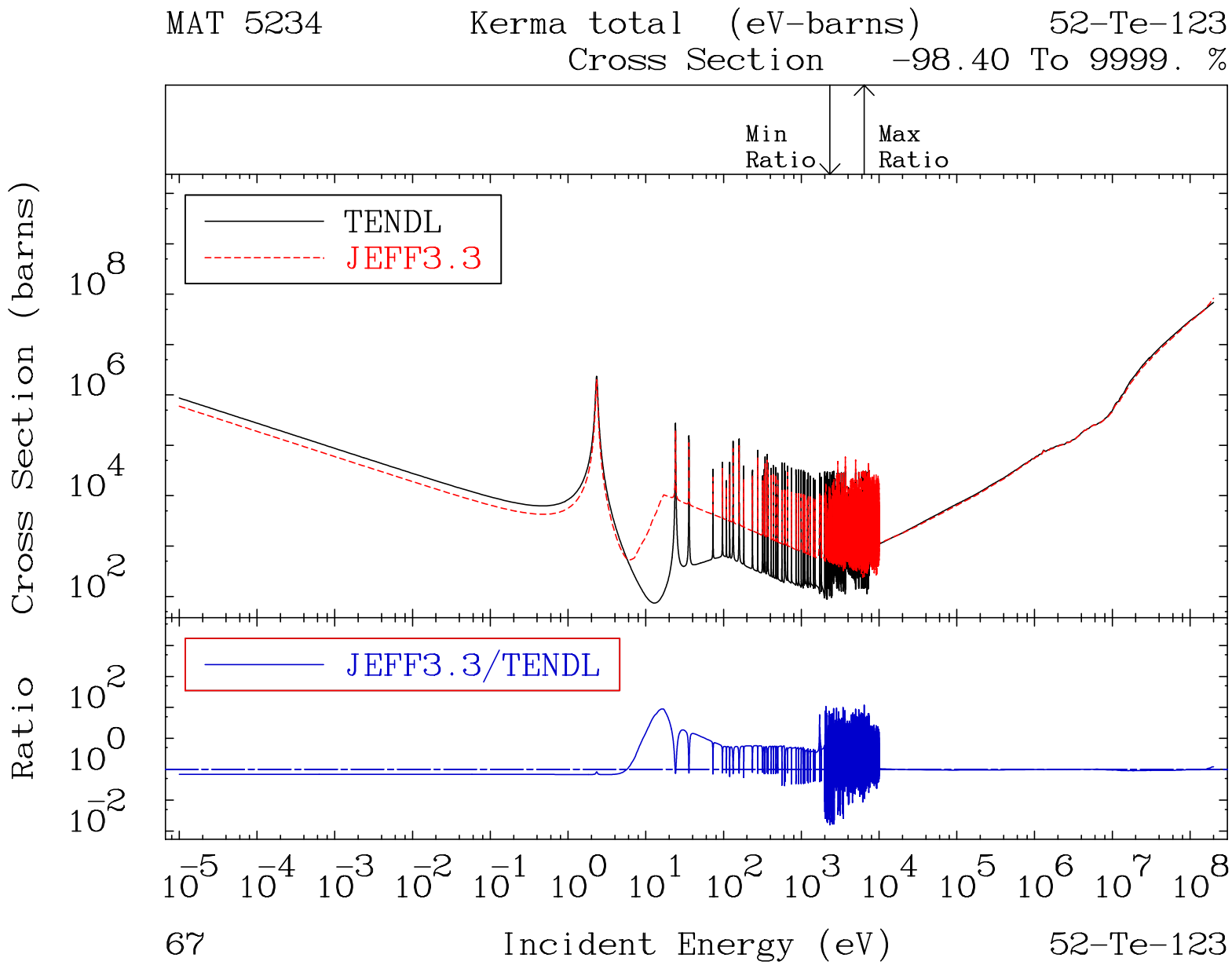

MAT 5234
Hydrogen Production
52-Te-123
Cross Section
-58.64 To 166.1 %
Min
Ratio
Max
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
62
52-Te-123

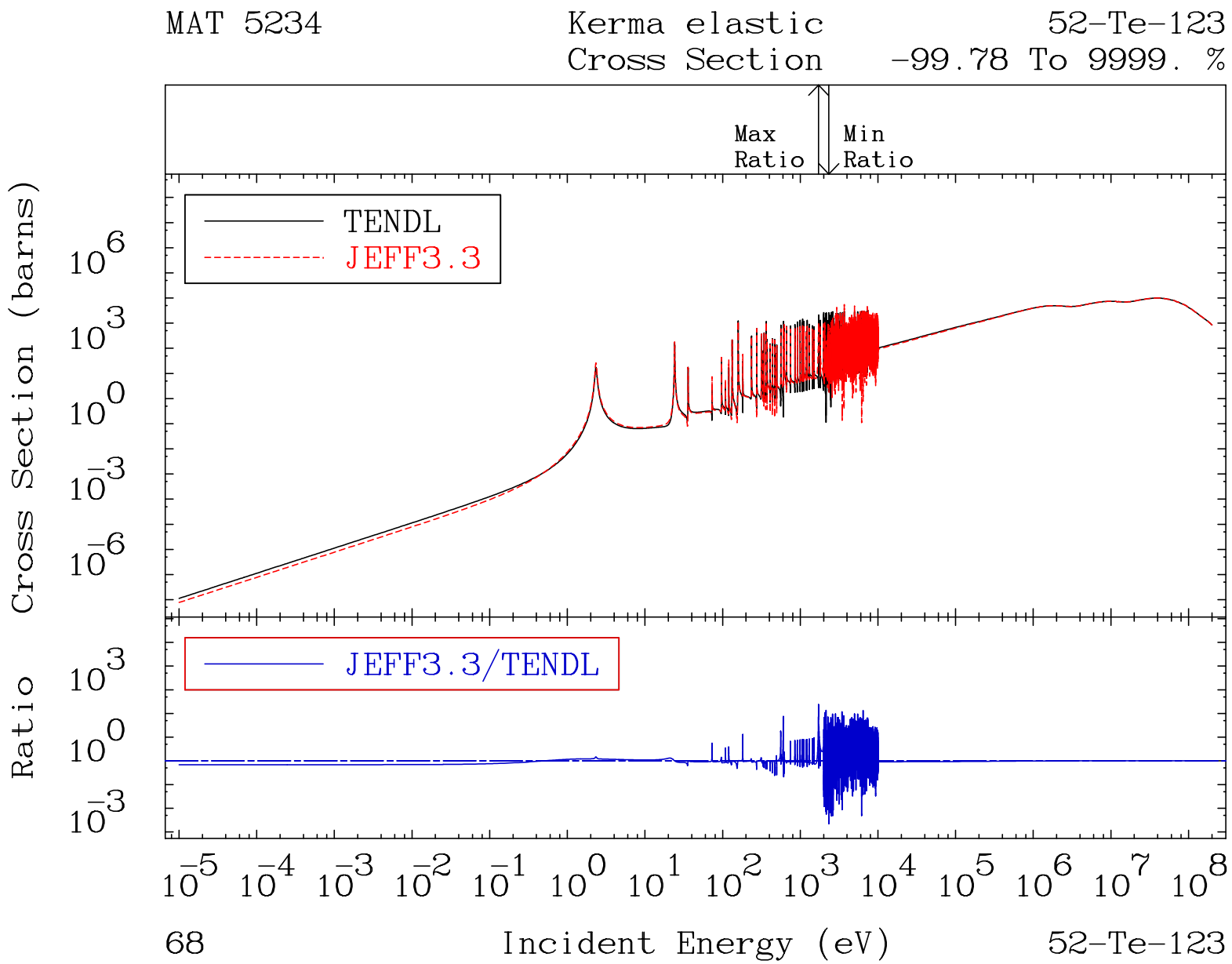

MAT 5234
Deuterium Production
52-Te-123
Cross Section
-100.0 To 90.90 %
Min
Ratio
Max
Ratio
TENDL Threshold 5.9496 MeV
JEFF3.3 Threshold 5.9514 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
2.0
1.0
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
63
Incident Energy (eV)
52-Te-123

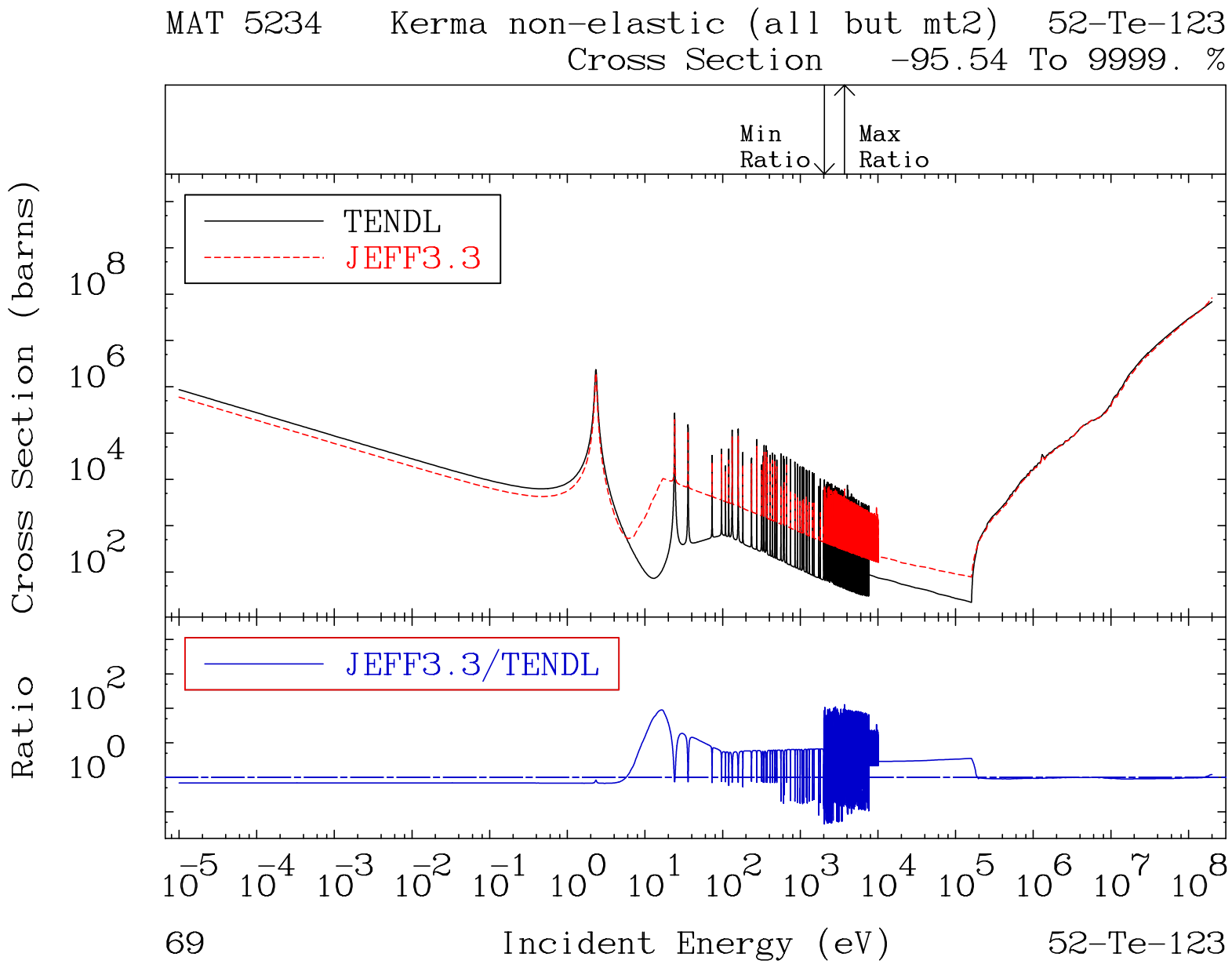

MAT 5234
Tritium Production
52-Te-123
Cross Section
-100.0 To -1.273%
Min Ratio
Max Ratio
TENDL Threshold 6.5032 MeV
JEFF3.3 Threshold 6.5050 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
1.2
0.6
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
64
Incident Energy (eV)
52-Te-123

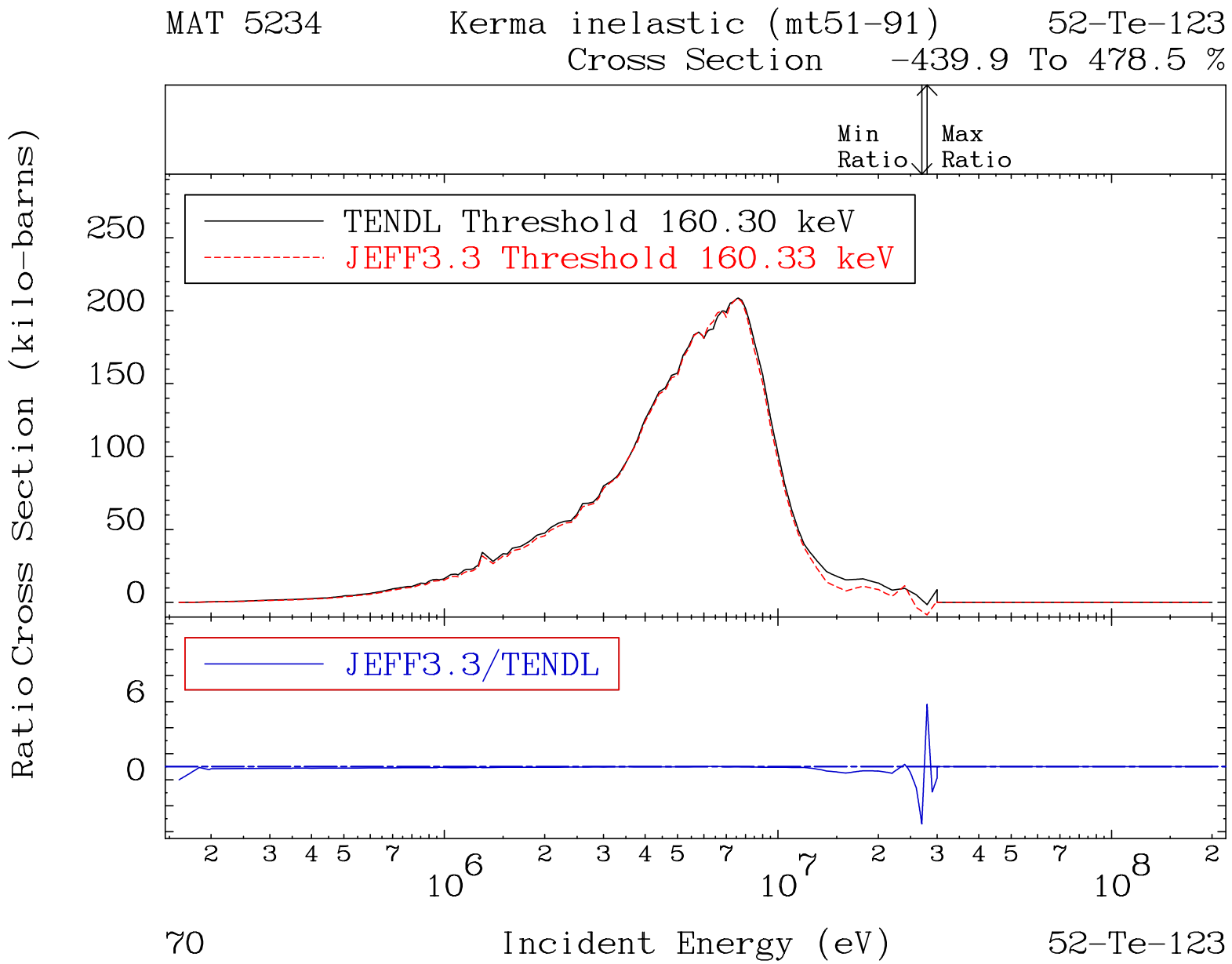

MAT 5234
He-3 Production
Cross Section
52-Te-123
-100.0 To 1.525 %
Min Ratio
Max Ratio
TENDL Threshold 6.8903 MeV
JEFF3.3 Threshold 6.8903 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
300
200
100
0
1.2
0.6
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
65
Incident Energy (eV)
52-Te-123

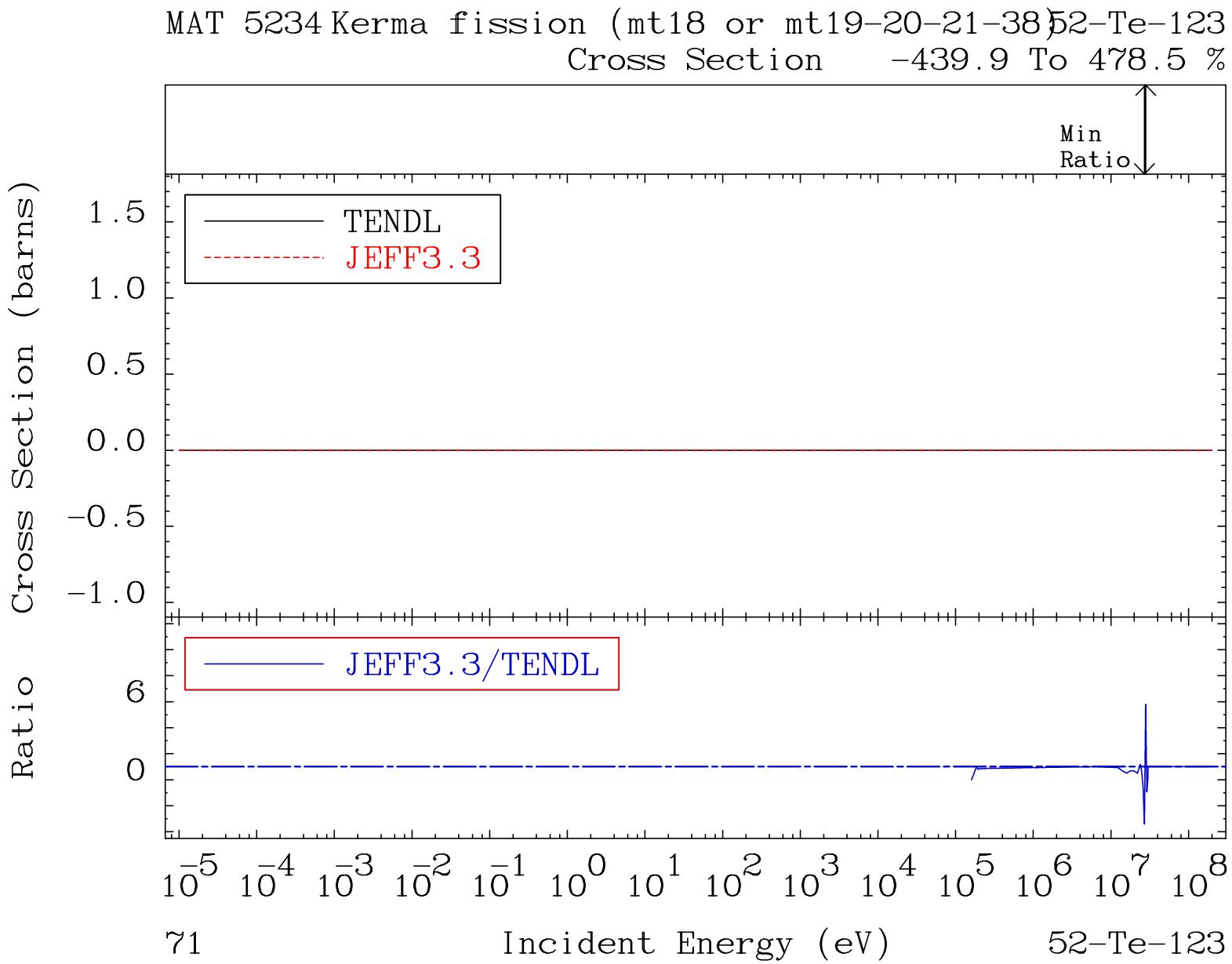

MAT 5234
He-4 Production
Cross Section
52-Te-123
-15.10 To 1741. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
66
52-Te-123

