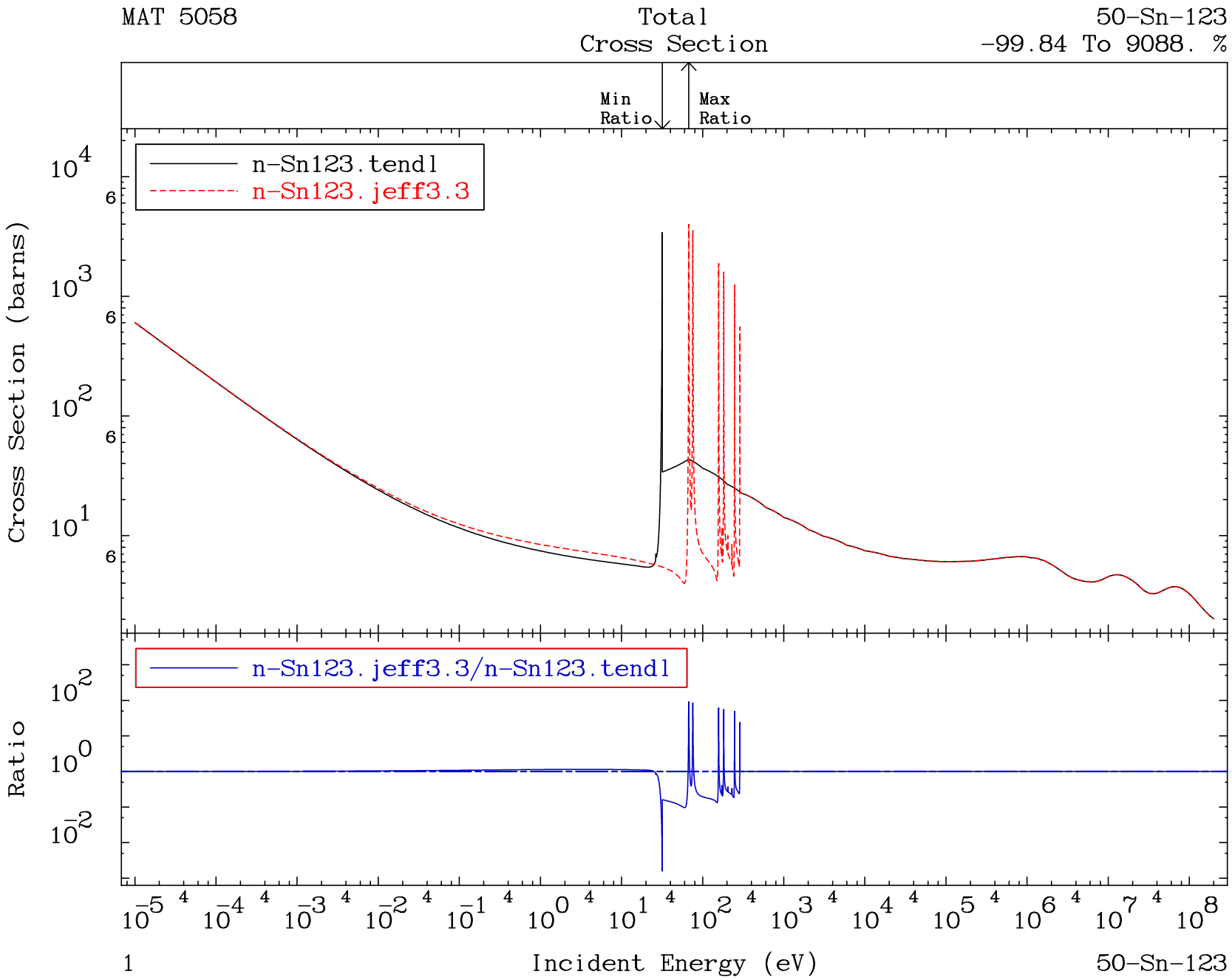