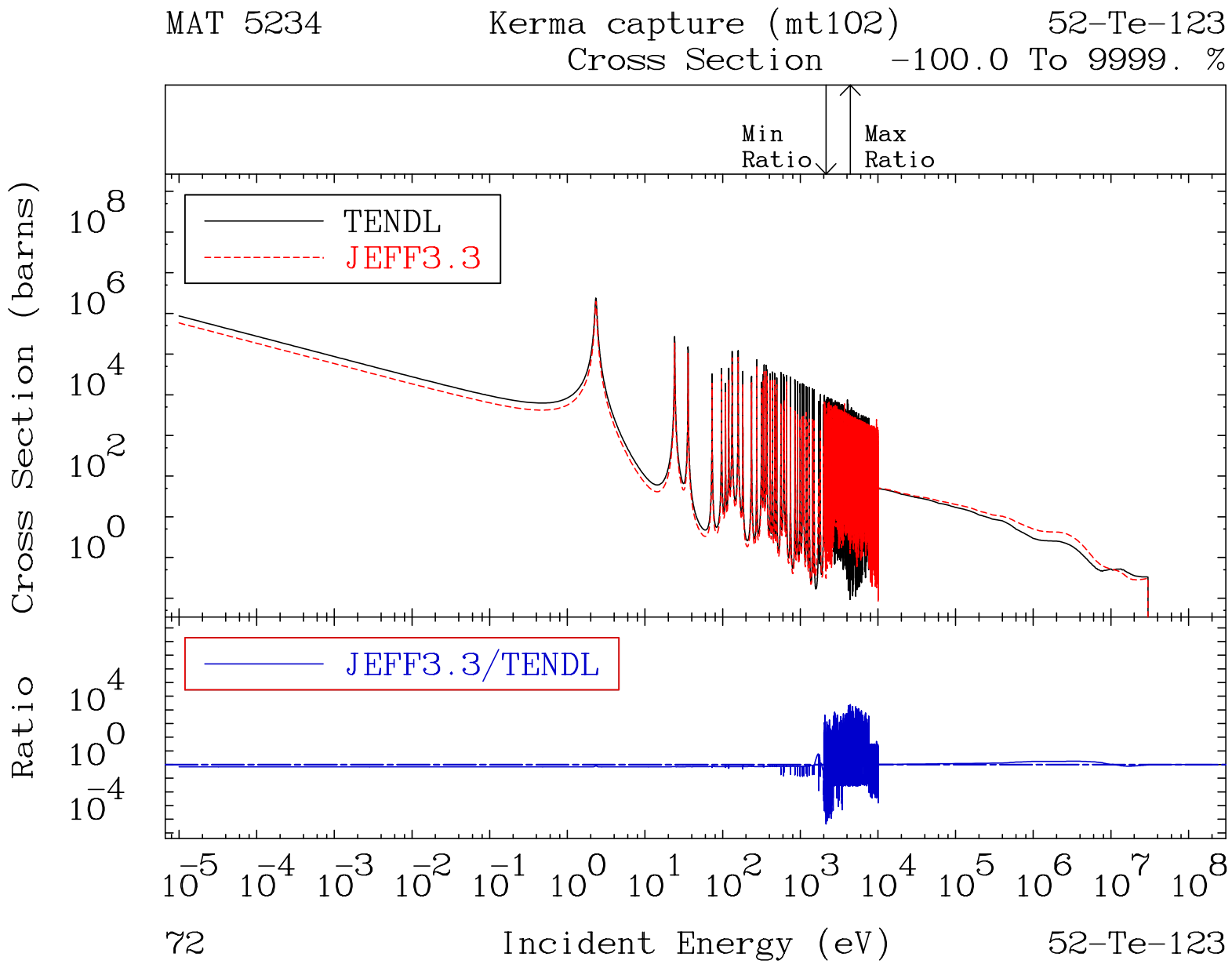

MAT 5234
Kerma total (eV-barns)
52-Te-123
Cross Section -98.40 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
67
52-Te-123

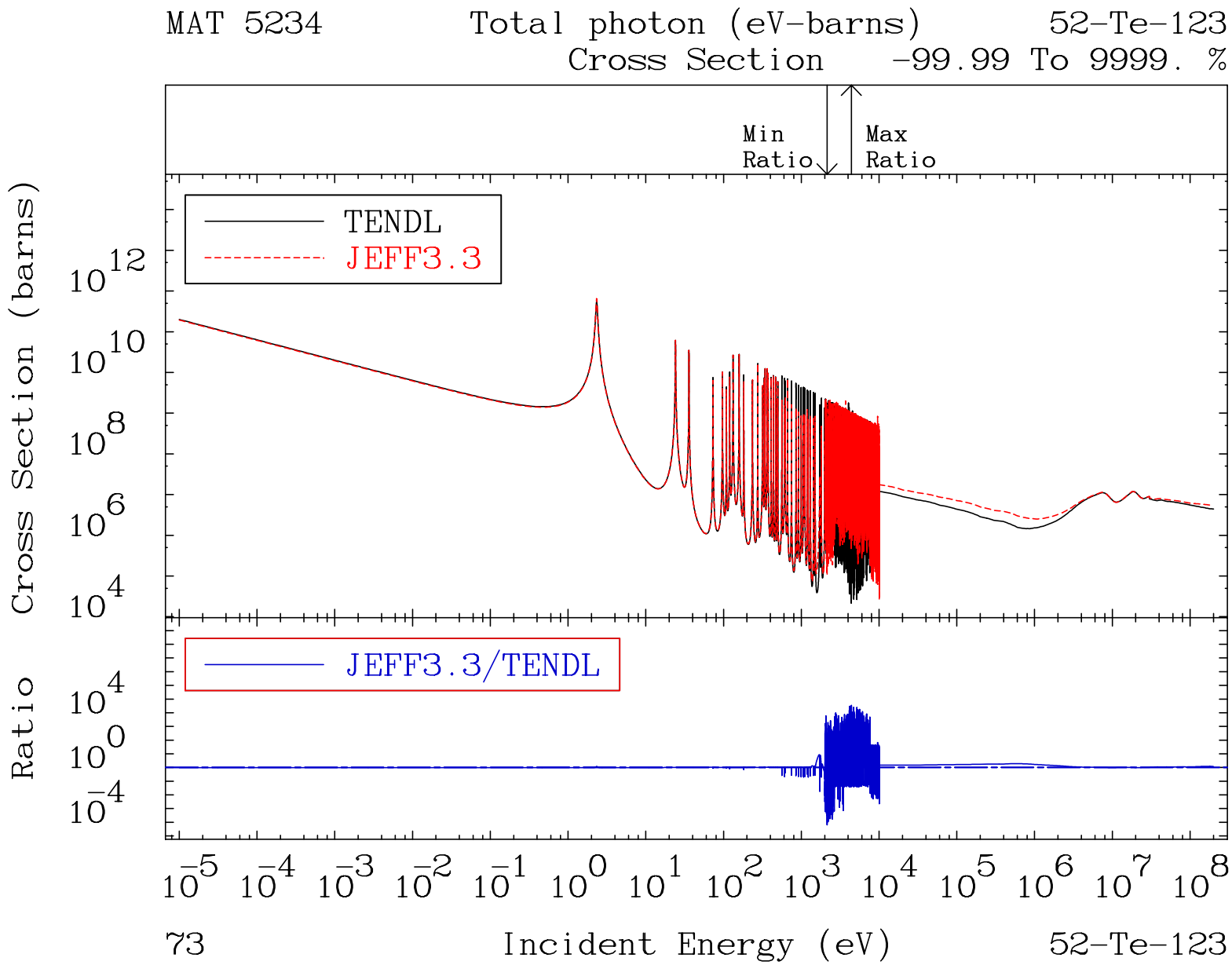

MAT 5234
Kerma elastic
Cross Section
52-Te-123
-99.78 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
52-Te-123

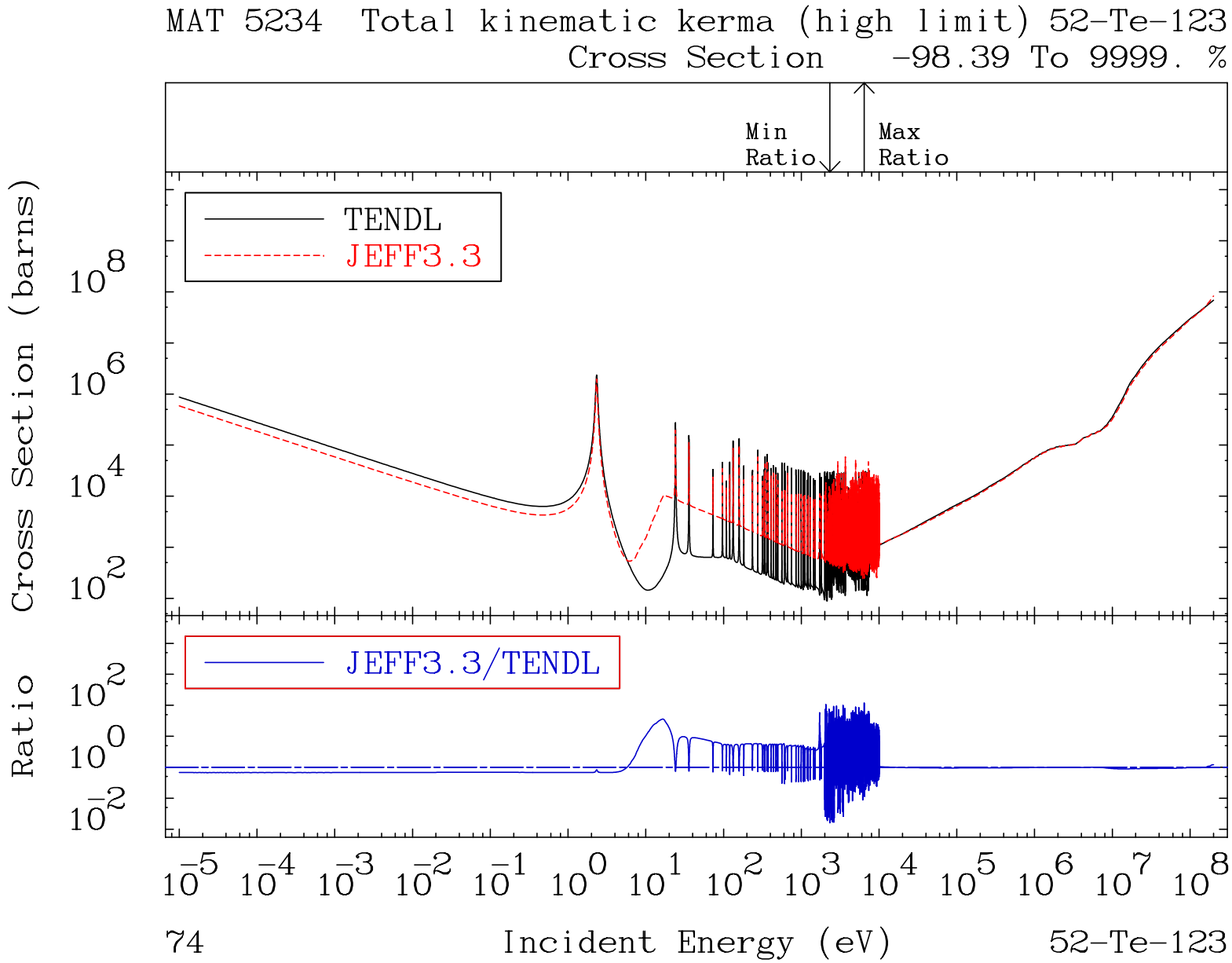

MAT 5234 Kerma non-elastic (all but mt2) 52-Te-123
Cross Section -95.54 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
69
52-Te-123

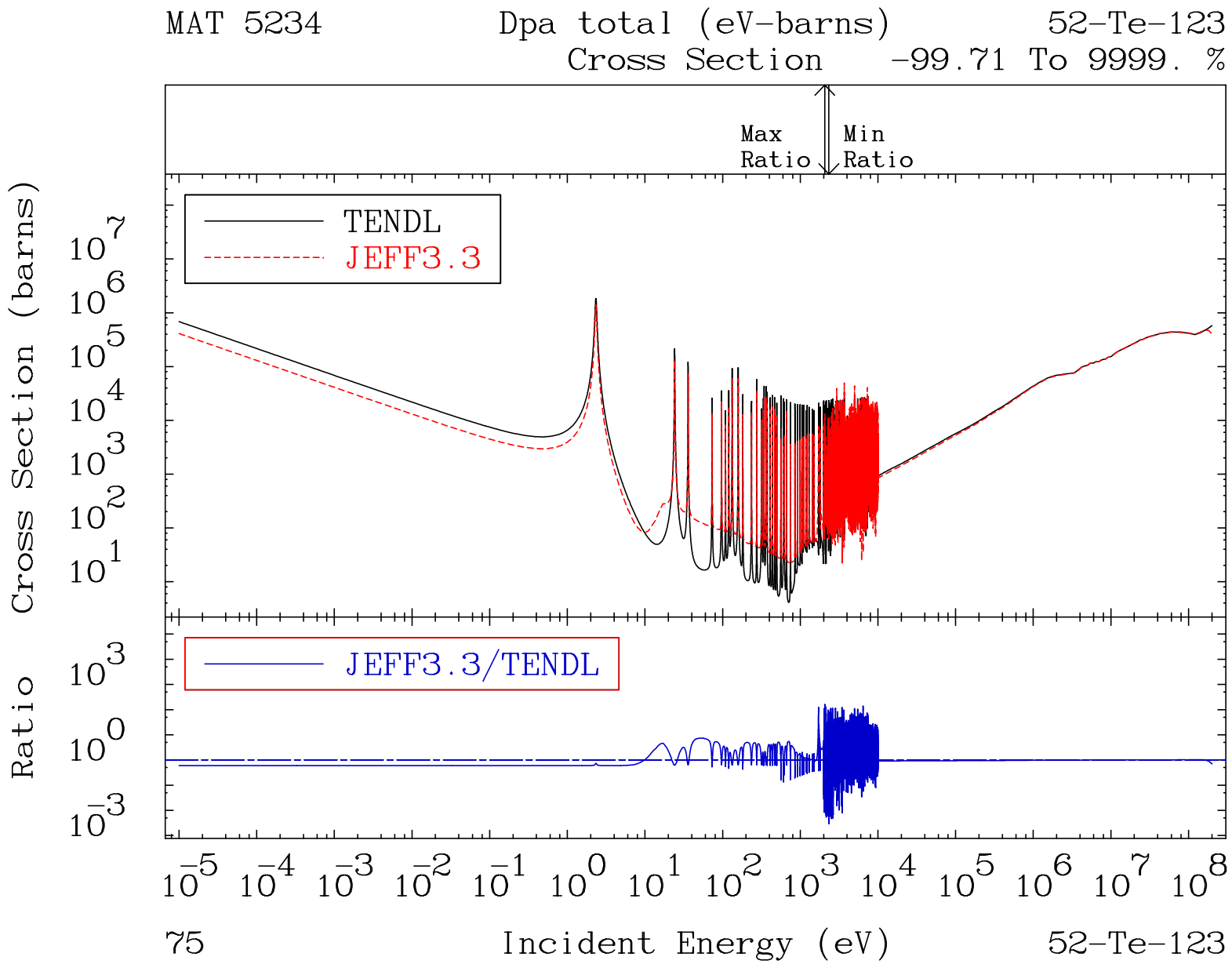

MAT 5234
Kerma inelastic (mt51-91)
52-Te-123
Cross Section
-439.9 To 478.5 %
Min Ratio
Max Ratio
TENDL Threshold 160.30 keV
JEFF3.3 Threshold 160.33 keV
JEFF3.3/TENDL
Ratio Cross Section (kilo-barns)
250
200
150
100
50
0
6
0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
70
Incident Energy (eV)
52-Te-123

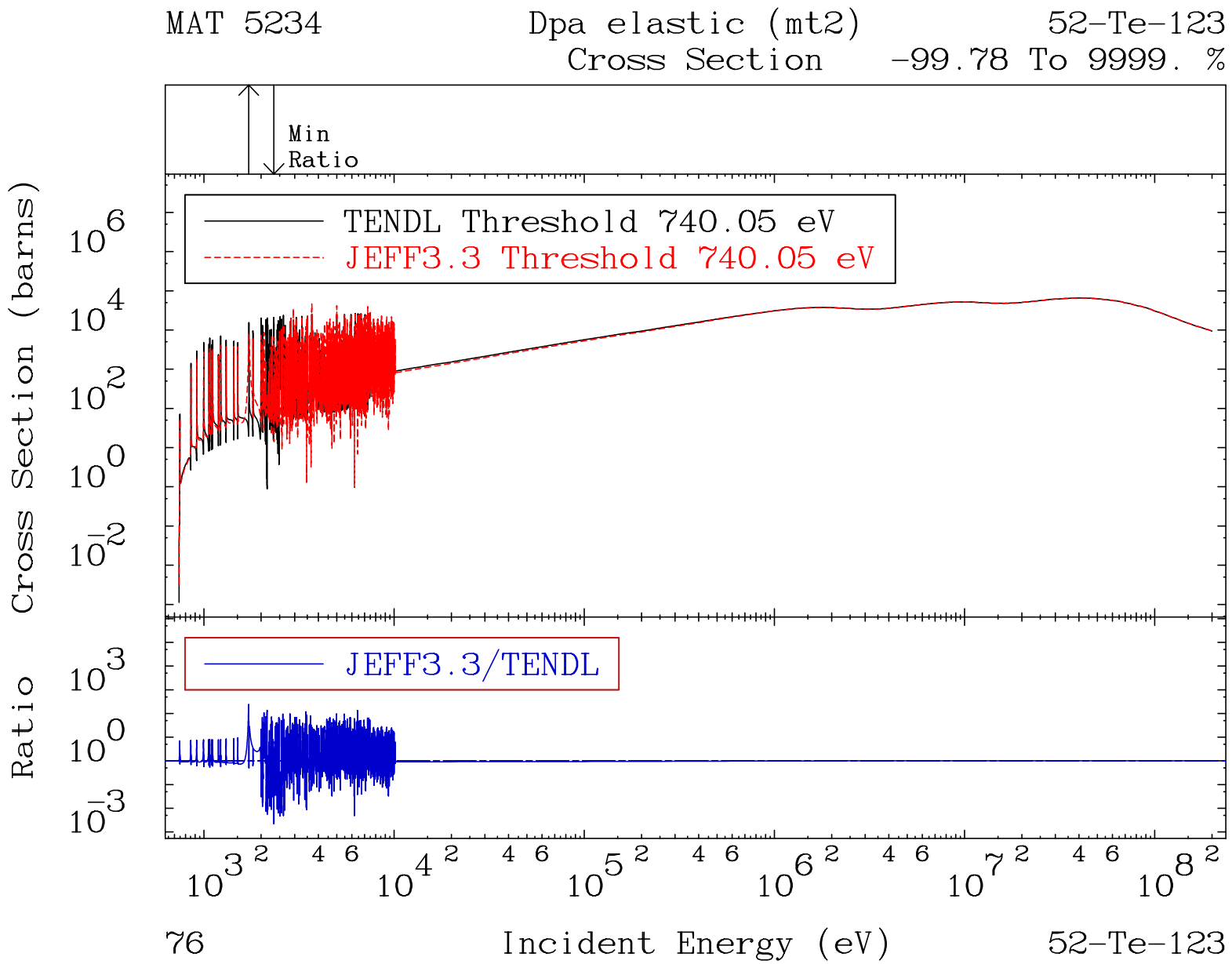

MAT 5234 Kerma fission (mt18 or mt19-20-21-38) 52-Te-123
Cross Section -439.9 To 478.5 %
Min
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
6
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
71
Incident Energy (eV)
52-Te-123

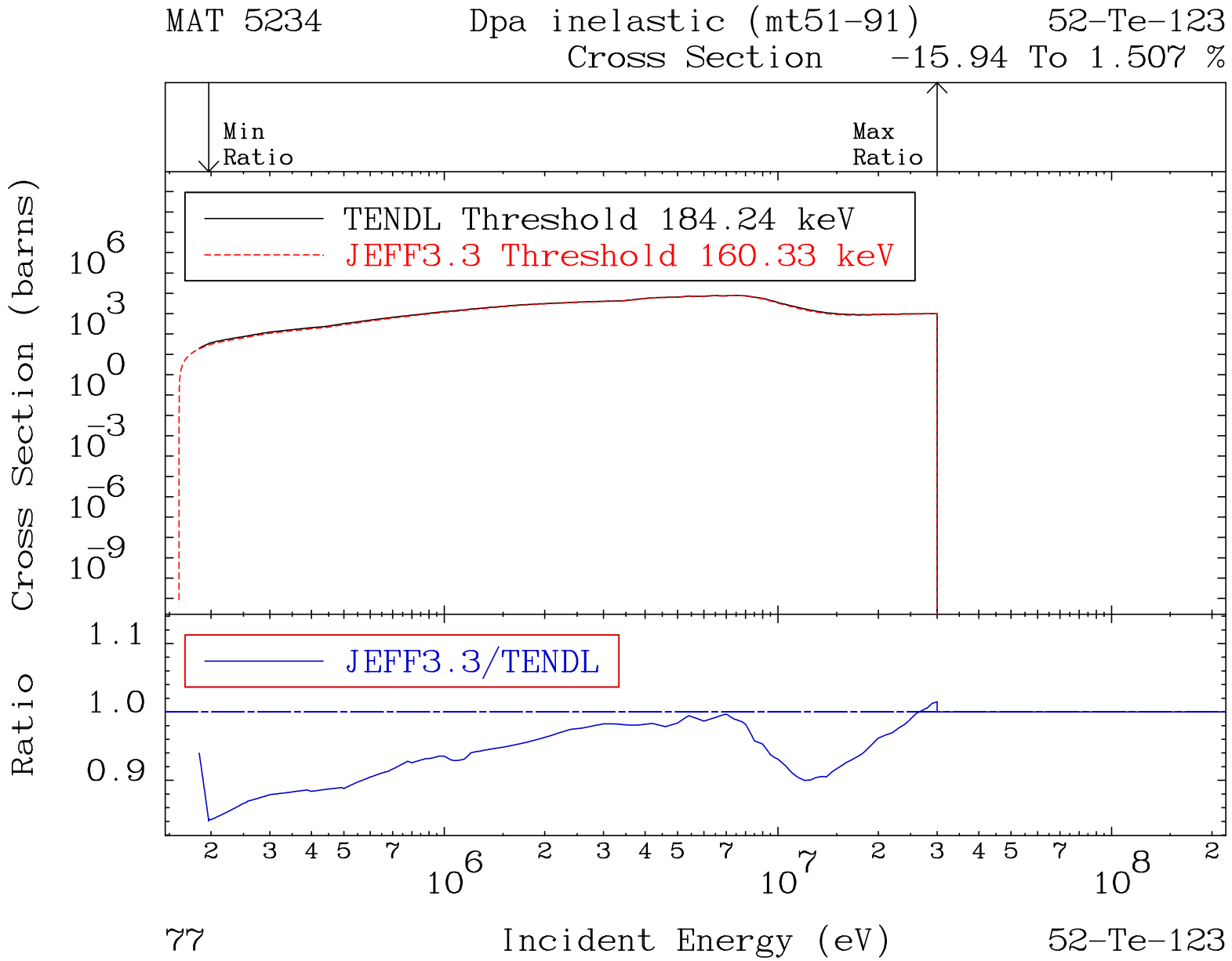

MAT 5234
Kerma capture (mt102)
52-Te-123
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
52-Te-123

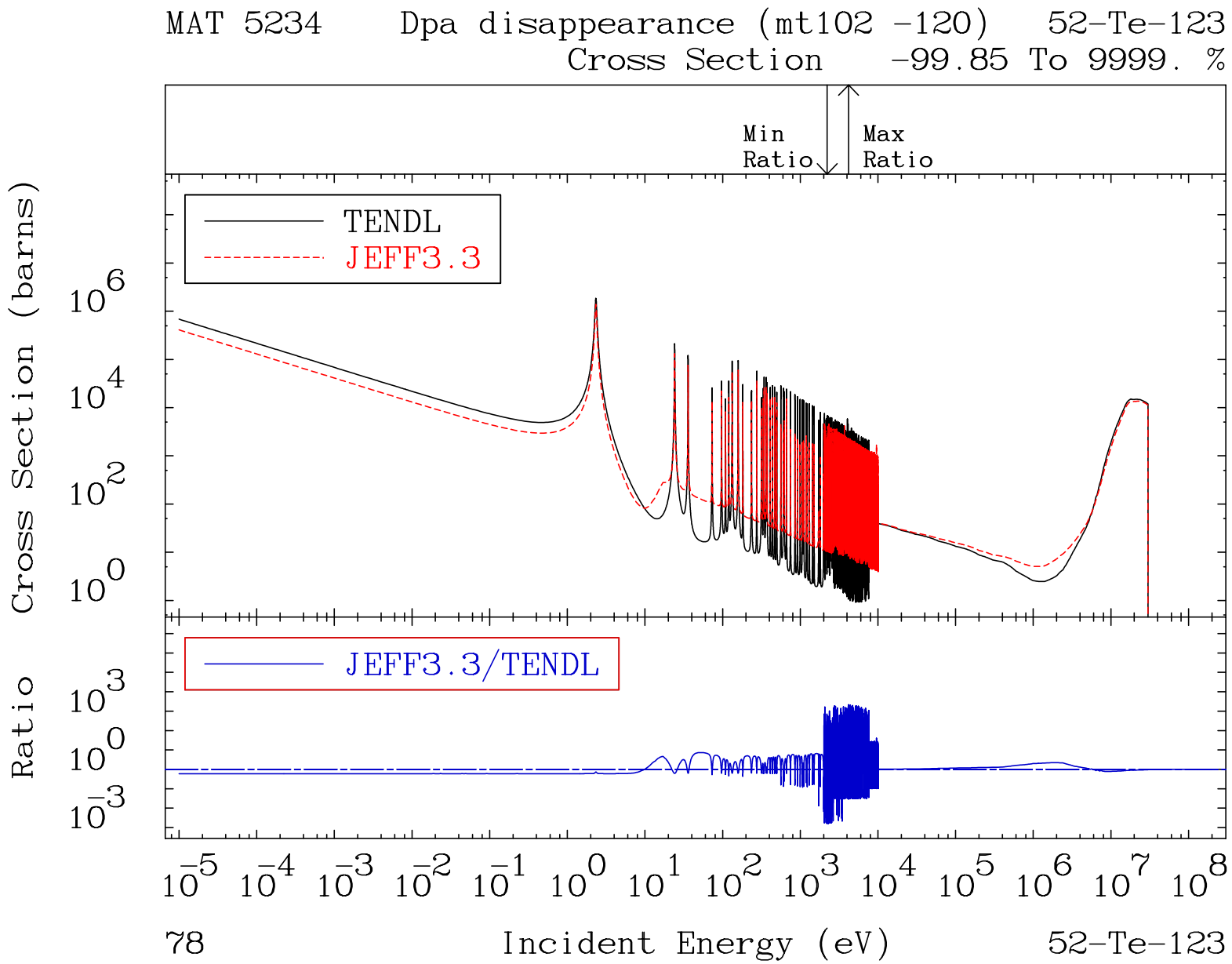

MAT 5234
Total photon (eV-barns)
52-Te-123
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
52-Te-123

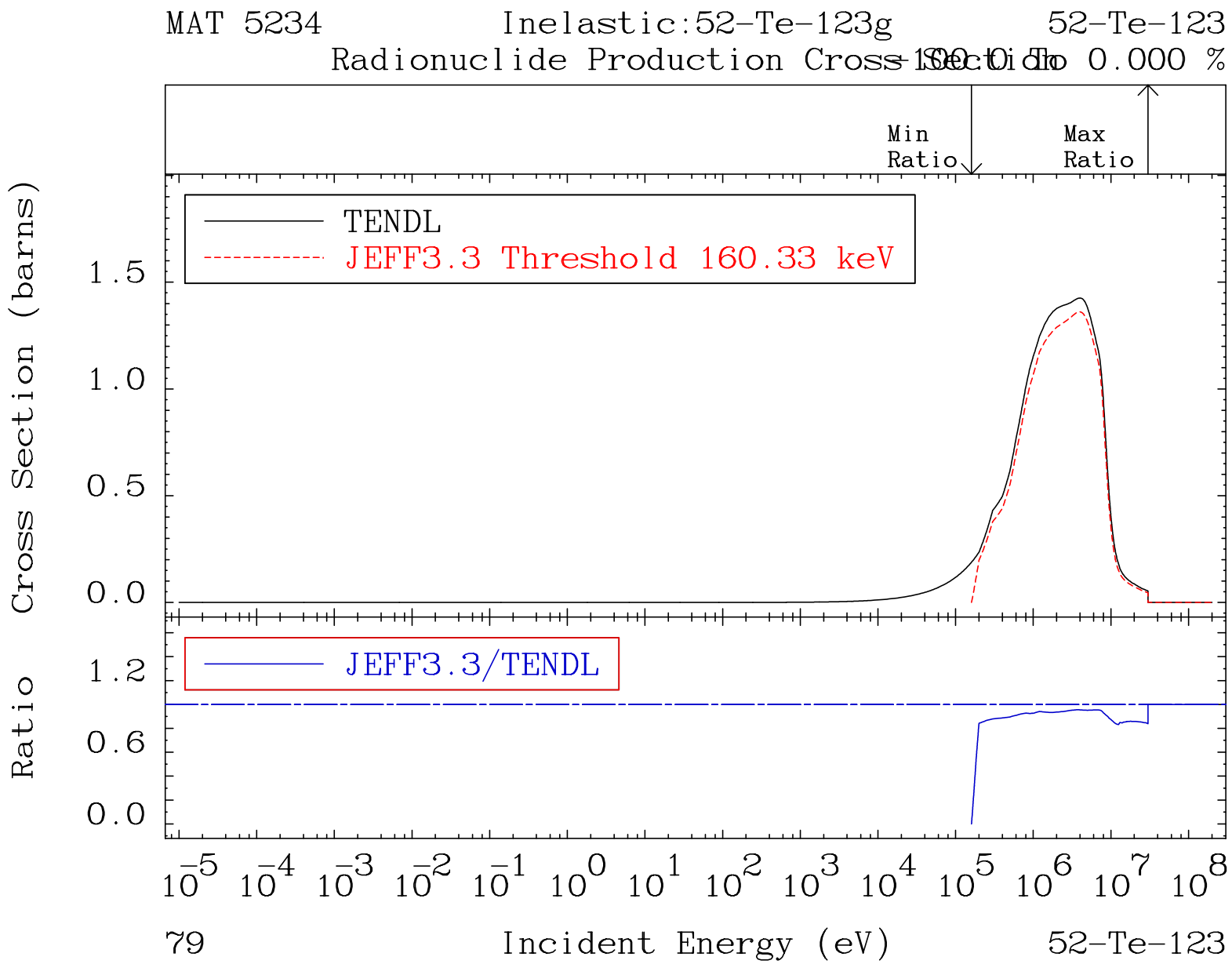

MAT 5234 Total kinematic kerma (high limit) 52-Te-123
Cross Section -98.39 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
52-Te-123

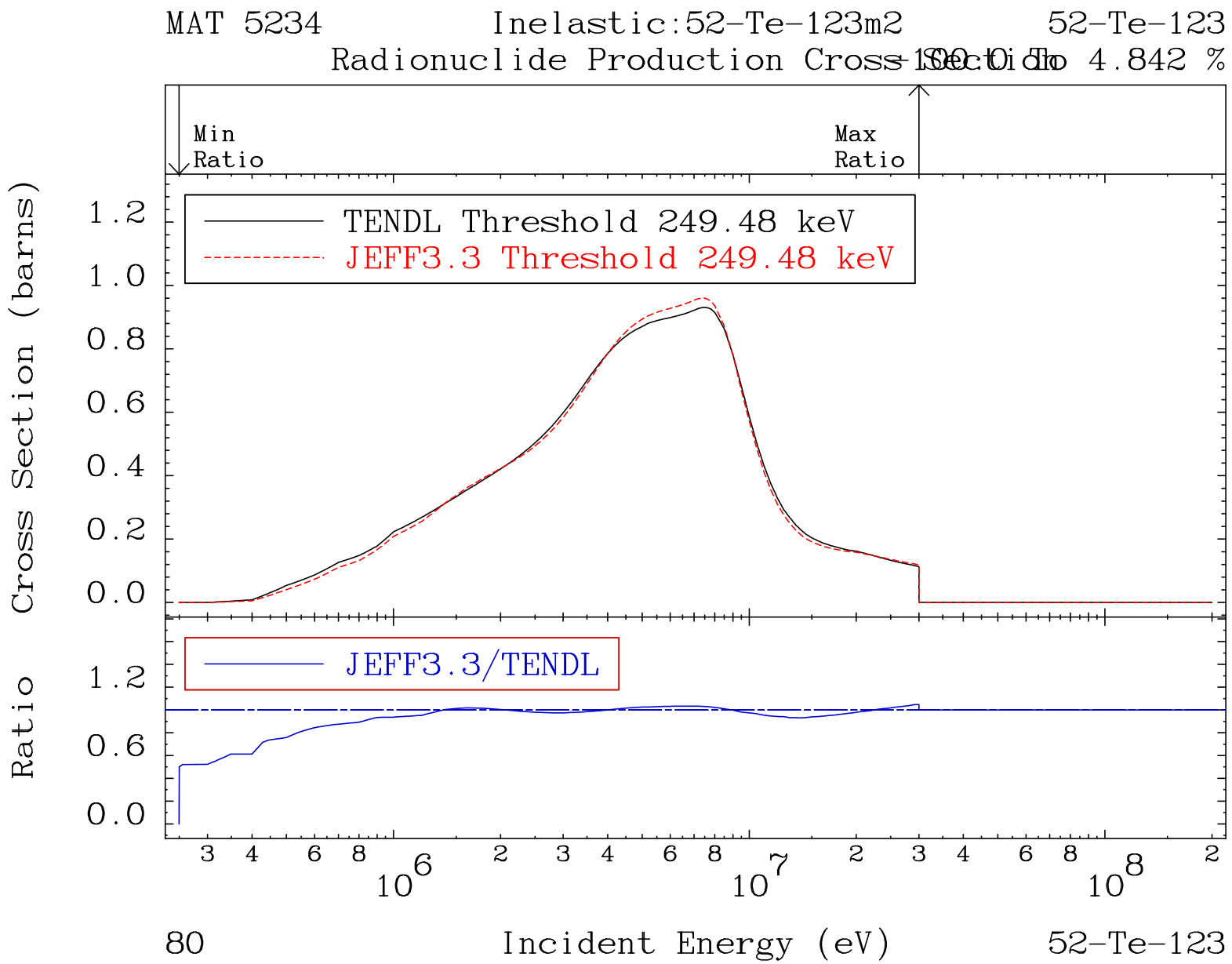

MAT 5234
Dpa total (eV-barns)
52-Te-123
Cross Section
-99.71 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
75
52-Te-123

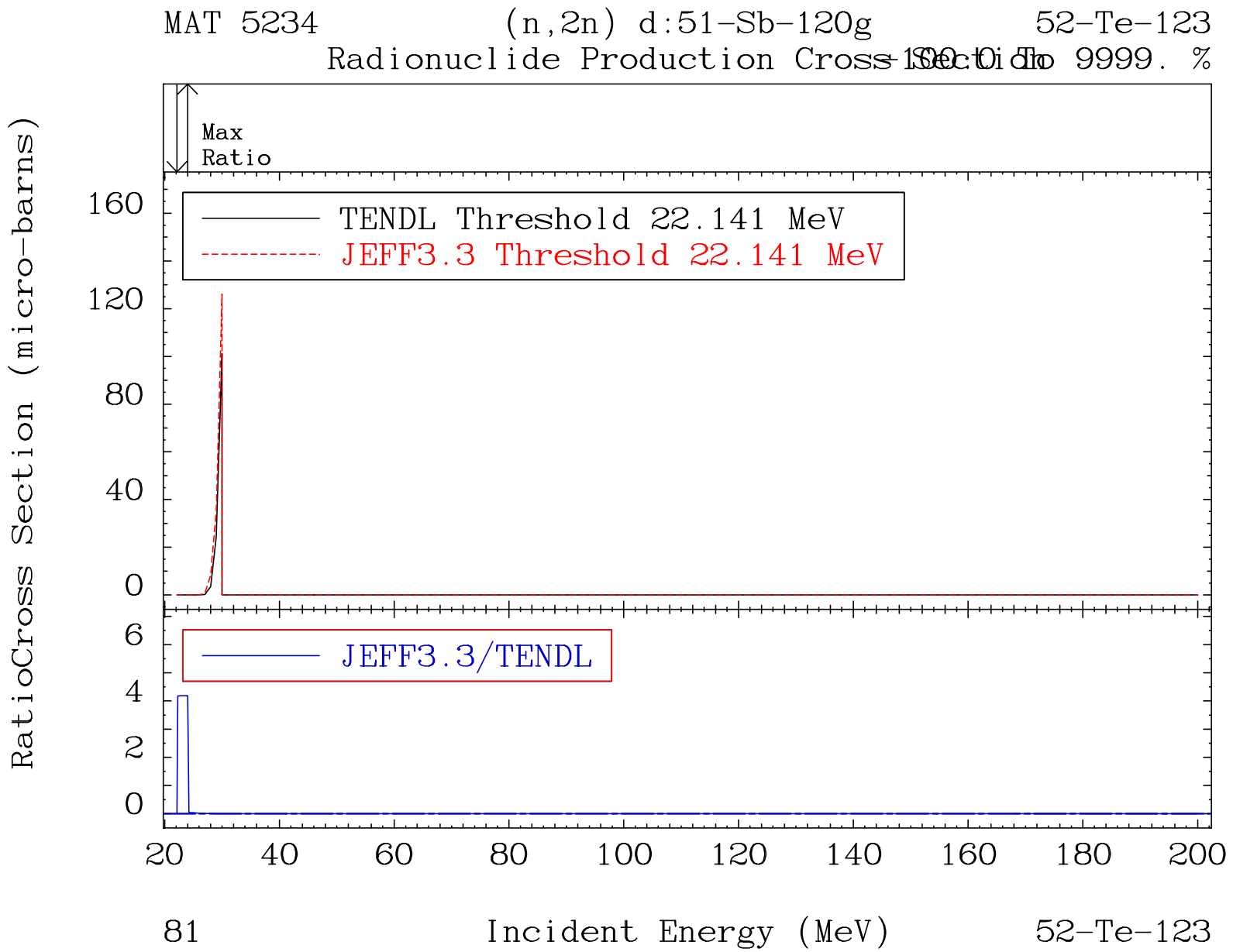

MAT 5234
Dpa elastic (mt2)
Cross Section
52-Te-123
-99.78 To 9999. %
Min
Ratio
TENDL Threshold 740.05 eV
JEFF3.3 Threshold 740.05 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
52-Te-123

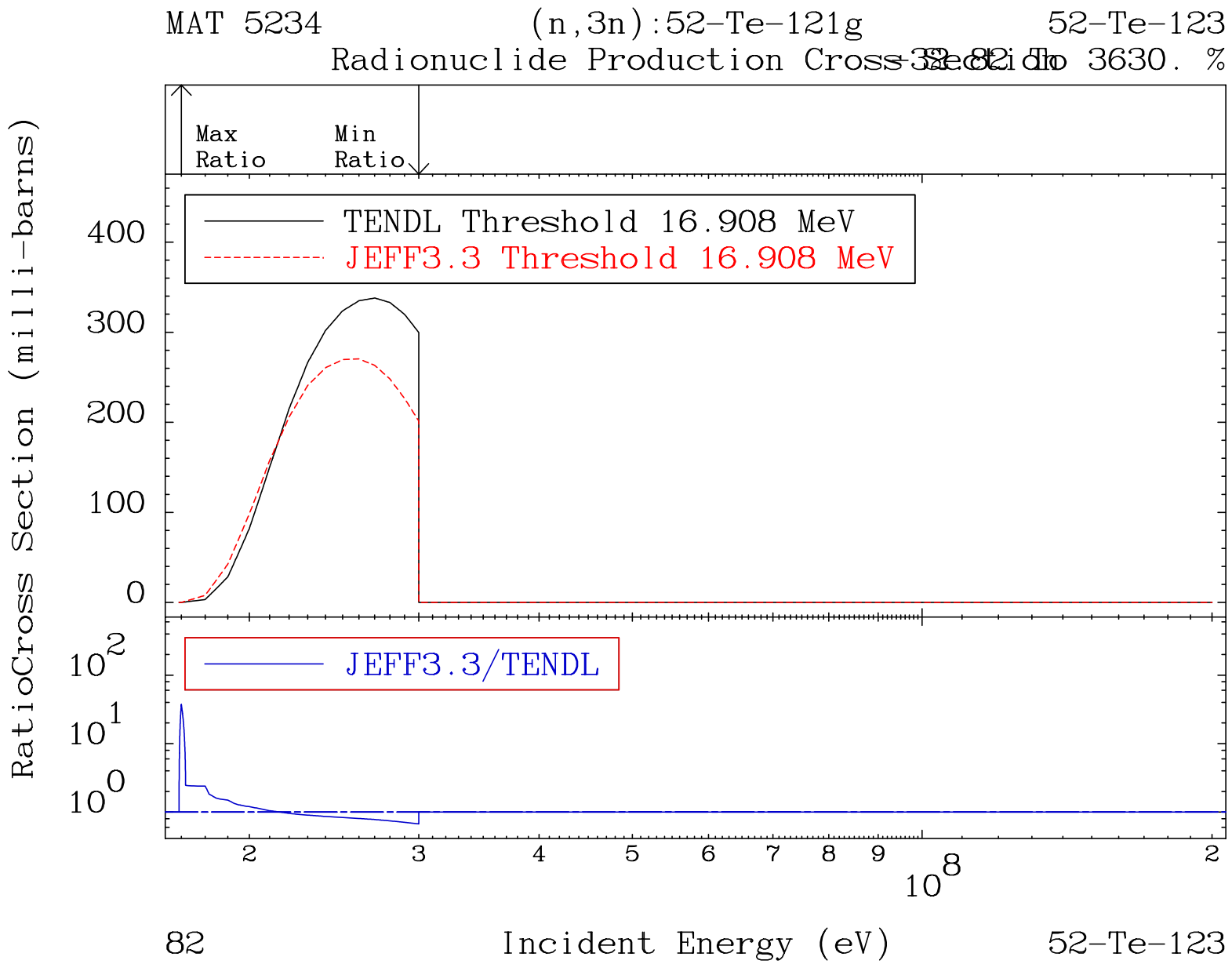

MAT 5234
Dpa inelastic (mt51-91)
52-Te-123
Cross Section
-15.94 To 1.507 %
Min Ratio
Max Ratio
TENDL Threshold 184.24 keV
JEFF3.3 Threshold 160.33 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
52-Te-123