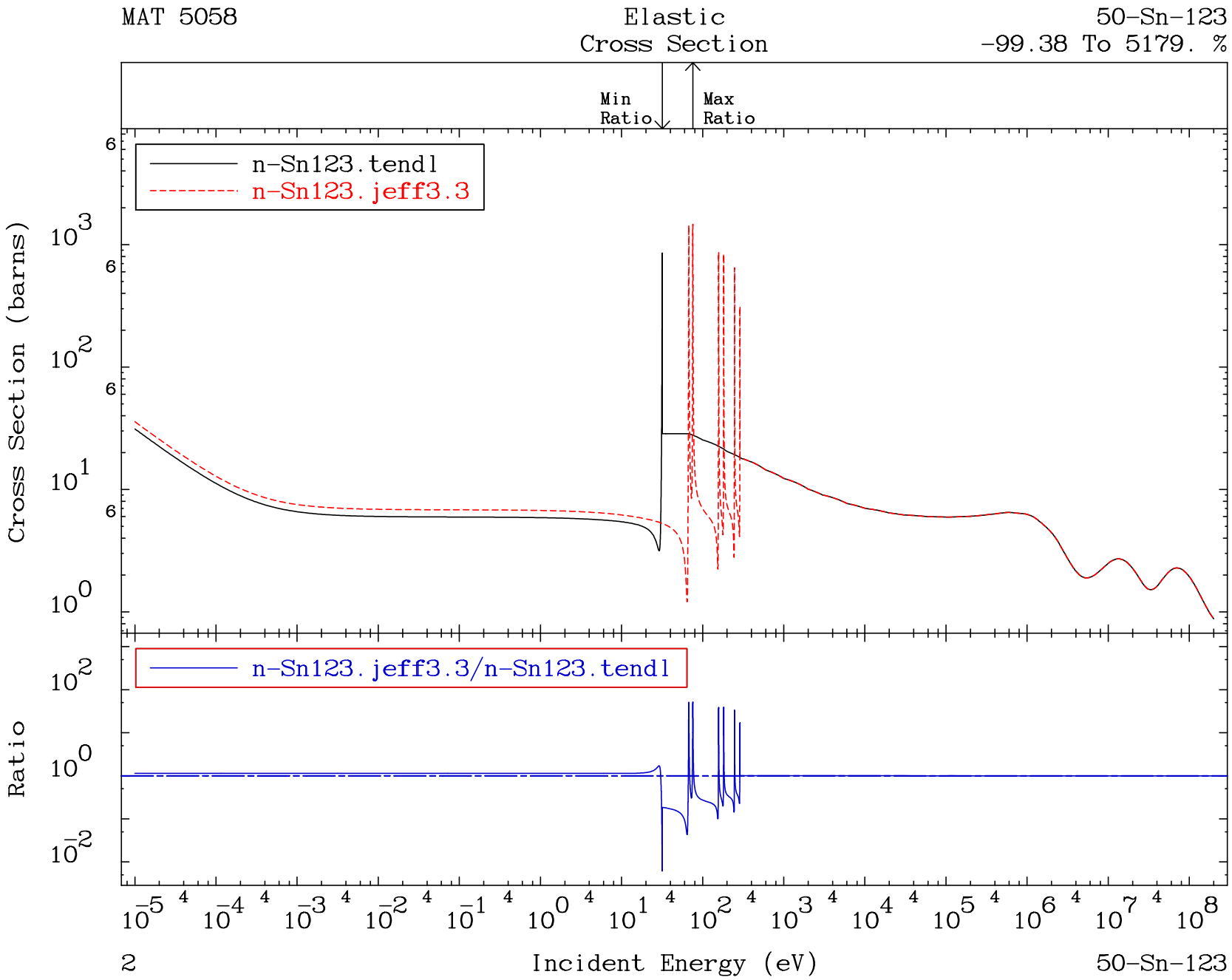