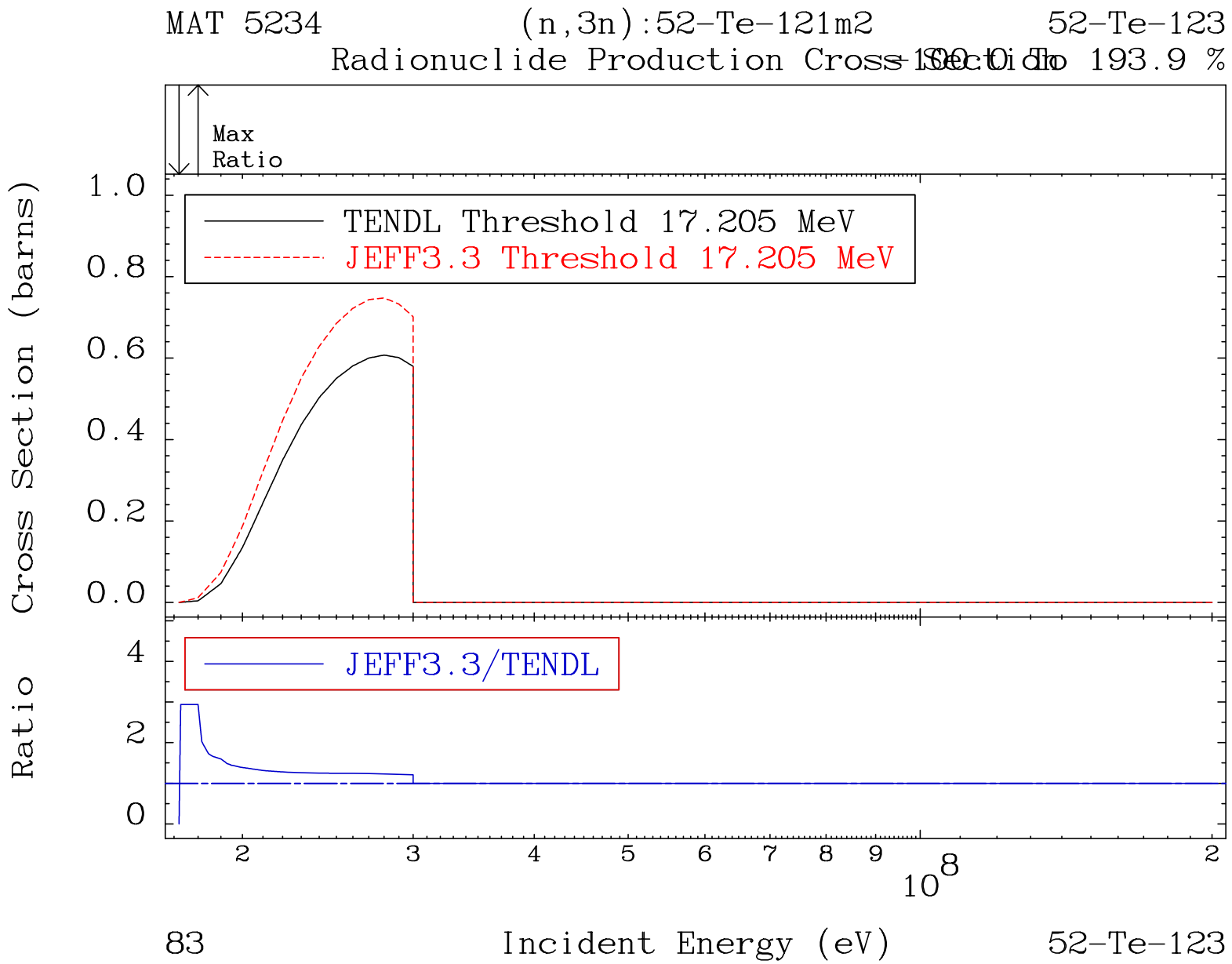

MAT 5234 Dpa disappearance (mt102 -120) 52-Te-123
Cross Section -99.85 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
78
52-Te-123

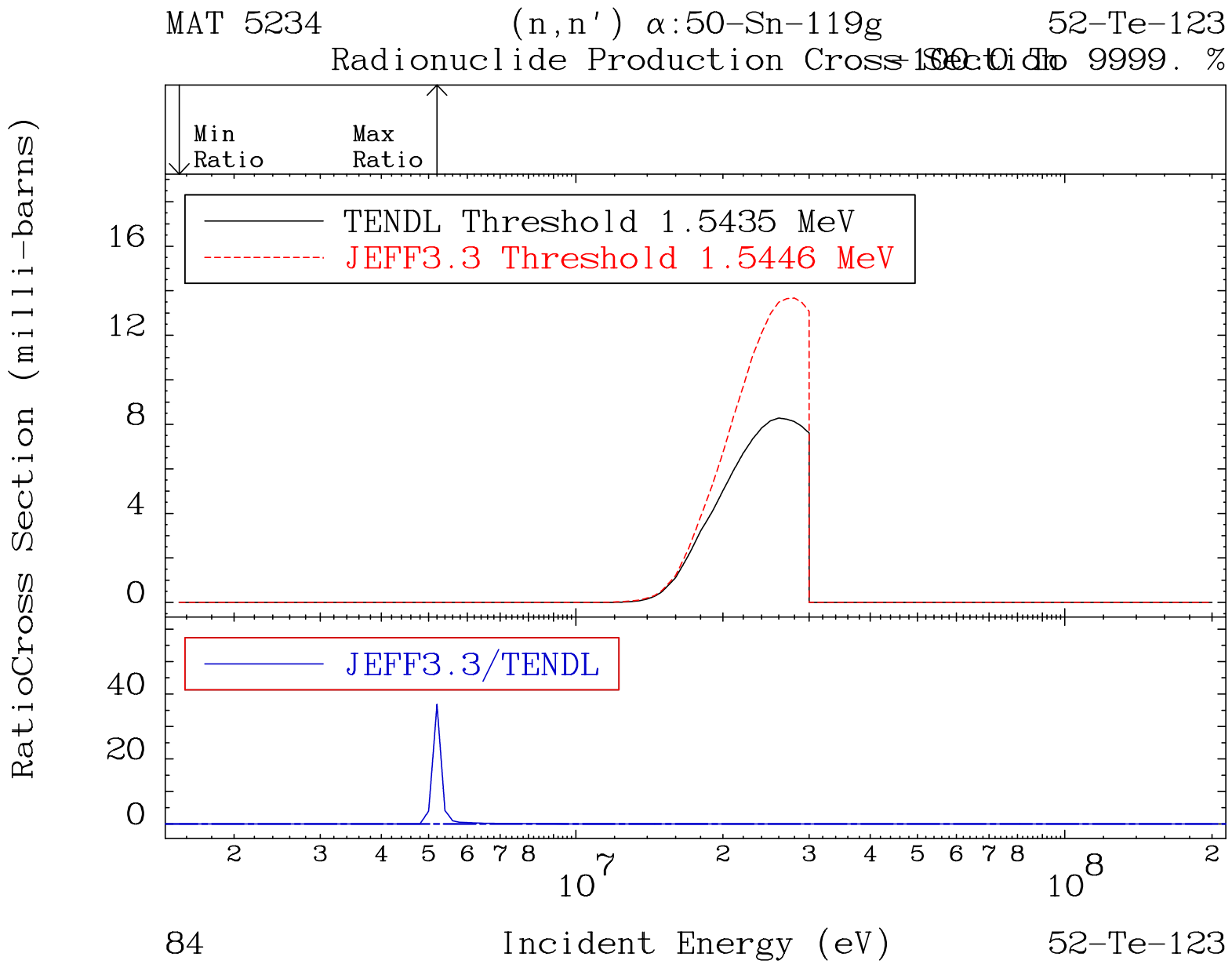

MAT 5234
Inelastic:52-Te-123g
52-Te-123
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL
JEFF3.3 Threshold 160.33 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
79
Incident Energy (eV)
52-Te-123

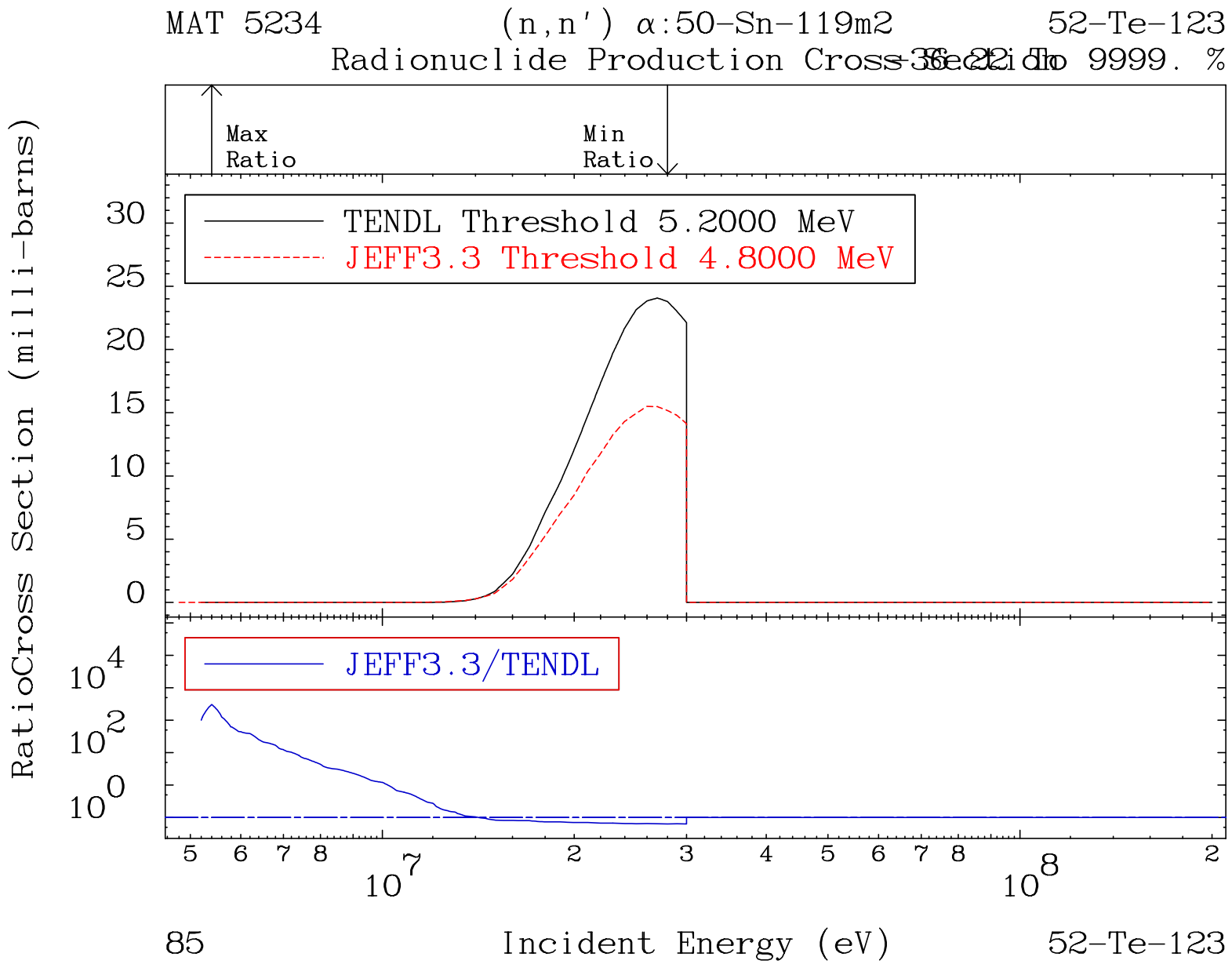

MAT 5234
Inelastic:52-Te-123m2
52-Te-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 249.48 keV
JEFF3.3 Threshold 249.48 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
80
52-Te-123

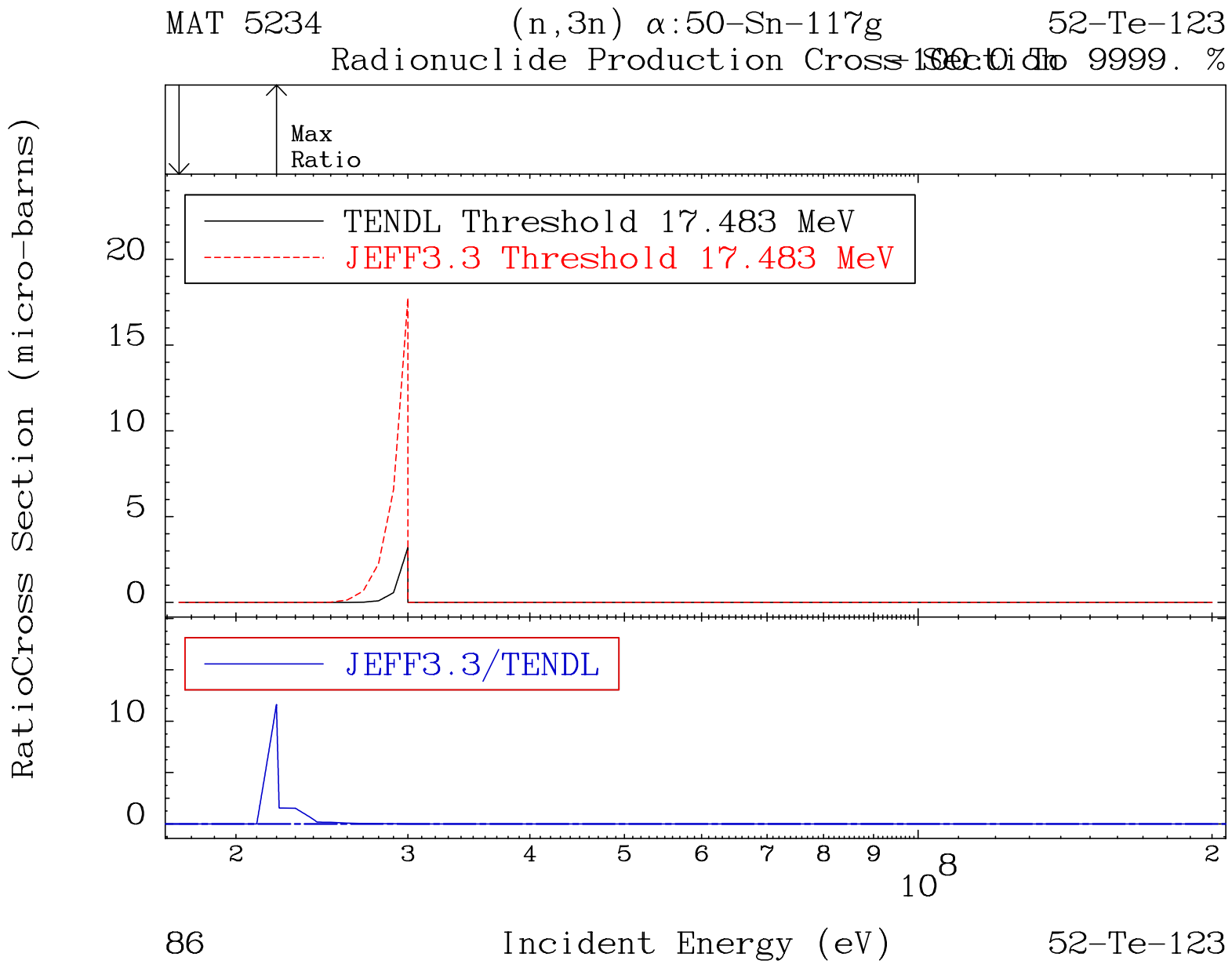

MAT 5234
(n,2n) d:51-Sb-120g
52-Te-123
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 22.141 MeV
JEFF3.3 Threshold 22.141 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
160
120
80
40
0
6
4
2
0
20
40
60
80
100
120
140
160
180
200
81
Incident Energy (MeV)
52-Te-123

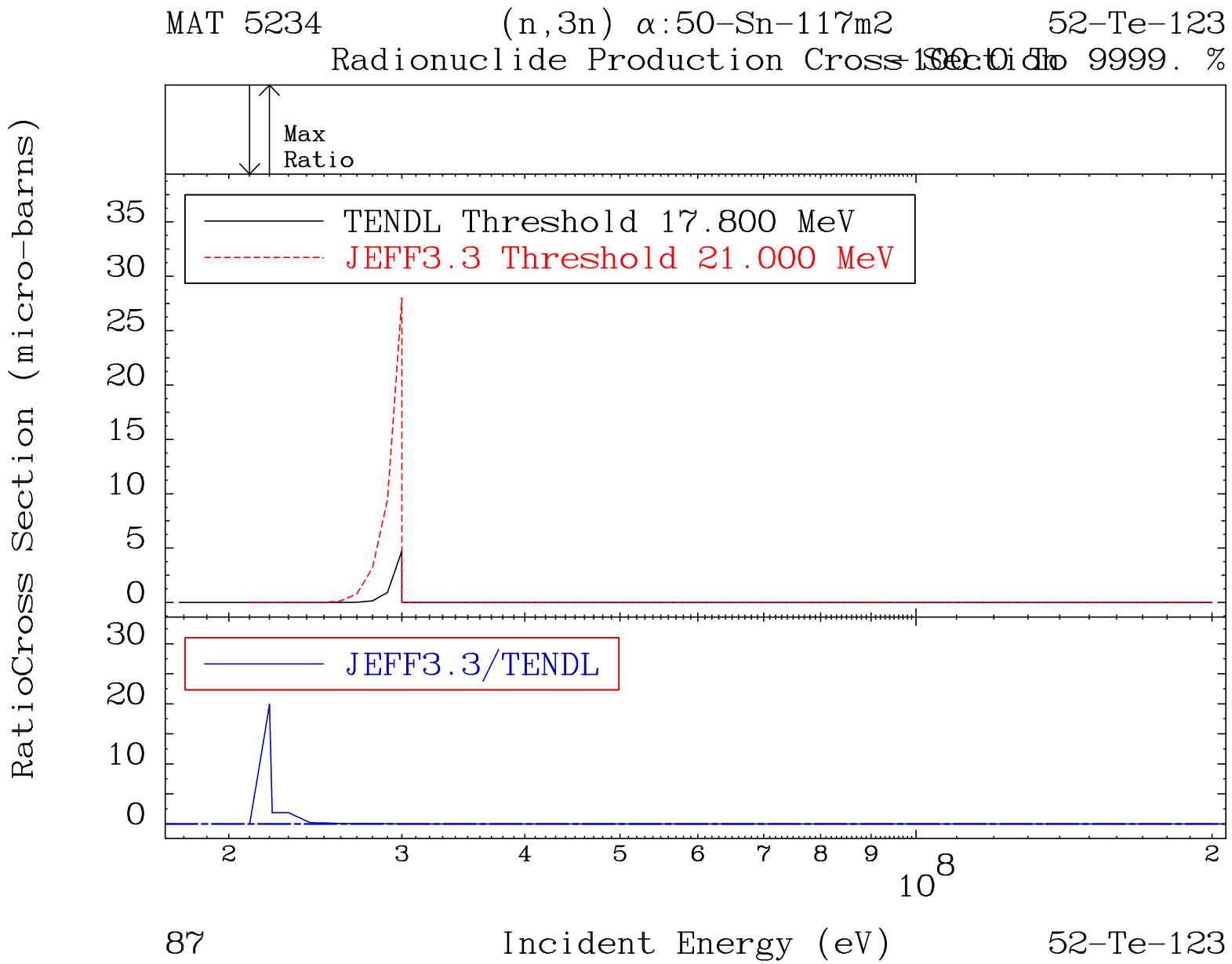

MAT 5234
(n,3n):52-Te-121g
52-Te-123
Radionuclide Production Cross Section To 3630. %
Max Ratio
Min Ratio
TENDL Threshold 16.908 MeV
JEFF3.3 Threshold 16.908 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
52-Te-123

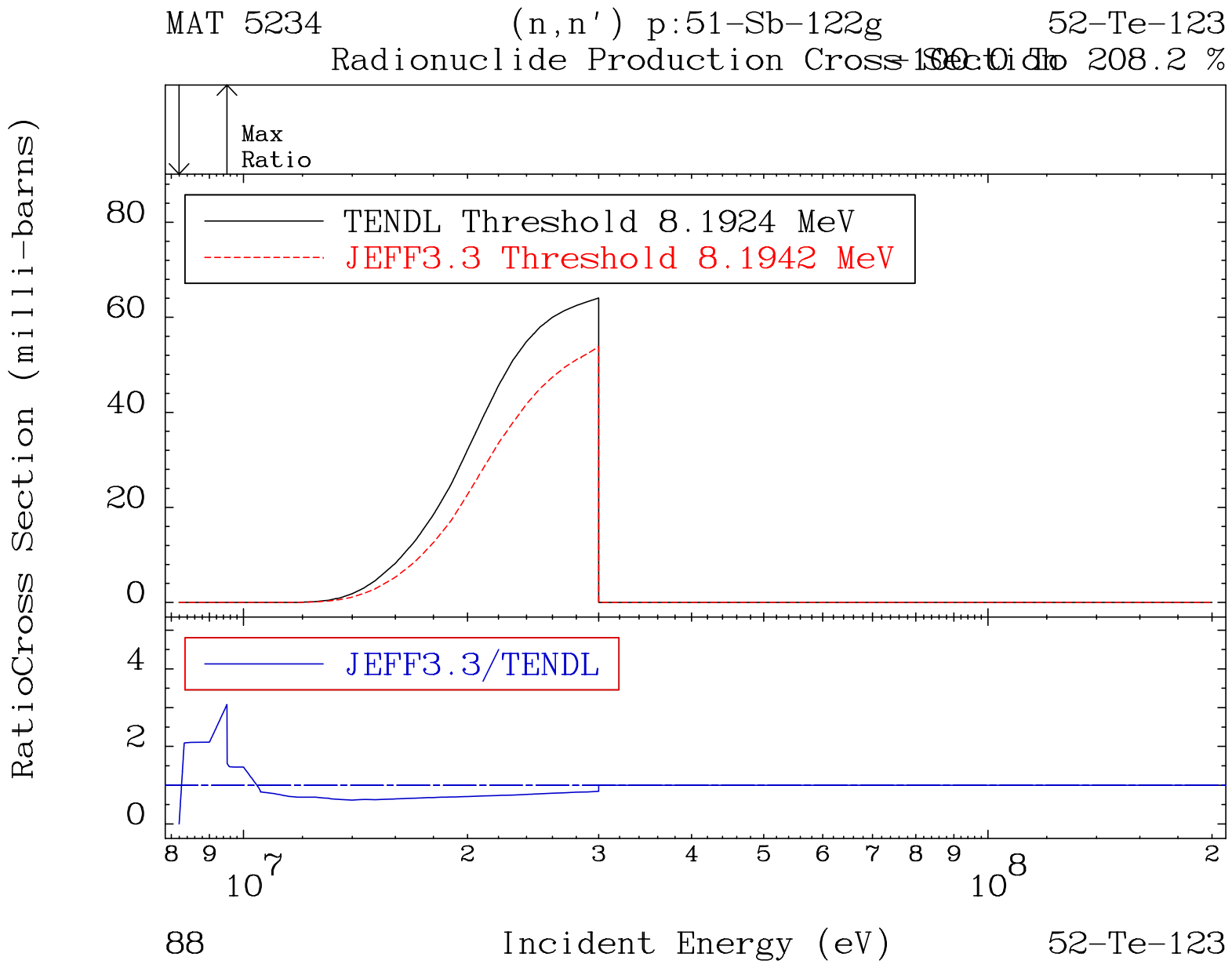

MAT 5234
(n,3n):52-Te-121m2
52-Te-123
Radionuclide Production Cross Section
Max Ratio
1.0
0.8
0.6
0.4
0.2
0.0
TENDL Threshold 17.205 MeV
JEFF3.3 Threshold 17.205 MeV
Cross Section (barns)
Ratio
4
2
0
JEFF3.3/TENDL
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
52-Te-123

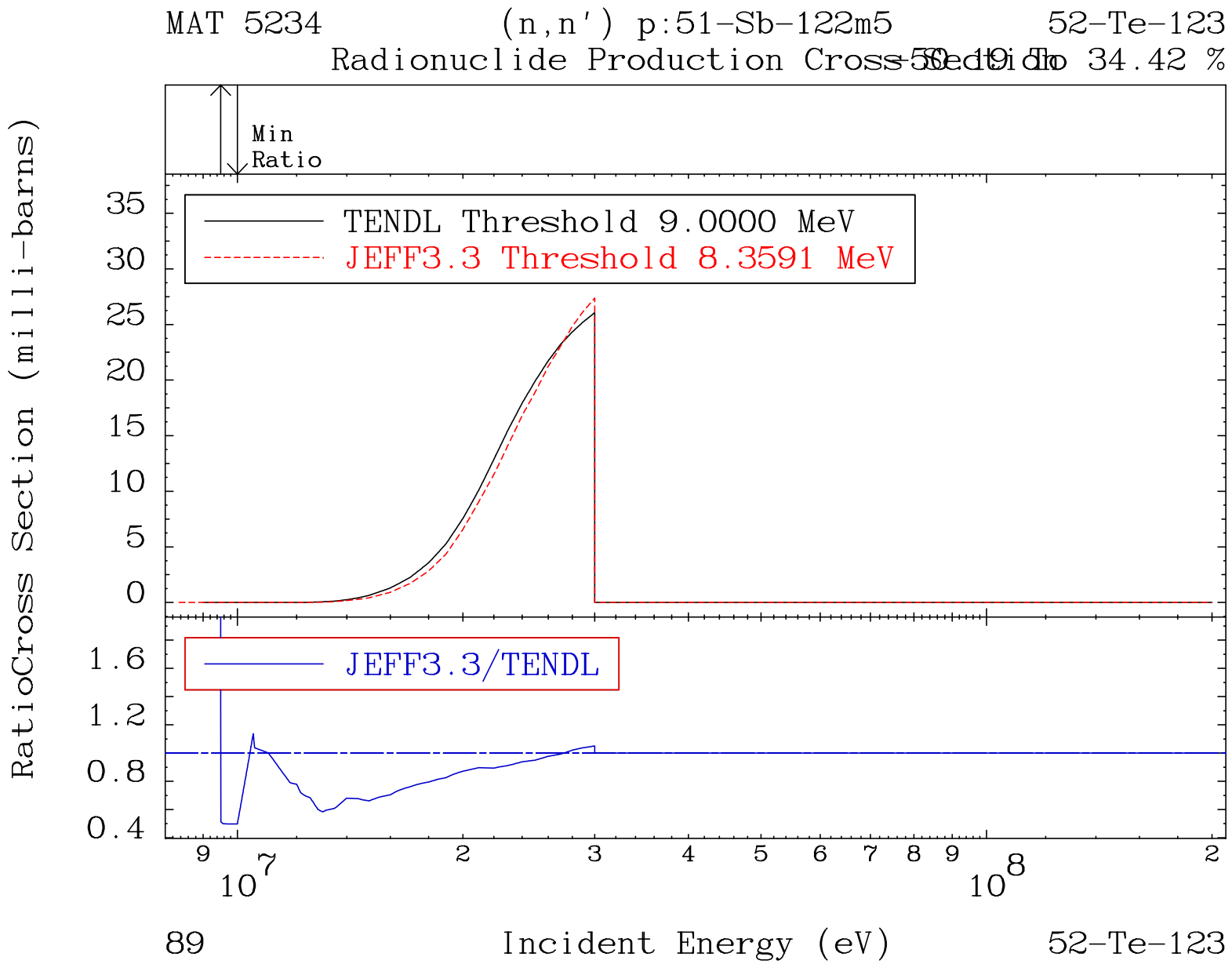

MAT 5234
(n,n') α:50-Sn-119g
52-Te-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 1.5435 MeV
JEFF3.3 Threshold 1.5446 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
40
20
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
84
Incident Energy (eV)
52-Te-123

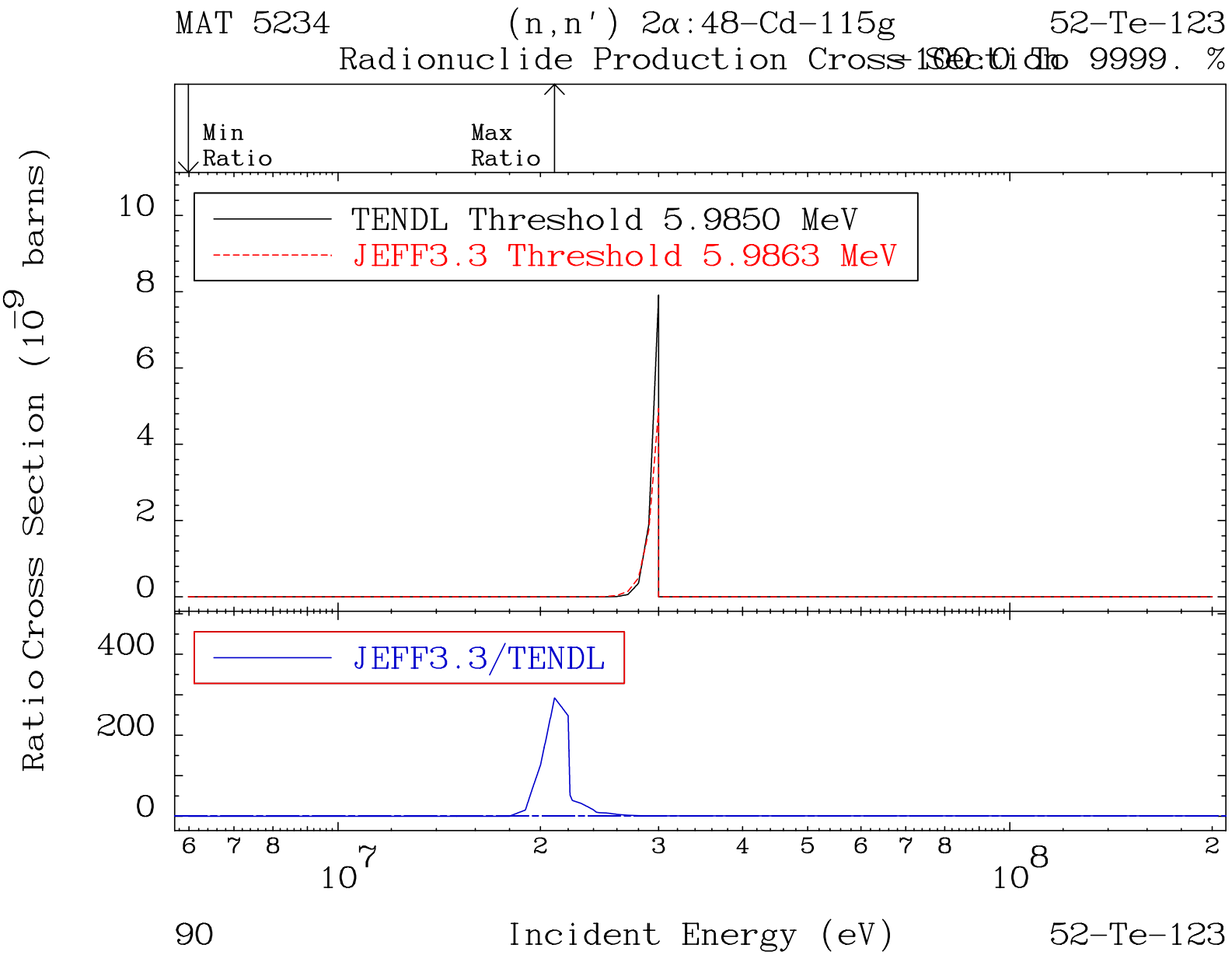

MAT 5234
(n,n') α:50-Sn-119m2
52-Te-123
Radionuclide Production Cross-Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.2000 MeV
JEFF3.3 Threshold 4.8000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
85
52-Te-123

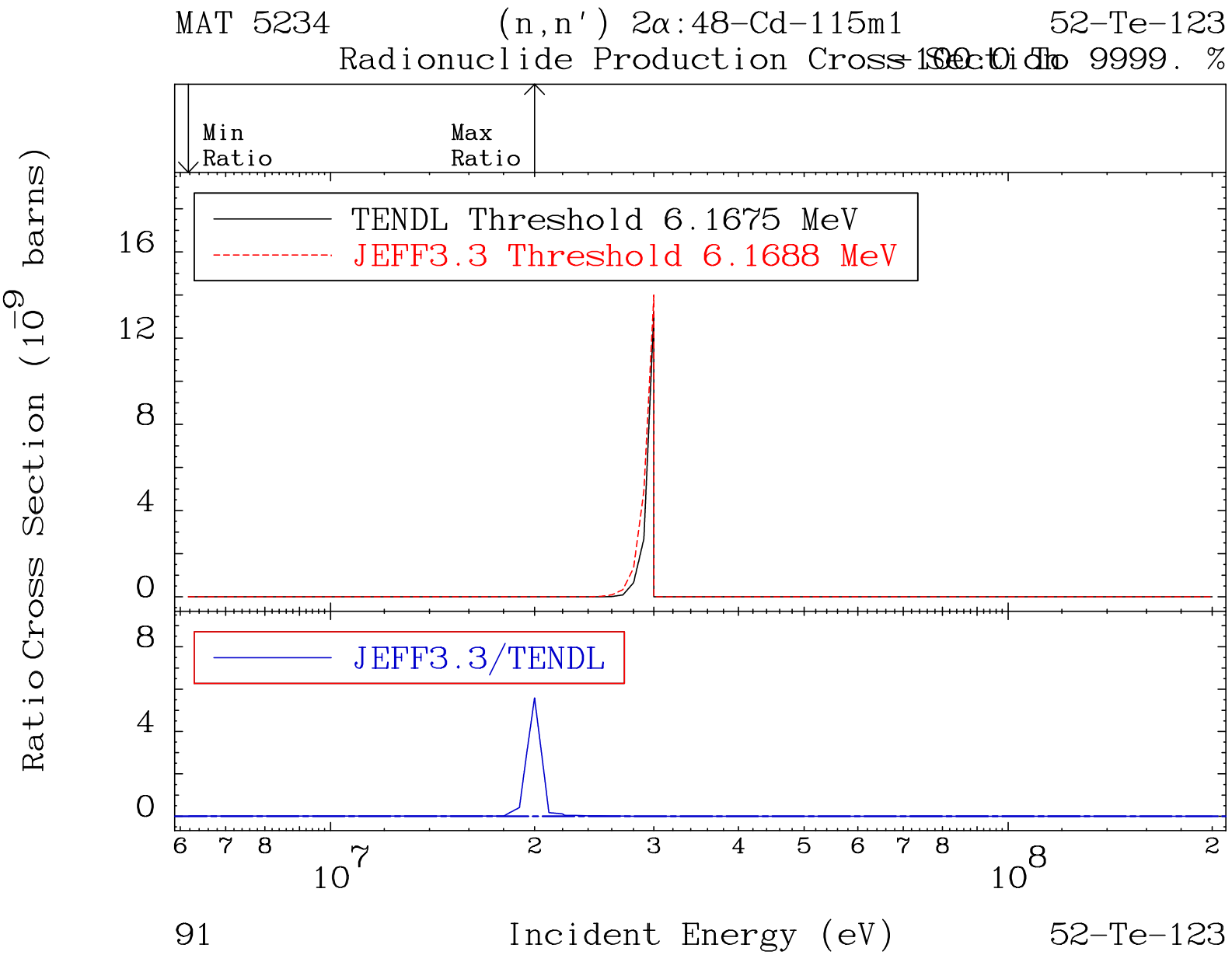

MAT 5234
(n,3n) α:50-Sn-117g
52-Te-123
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 17.483 MeV
JEFF3.3 Threshold 17.483 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
20
15
10
5
0
10
0
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
52-Te-123

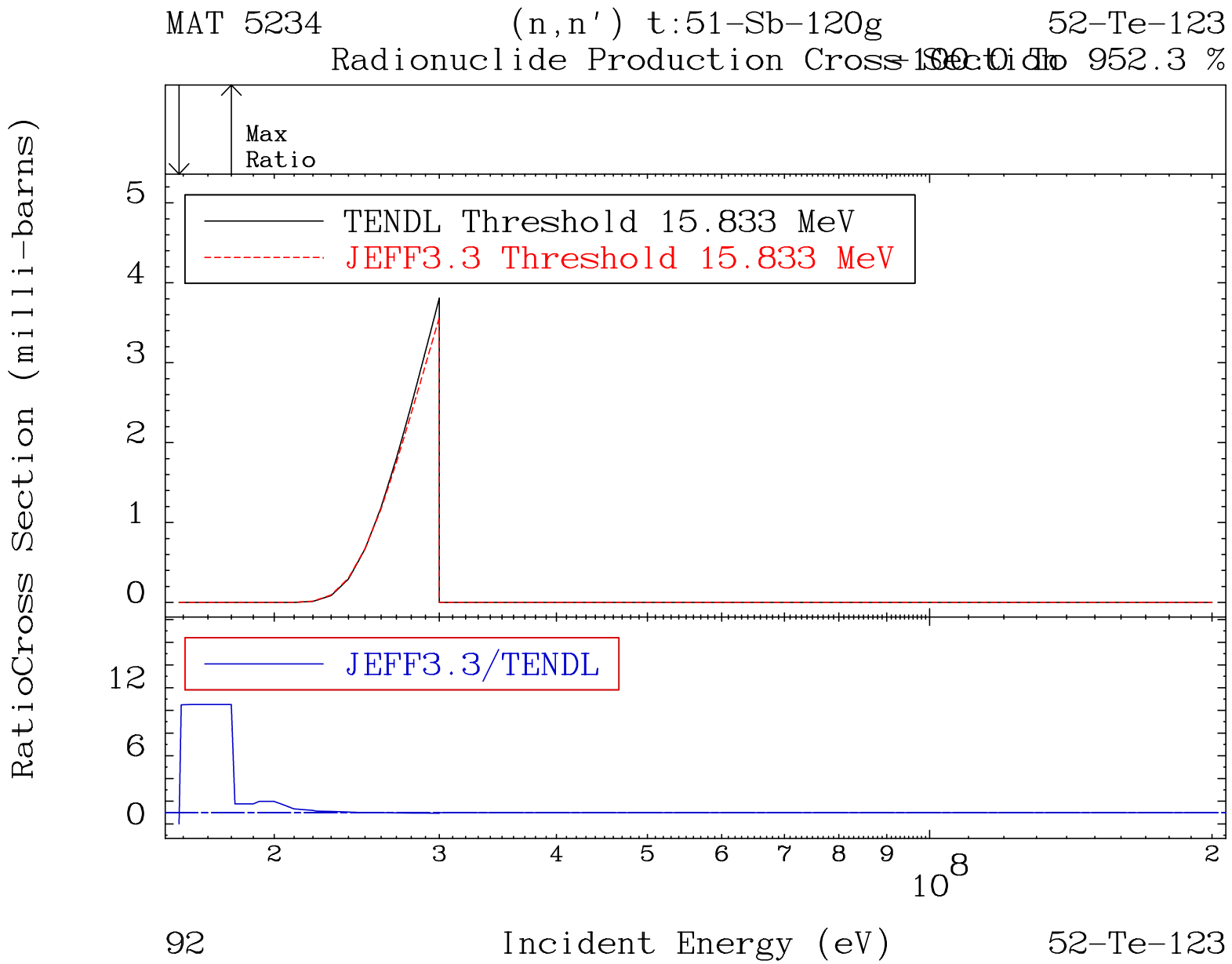

MAT 5234
(n,3n) α:50-Sn-117m2
52-Te-123
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 17.800 MeV
JEFF3.3 Threshold 21.000 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
35
30
25
20
15
10
5
0
30
20
10
0
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
52-Te-123

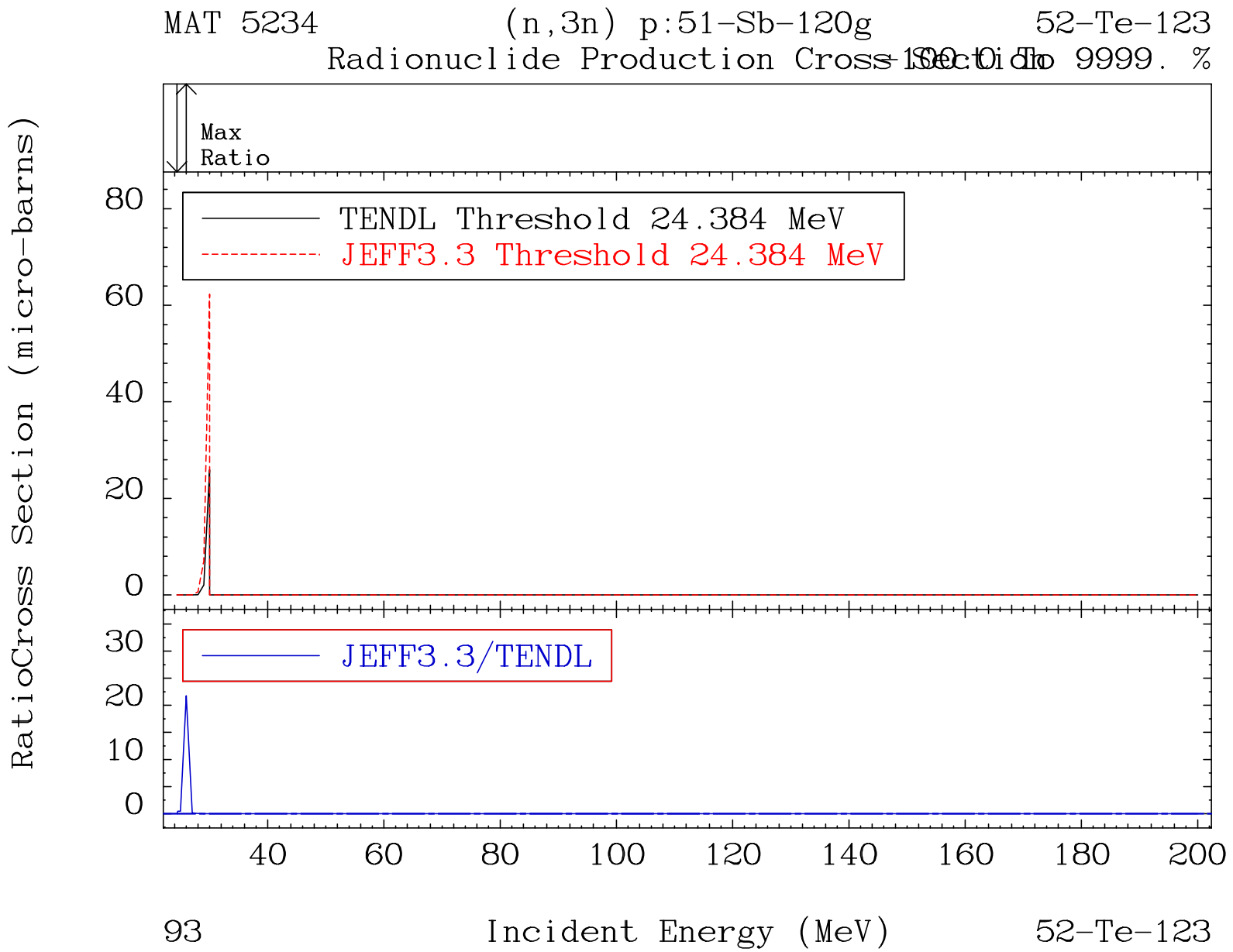

MAT 5234
(n,n') p:51-Sb-122g
52-Te-123
Radionuclide Production Cross Section To 208.2 %
Max
Ratio
TENDL Threshold 8.1924 MeV
JEFF3.3 Threshold 8.1942 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
88
52-Te-123