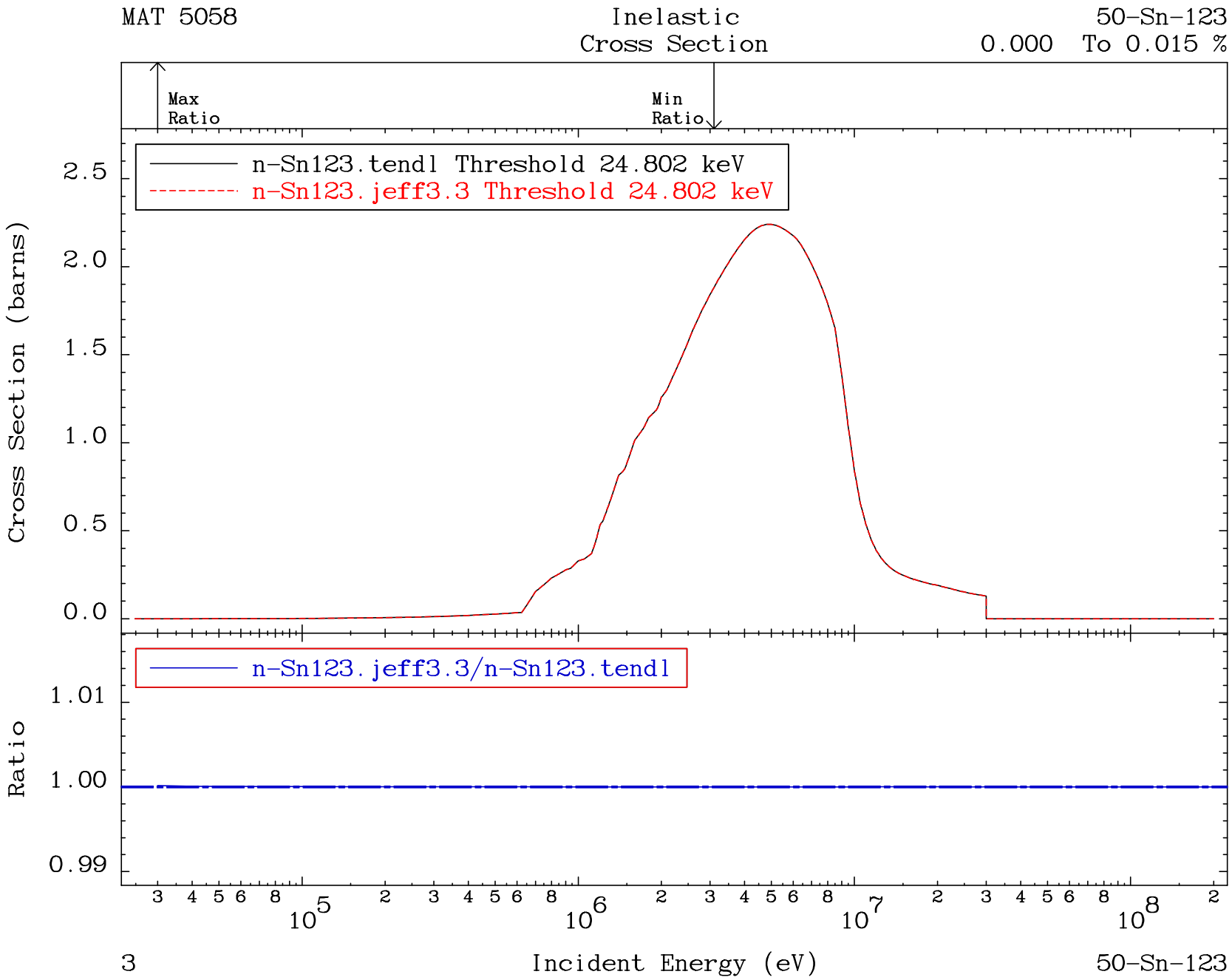