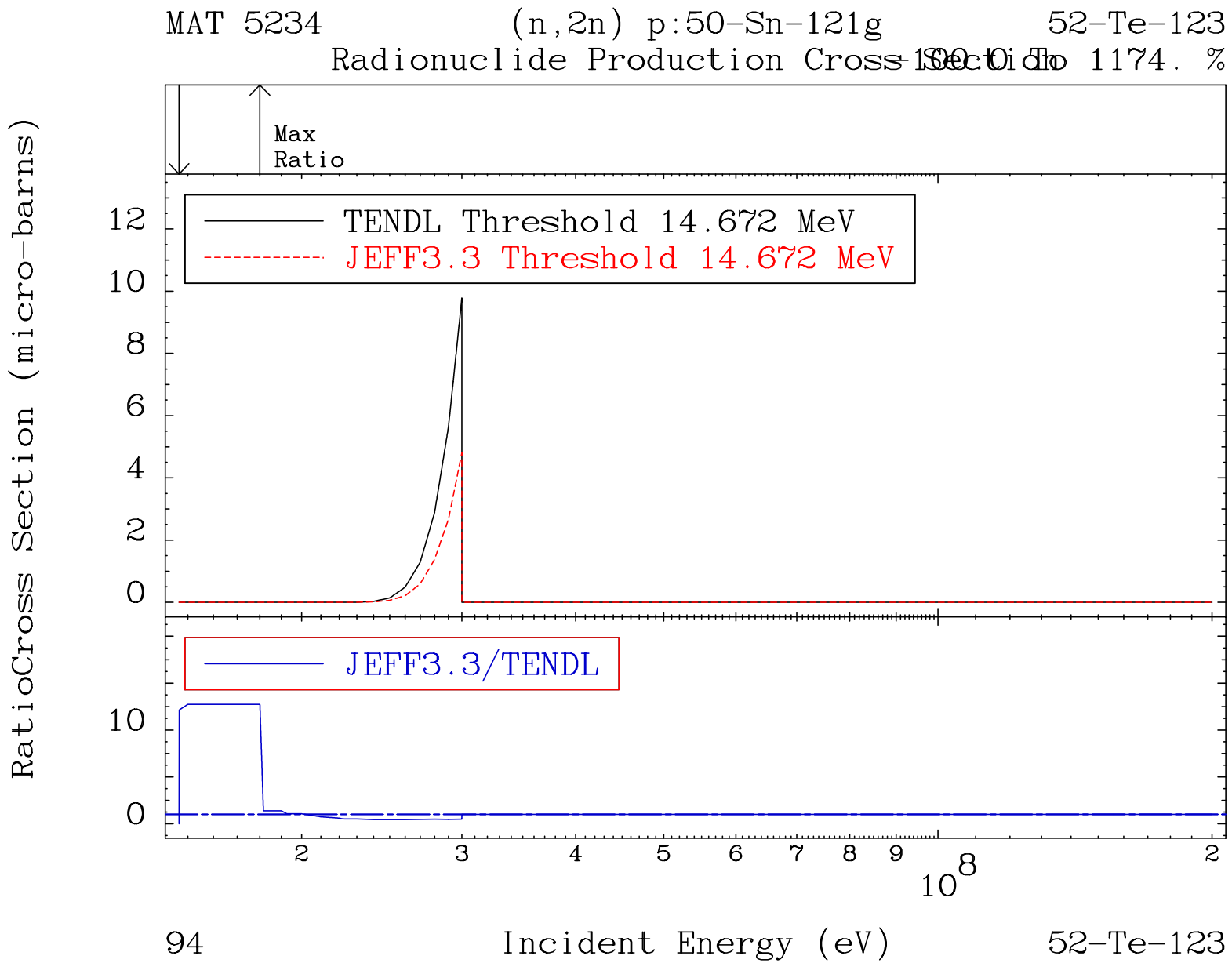

MAT 5234 (n,n') p:51-Sb-122m5 52-Te-123
Radionuclide Production Cross Section Uncertainty 34.42 %
Min Ratio
TENDL Threshold 9.0000 MeV
JEFF3.3 Threshold 8.3591 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
1.6
1.2
0.8
0.4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
89
Incident Energy (eV)
52-Te-123

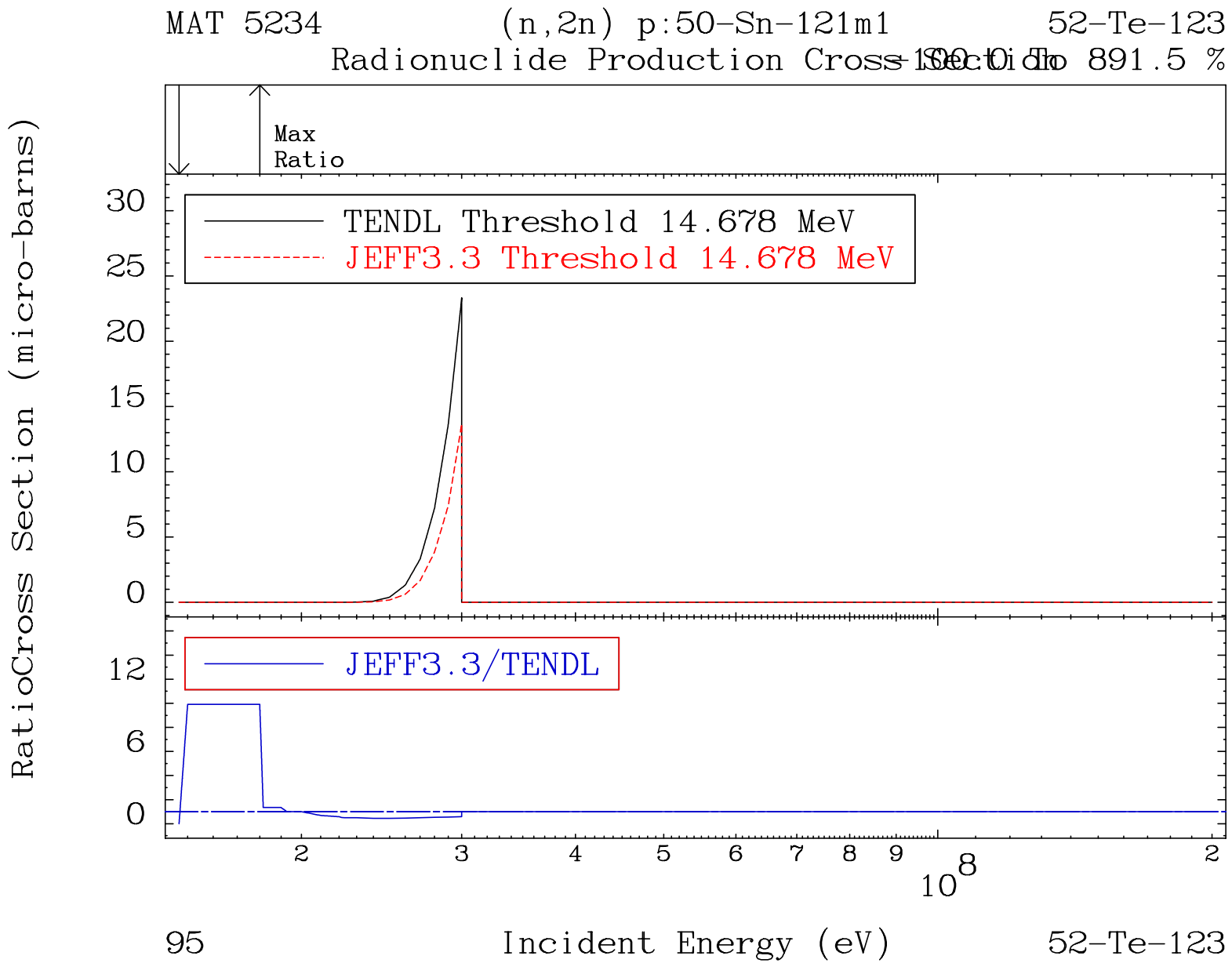

MAT 5234
(n,n') 2α:48-Cd-115g
52-Te-123
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.9850 MeV
JEFF3.3 Threshold 5.9863 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
90
52-Te-123

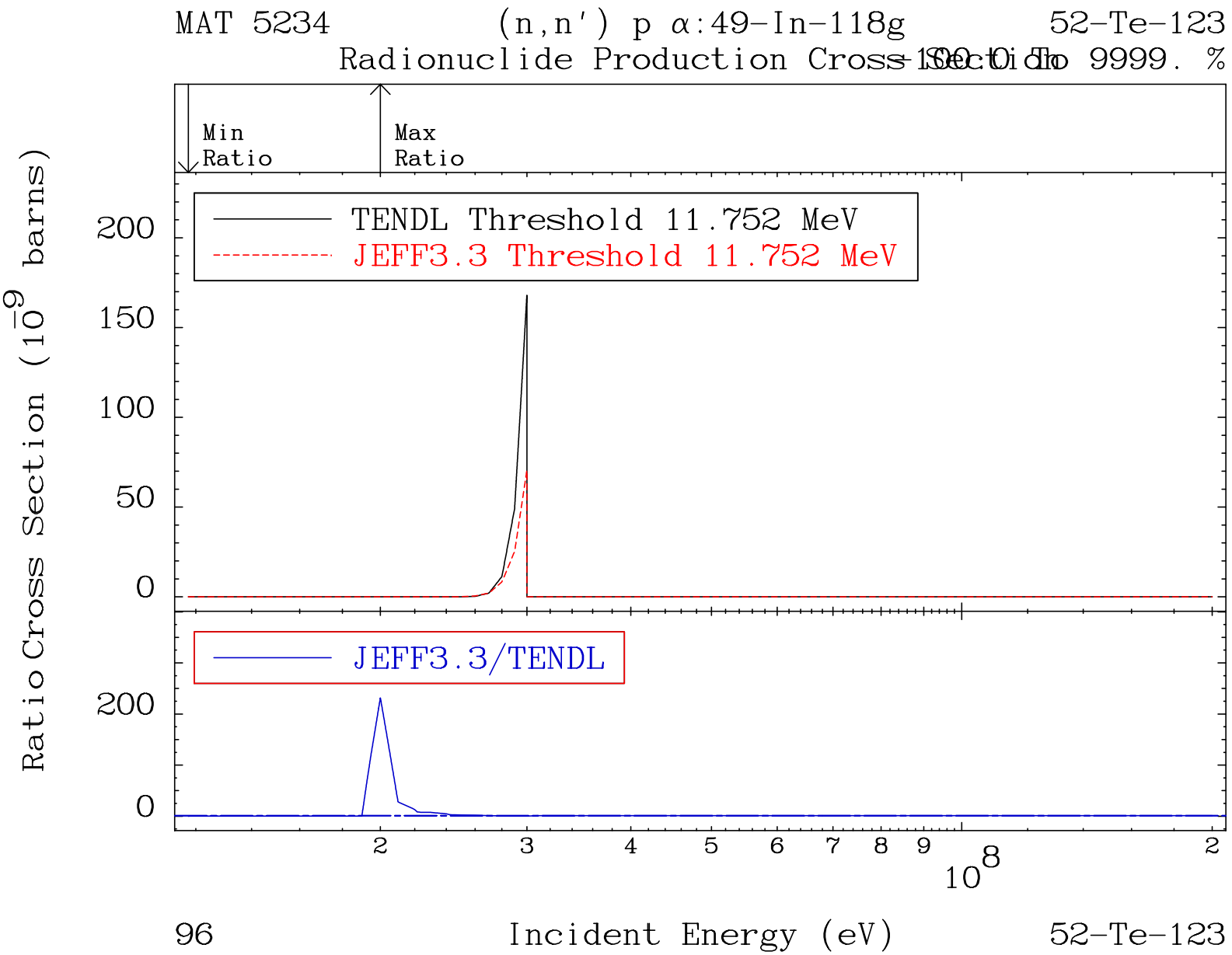

MAT 5234
(n,n') 2α:48-Cd-115m1
52-Te-123
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.1675 MeV
JEFF3.3 Threshold 6.1688 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
16
12
8
4
0
8
4
0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
91
Incident Energy (eV)
52-Te-123

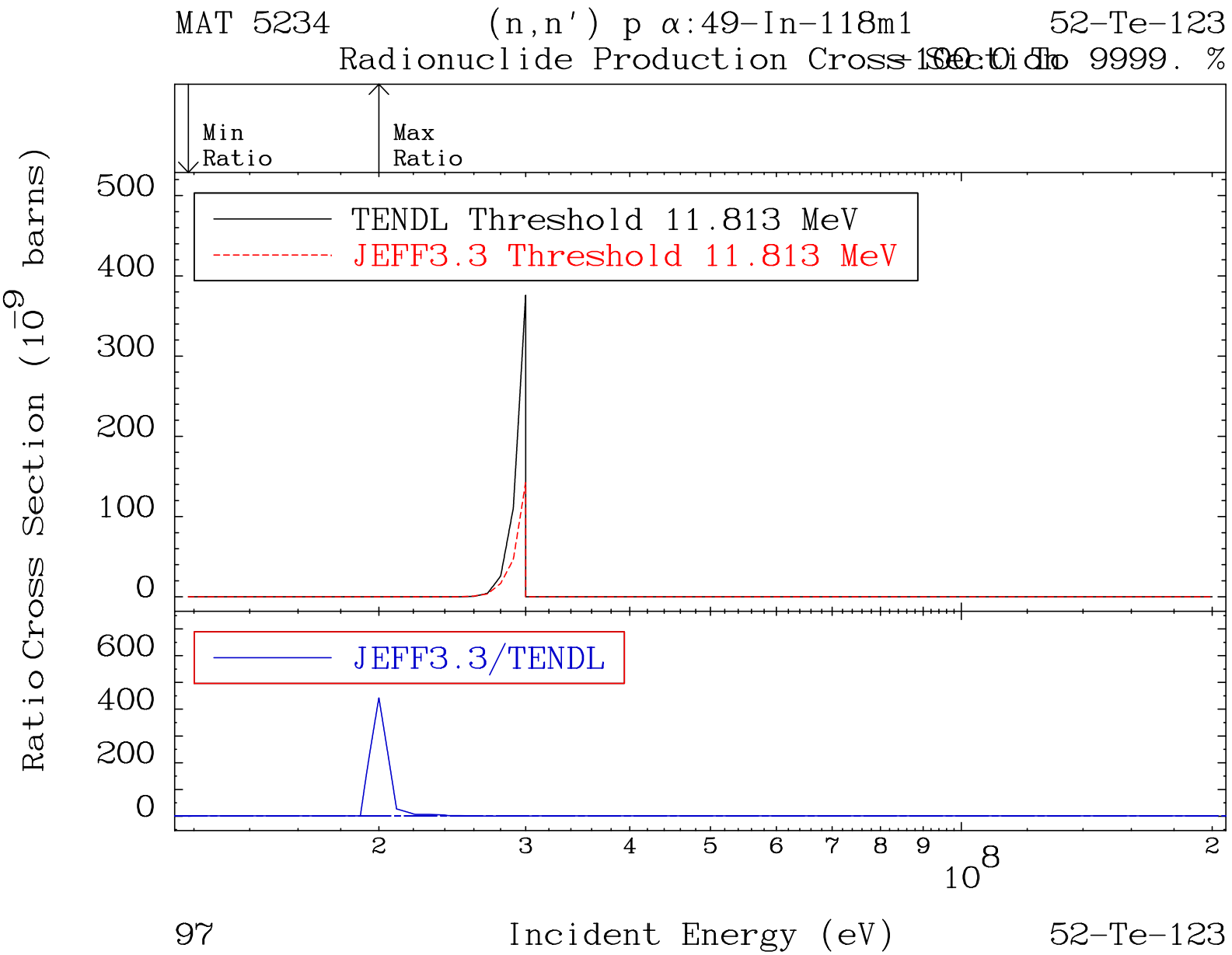

MAT 5234
(n,n') t:51-Sb-120g
52-Te-123
Radionuclide Production Cross Section To 952.3 %
Max
Ratio
TENDL Threshold 15.833 MeV
JEFF3.3 Threshold 15.833 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
92
52-Te-123

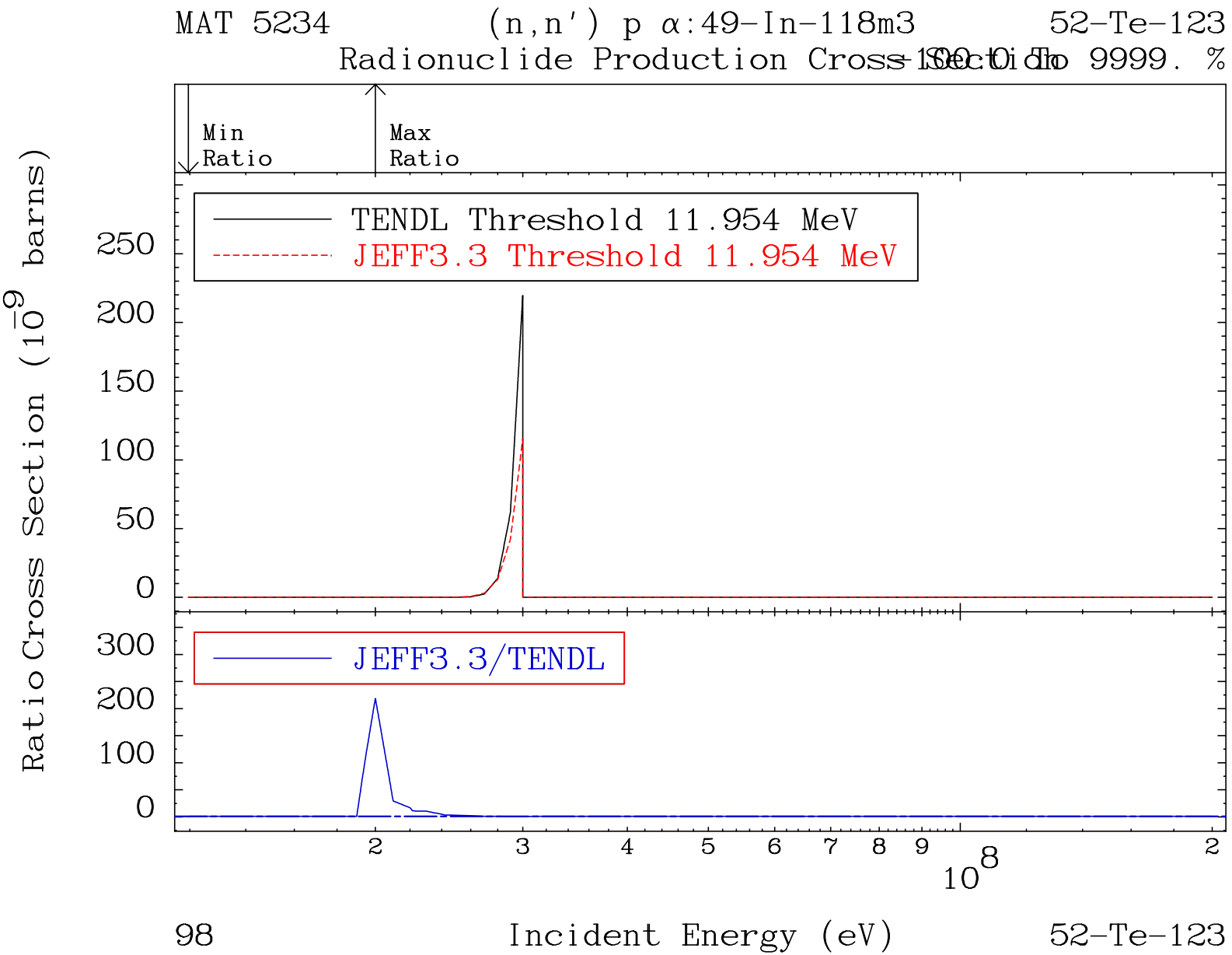

MAT 5234
(n,3n) p:51-Sb-120g
52-Te-123
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 24.384 MeV
JEFF3.3 Threshold 24.384 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
80
60
40
20
0
30
20
10
0
40
60
80
100
120
140
160
180
200
93
Incident Energy (MeV)
52-Te-123

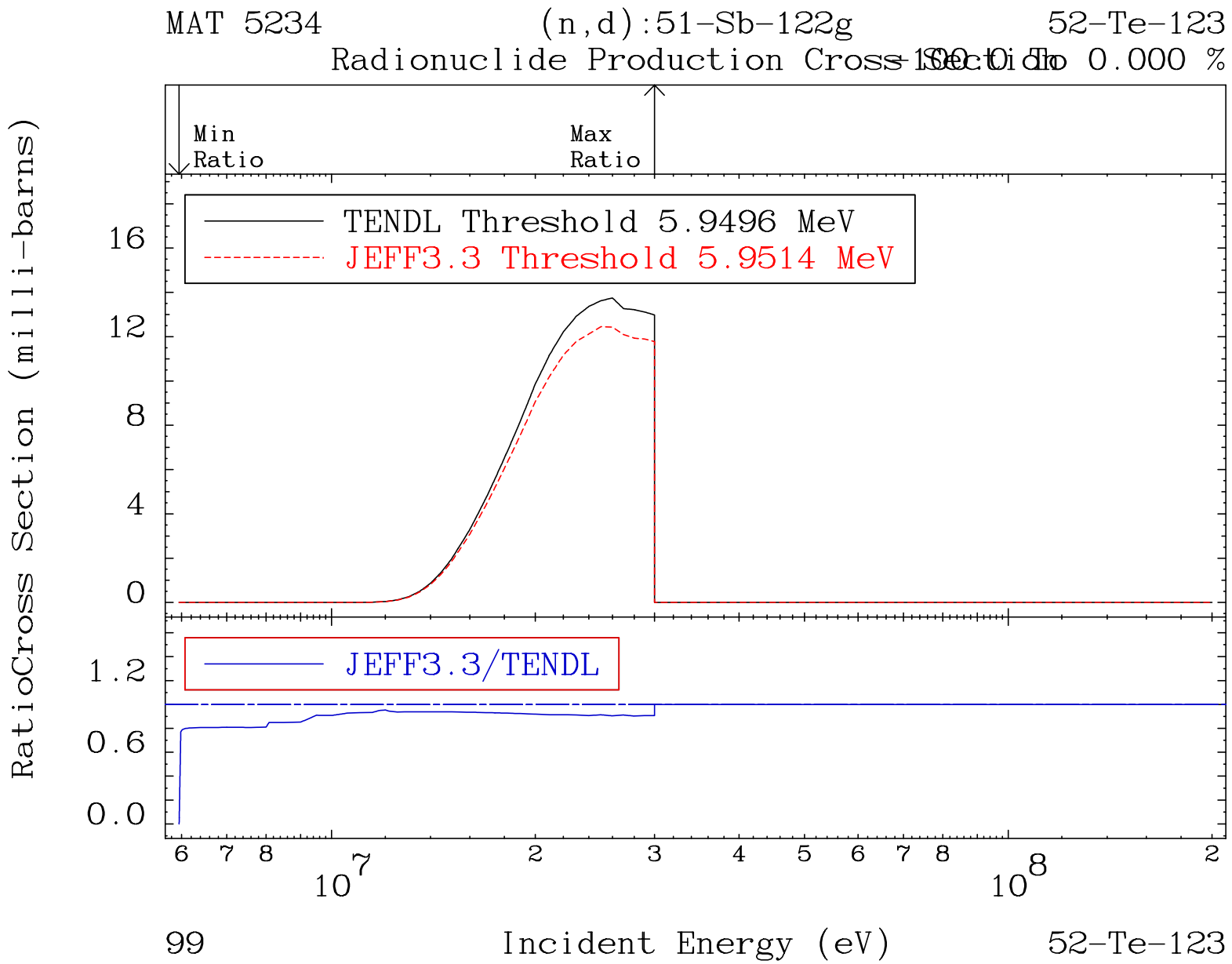

MAT 5234
(n,2n) p:50-Sn-121g
52-Te-123
Radionuclide Production Cross Section To 1174. %
Max
Ratio
TENDL Threshold 14.672 MeV
JEFF3.3 Threshold 14.672 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
12
10
8
6
4
2
0
10
0
2
3
4
5
6
7
8
9
2
10^8
94
Incident Energy (eV)
52-Te-123