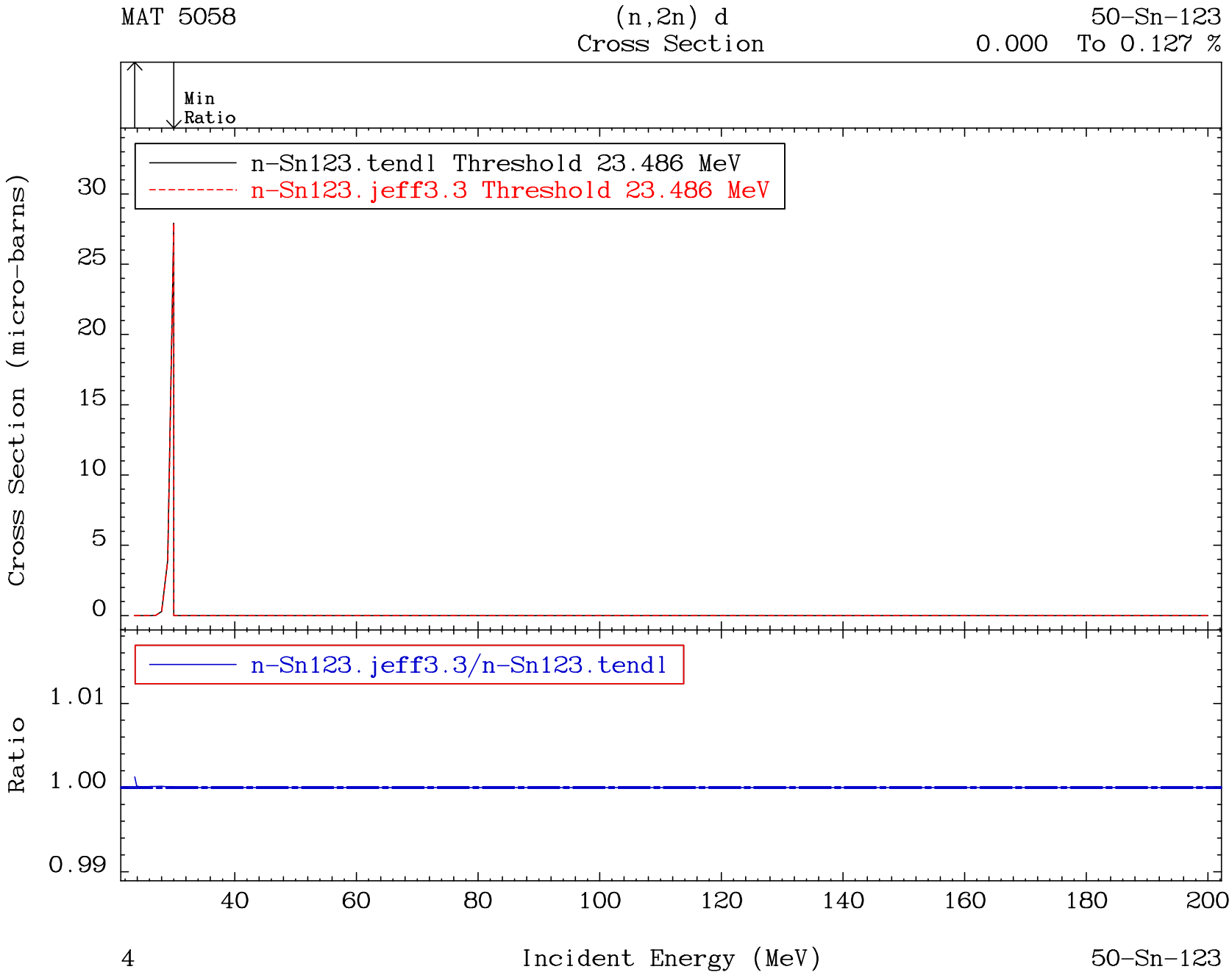