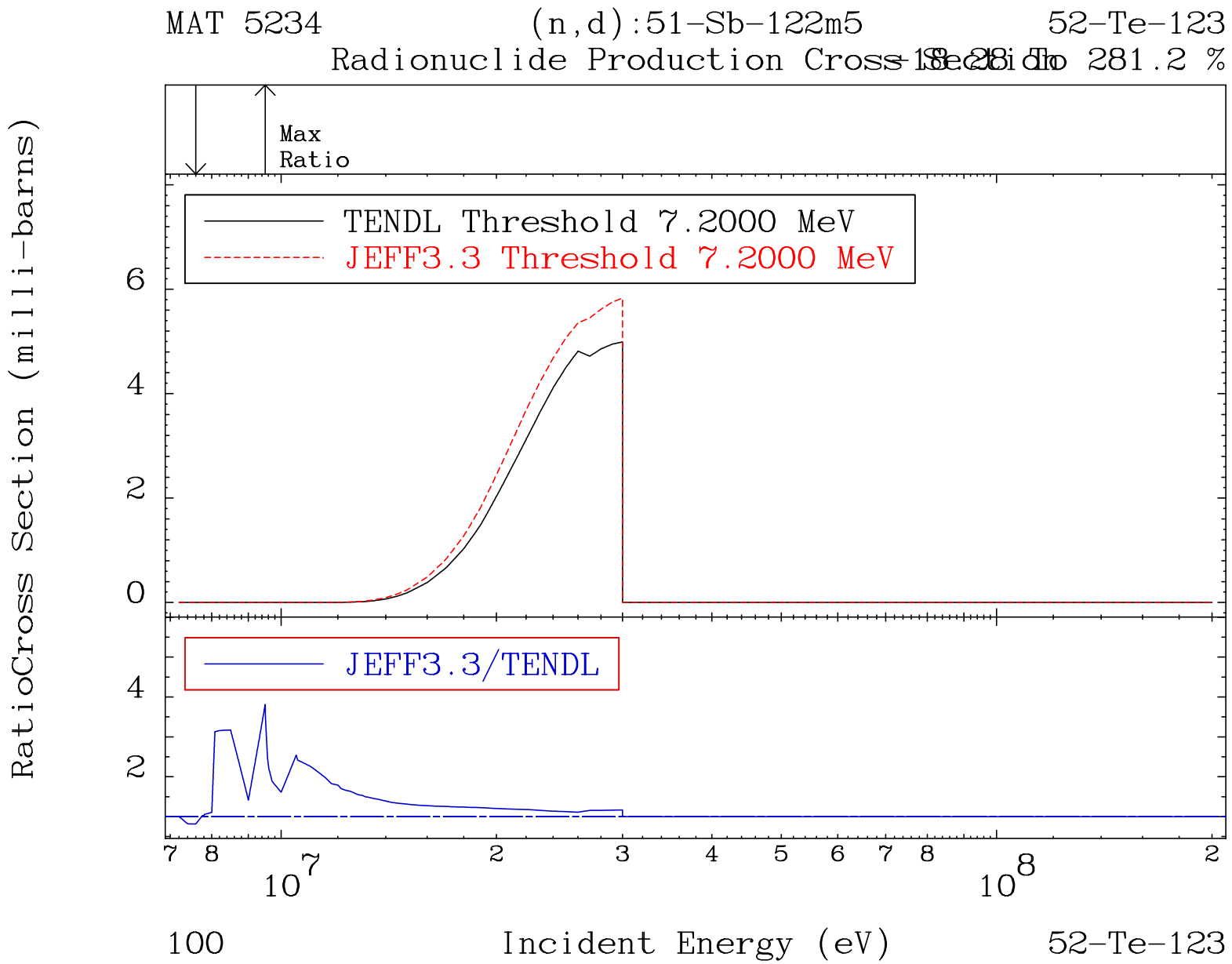

MAT 5234
(n,2n) p:50-Sn-121m1
52-Te-123
Radionuclide Production Cross Section To 891.5 %
Max
Ratio
TENDL Threshold 14.678 MeV
JEFF3.3 Threshold 14.678 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
30
25
20
15
10
5
0
12
6
0
2
3
4
5
6
7
8
9
10^8
2
95
Incident Energy (eV)
52-Te-123

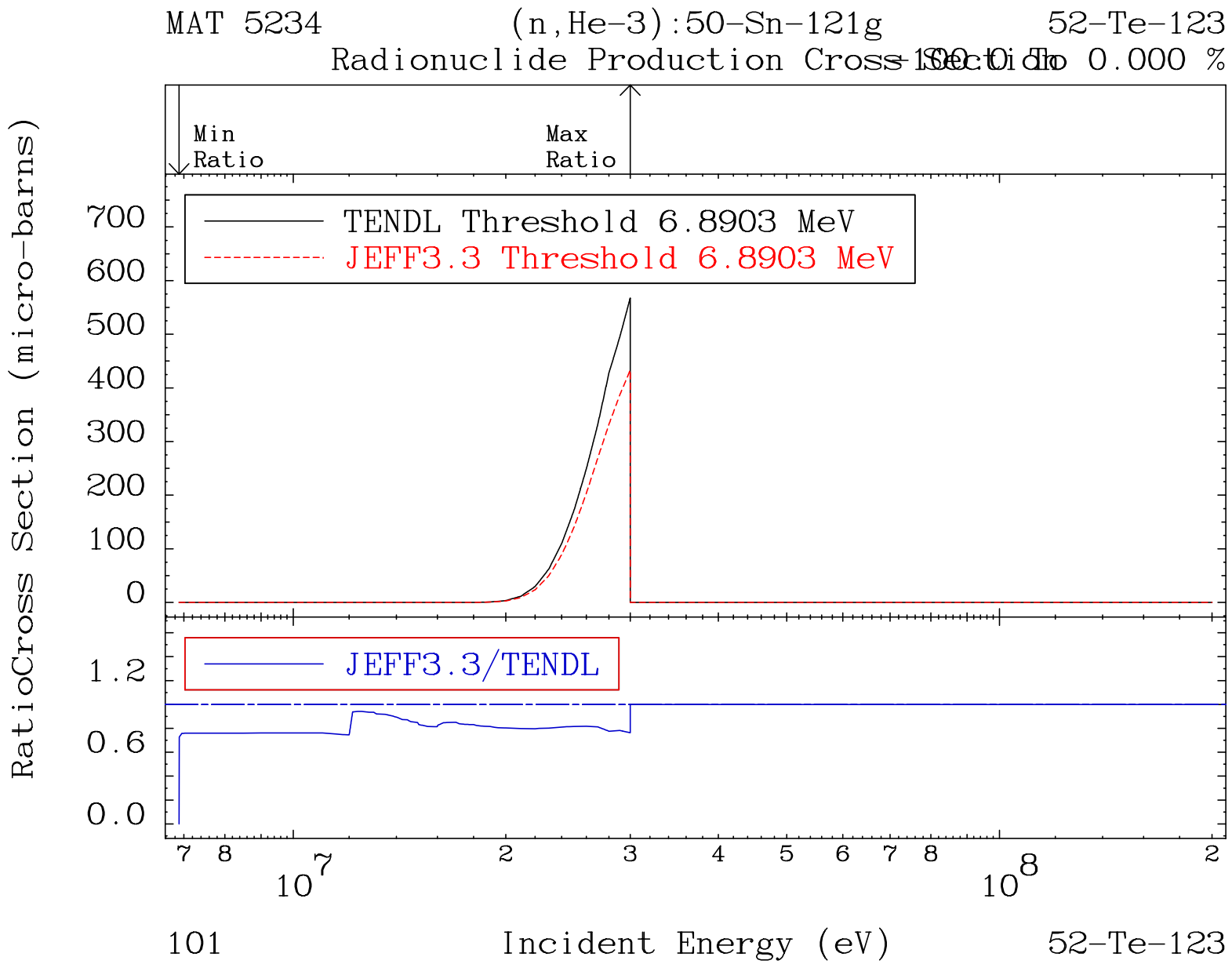

MAT 5234
(n,n') p α:49-In-118g
52-Te-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 11.752 MeV
JEFF3.3 Threshold 11.752 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
200
150
100
50
0
2
3
4
5
6
7
8
9
10^8
96
Incident Energy (eV)
52-Te-123

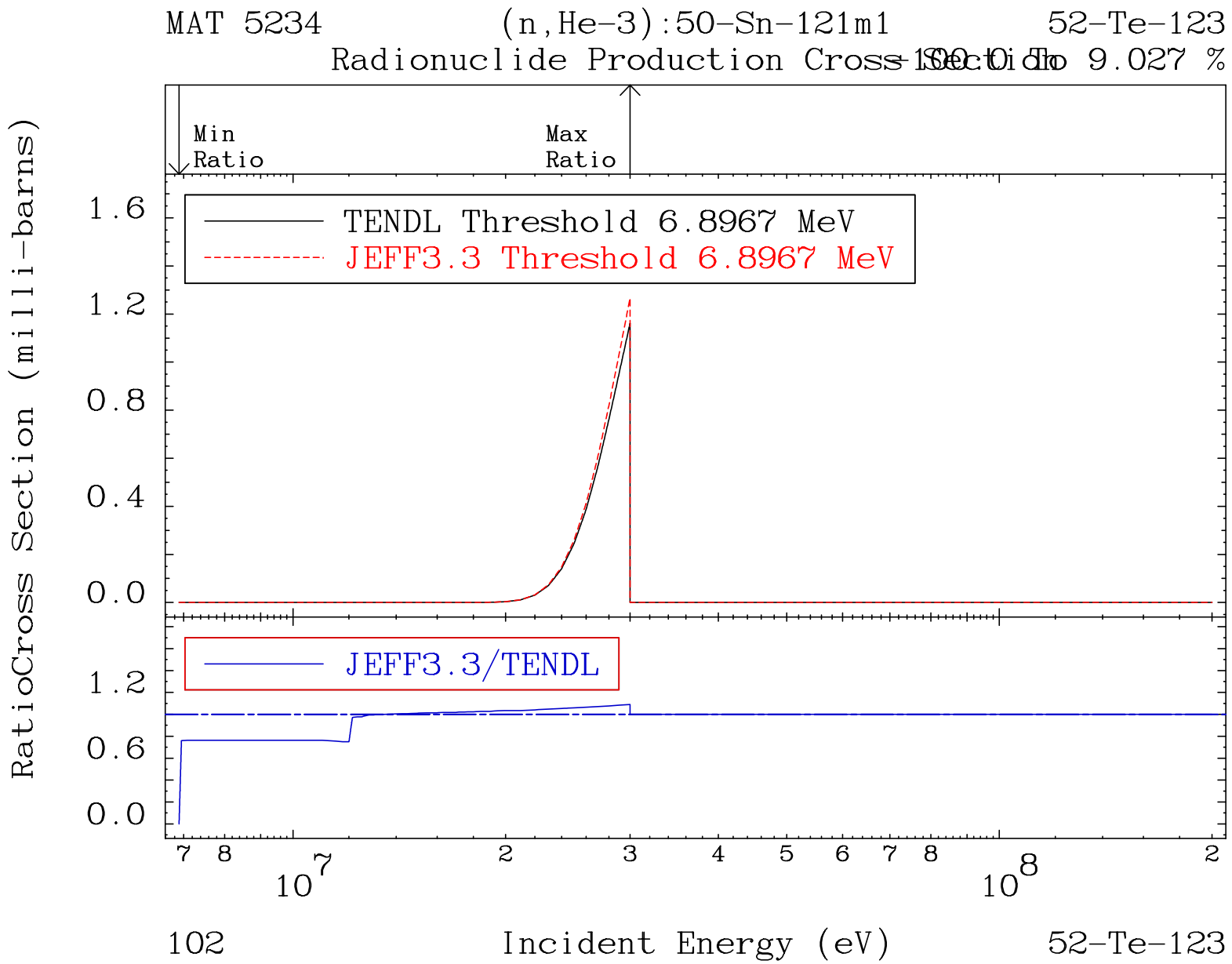

MAT 5234
(n,n') p α:49-In-118m1
52-Te-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 11.813 MeV
JEFF3.3 Threshold 11.813 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
Incident Energy (eV)
10^8
97
52-Te-123

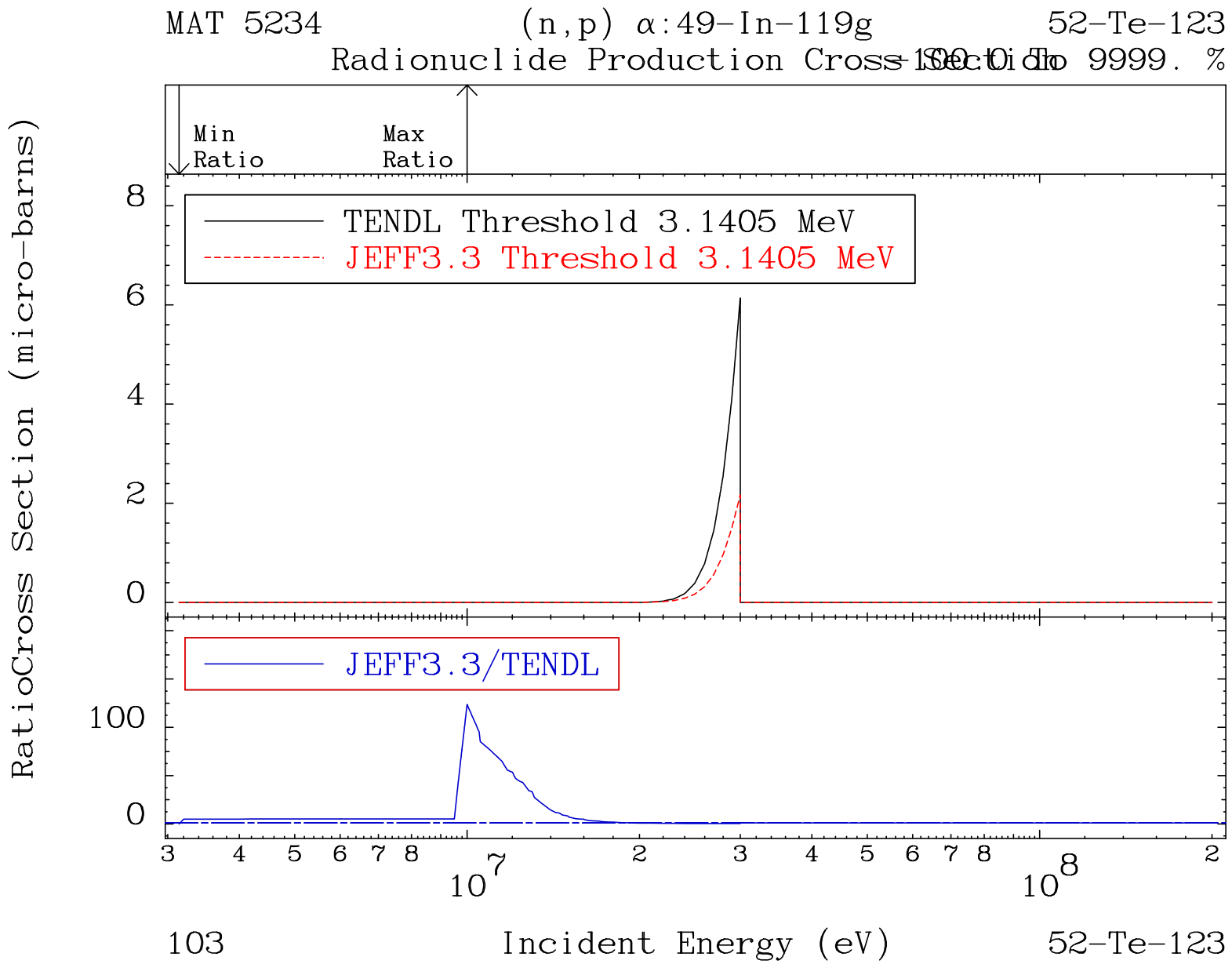

MAT 5234
(n,n') p α:49-In-118m3
52-Te-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 11.954 MeV
JEFF3.3 Threshold 11.954 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
250
200
150
100
50
0
300
200
100
0
2
3
4
5
6
7
8
9
10^8
2
98
Incident Energy (eV)
52-Te-123

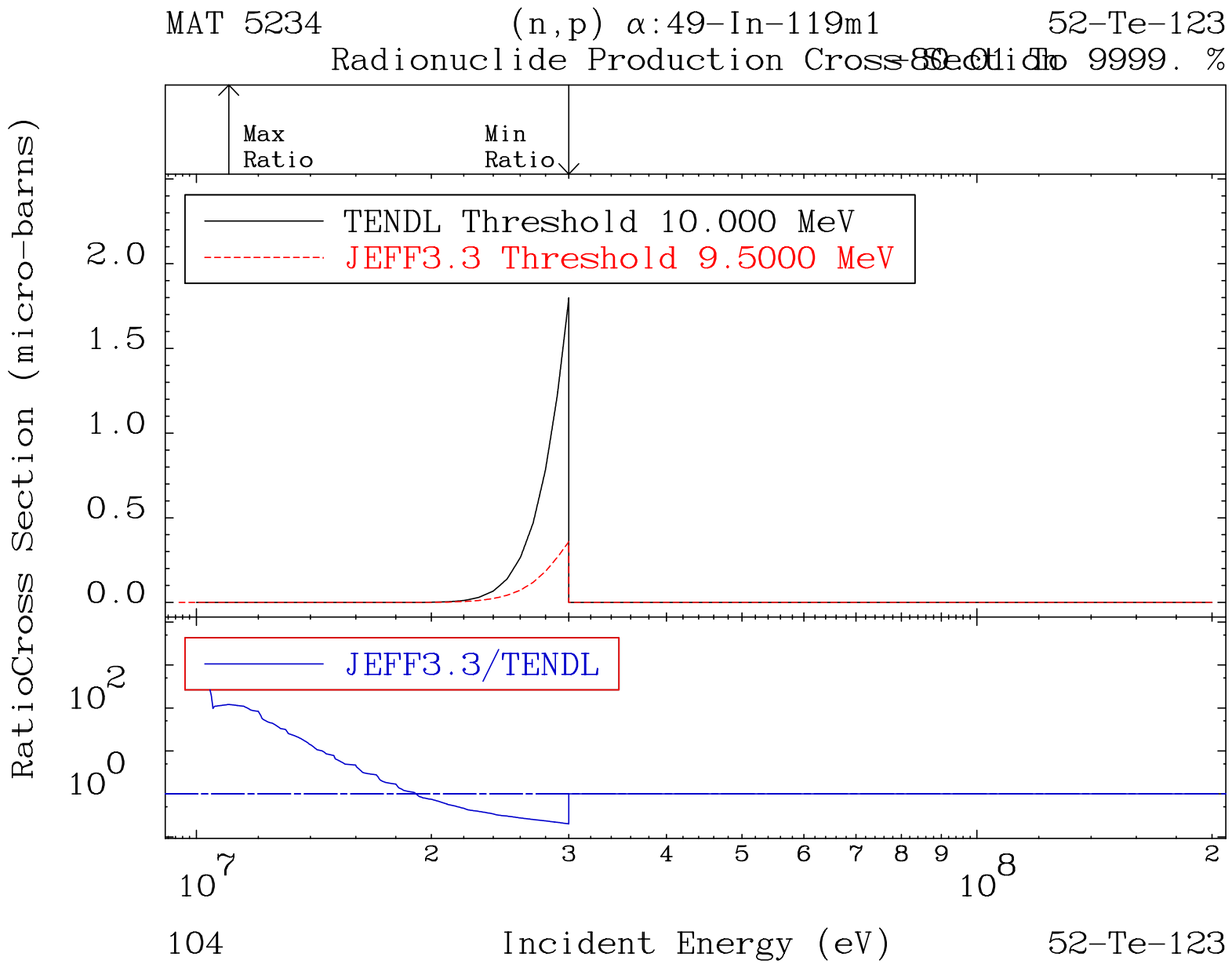

MAT 5234
(n,d):51-Sb-122g
52-Te-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 5.9496 MeV
JEFF3.3 Threshold 5.9514 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
1.2
0.6
0.0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
99
Incident Energy (eV)
52-Te-123

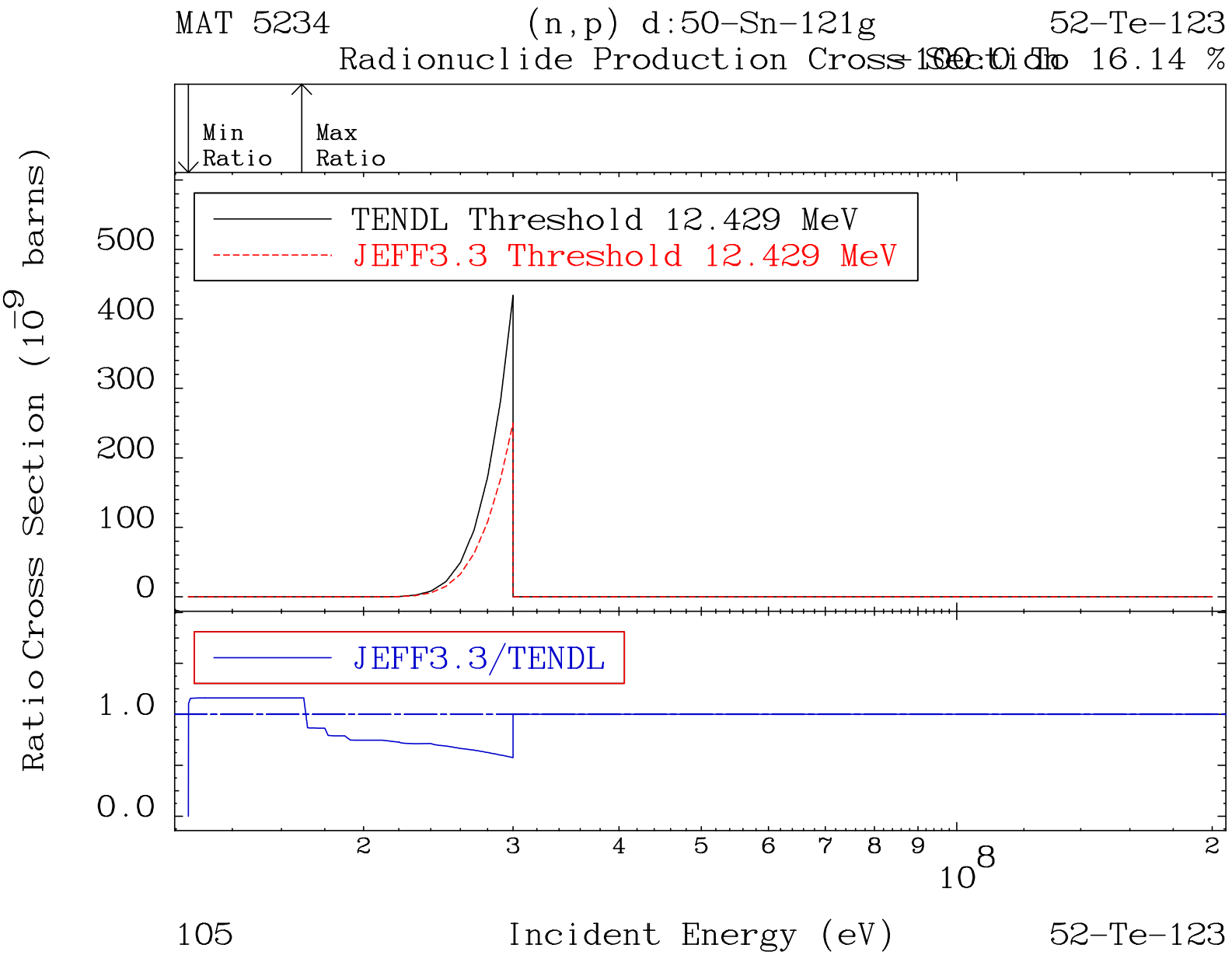

MAT 5234
(n,d):51-Sb-122m5
52-Te-123
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 7.2000 MeV
JEFF3.3 Threshold 7.2000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
52-Te-123

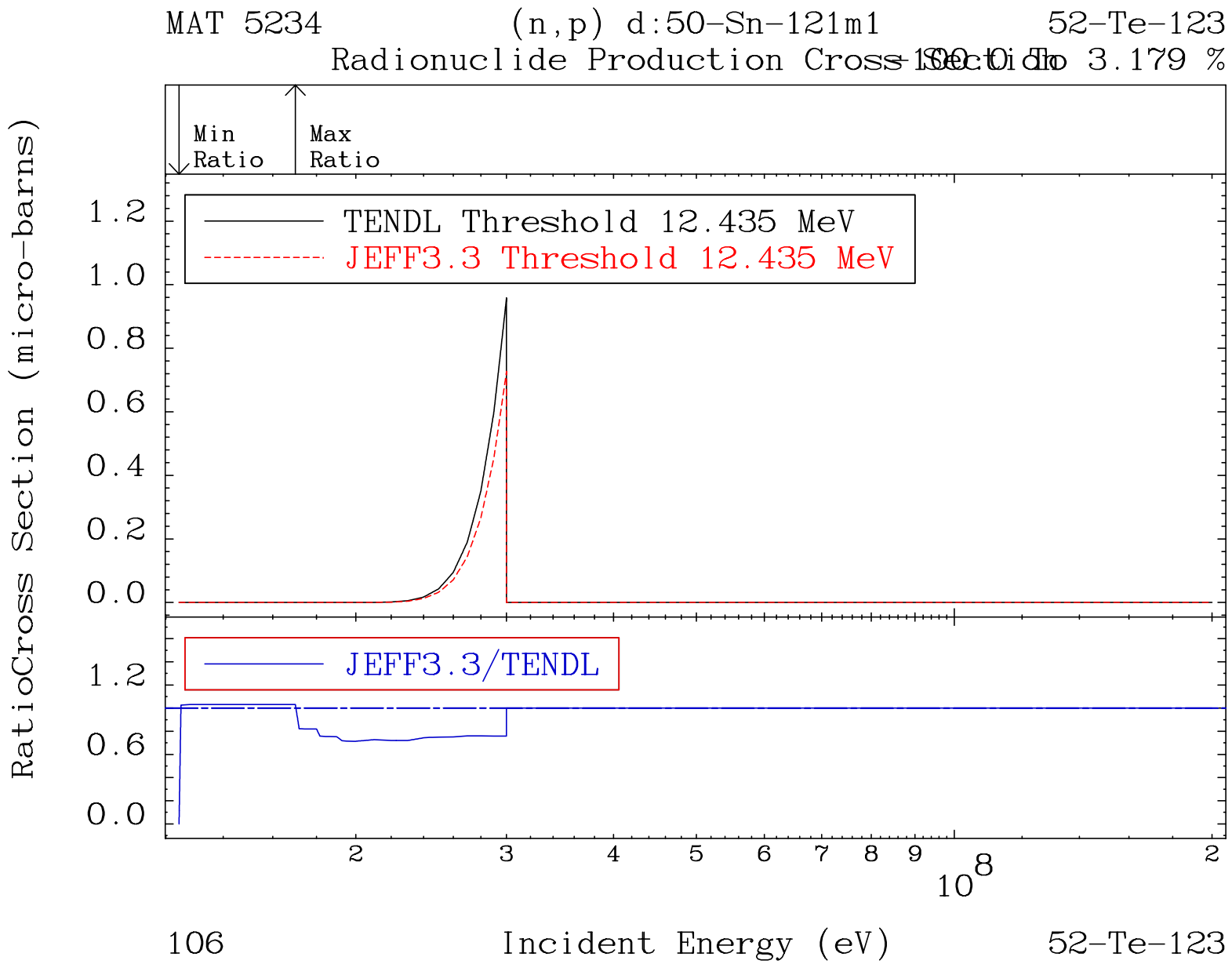

MAT 5234
(n,He-3):50-Sn-121g
52-Te-123
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 6.8903 MeV
JEFF3.3 Threshold 6.8903 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
700
600
500
400
300
200
100
0
1.2
0.6
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
101
Incident Energy (eV)
52-Te-123

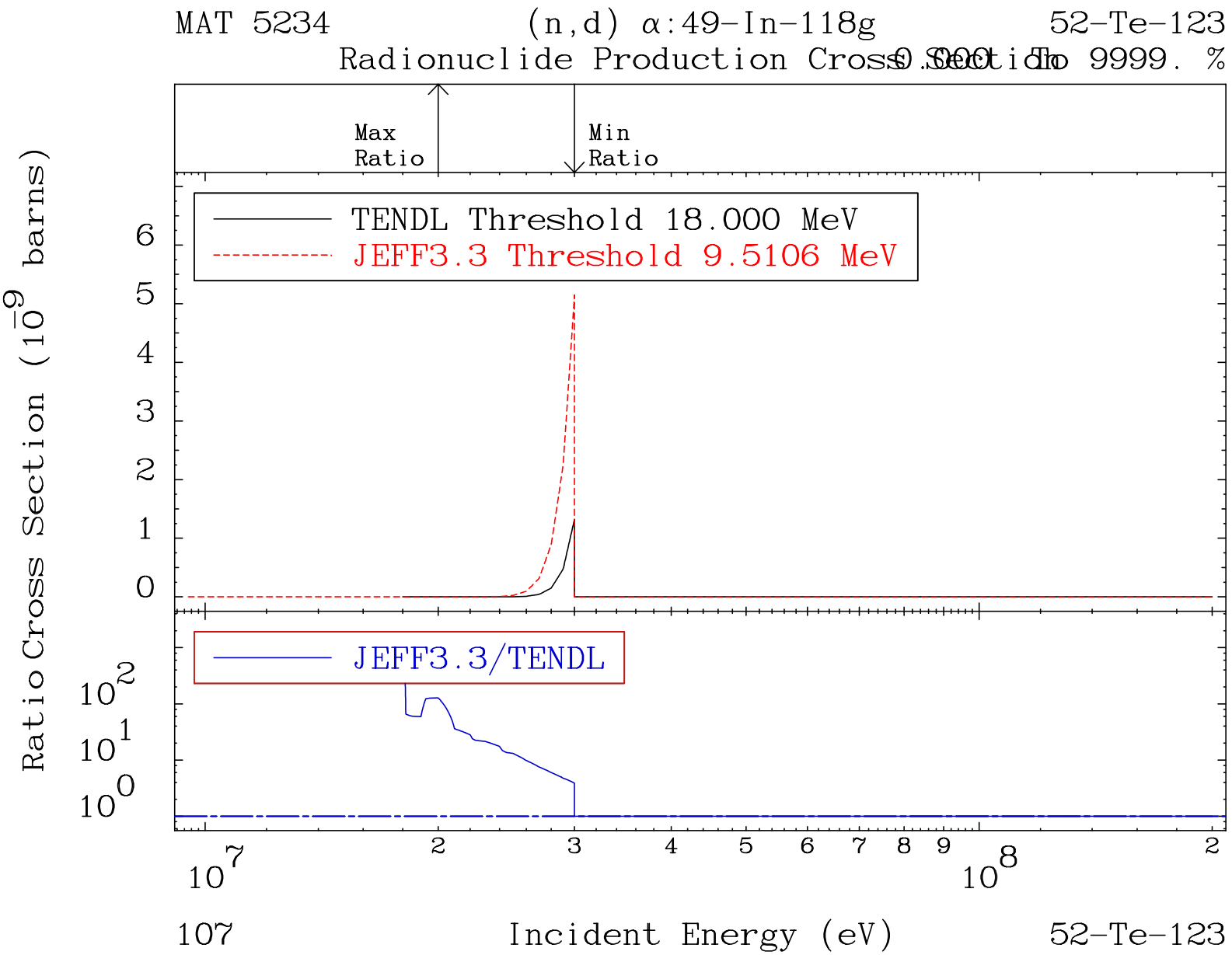

MAT 5234
(n,He-3):50-Sn-121m1
52-Te-123
Radionuclide Production Cross Section To 9.027 %
Min Ratio
Max Ratio
TENDL Threshold 6.8967 MeV
JEFF3.3 Threshold 6.8967 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
1.2
0.6
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
102
Incident Energy (eV)
52-Te-123

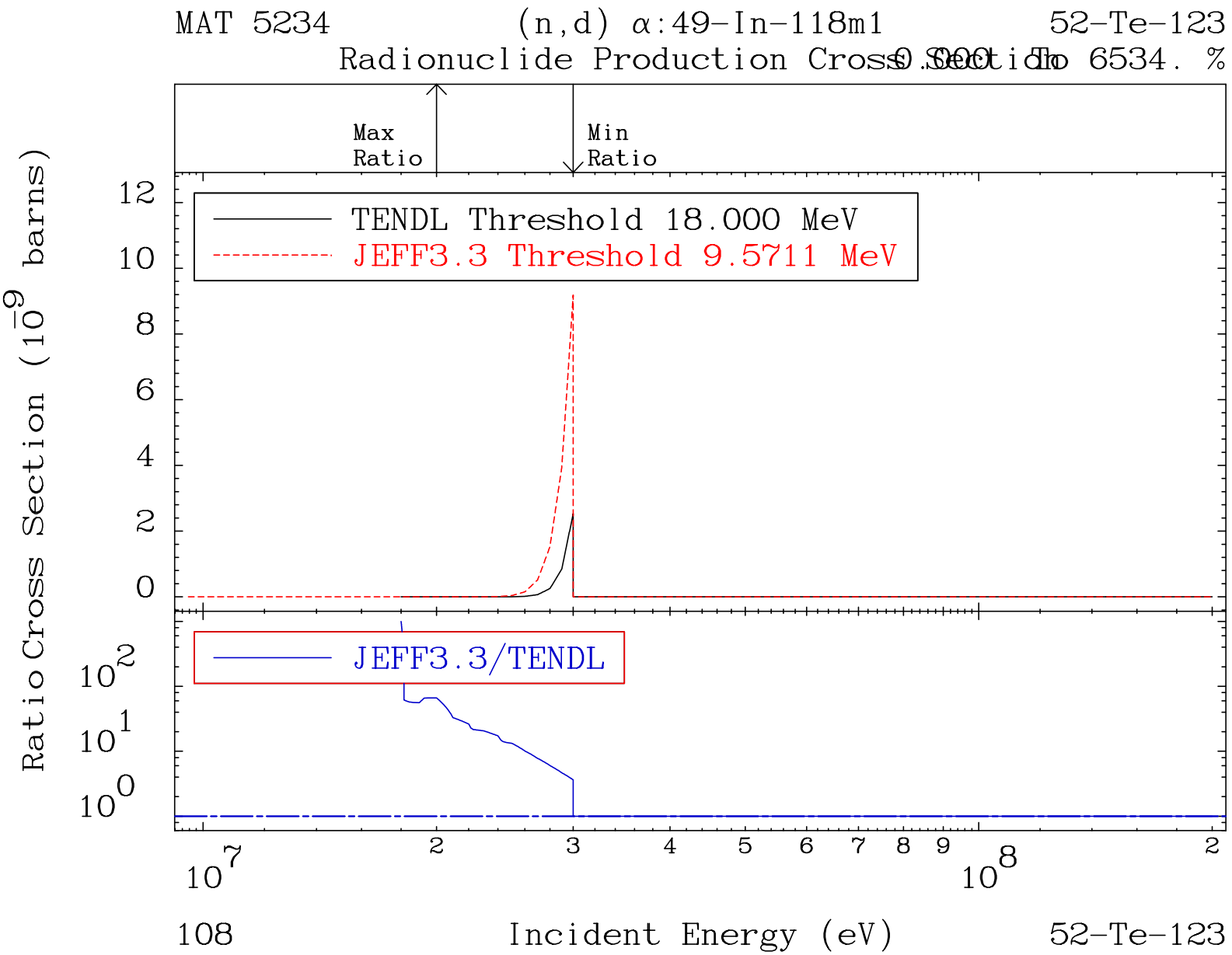

MAT 5234
(n,p) α:49-In-119g
52-Te-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 3.1405 MeV
JEFF3.3 Threshold 3.1405 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
103
52-Te-123

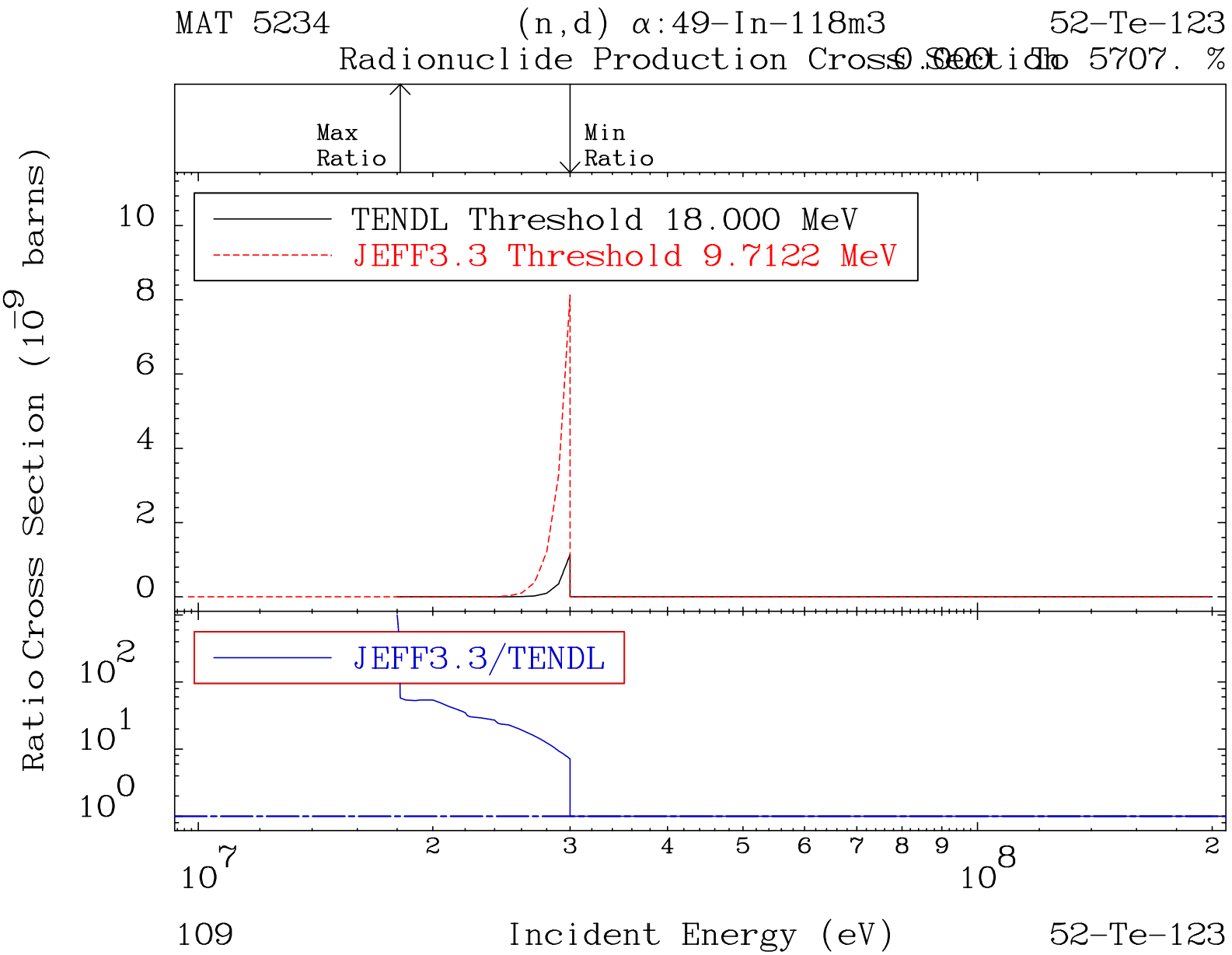

MAT 5234
(n,p) α:49-In-119m1
52-Te-123
Radionuclide Production Cross-Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 10.000 MeV
JEFF3.3 Threshold 9.5000 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
10^2
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
104
Incident Energy (eV)
52-Te-123


MAT 5234
(n,p) d:50-Sn-121g
52-Te-123
Radionuclide Production Cross Section To 16.14 %
Min Ratio
Max Ratio
TENDL Threshold 12.429 MeV
JEFF3.3 Threshold 12.429 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
500
400
300
200
100
0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
105
Incident Energy (eV)
52-Te-123


MAT 5234
(n,p) d:50-Sn-121m1
52-Te-123
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 12.435 MeV
JEFF3.3 Threshold 12.435 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
106
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
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 9.5106 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
52-Te-123


MAT 5234
(n,d) α:49-In-118m1
52-Te-123
Radionuclide Production Cross Section
0.000 To 6534. %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 9.5711 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
108
52-Te-123


MAT 5234
(n,d) α:49-In-118m3
52-Te-123
Radionuclide Production Cross Section
0.000 To 5707. %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 9.7122 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^-9 barns)
Incident Energy (eV)
109
52-Te-123