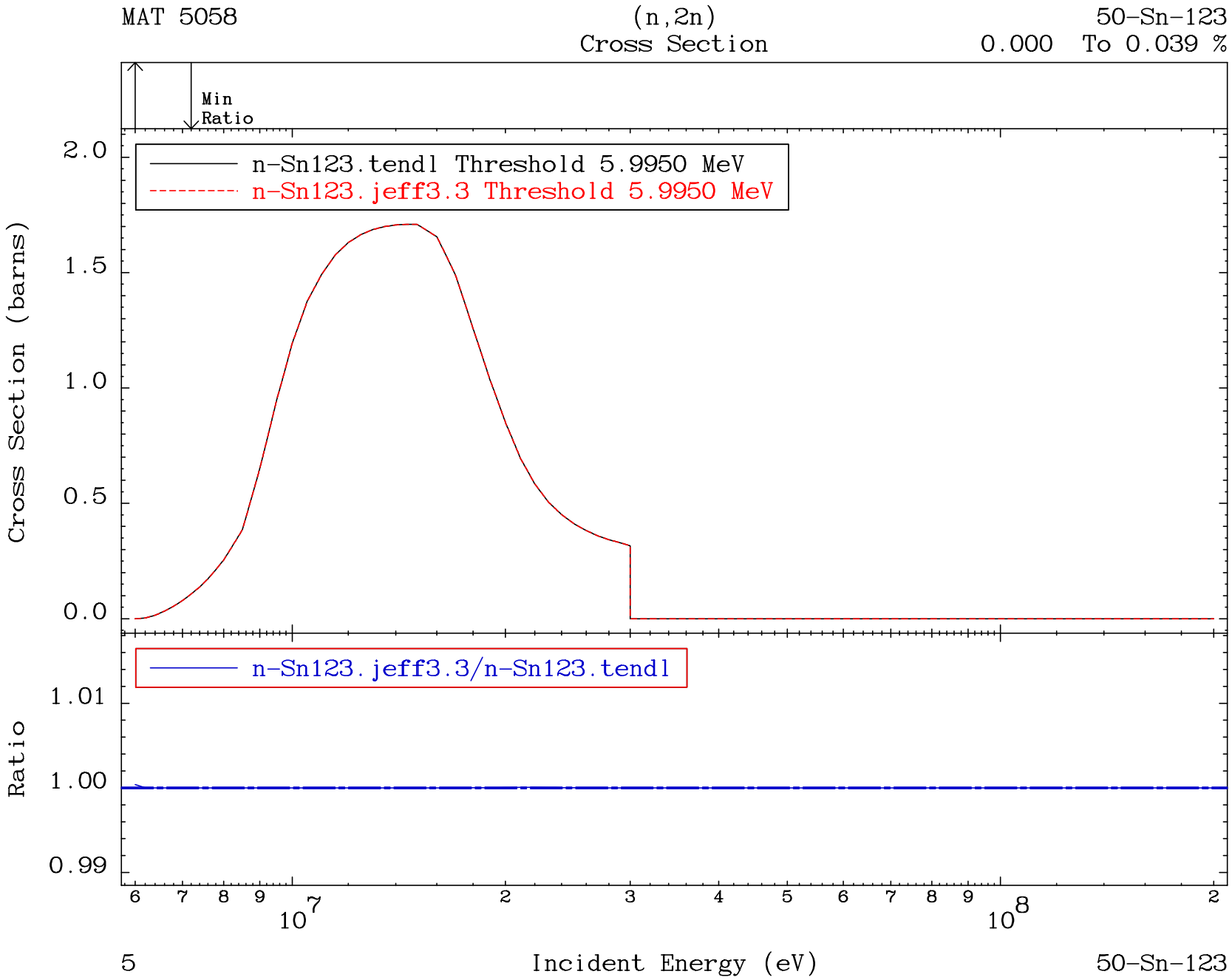
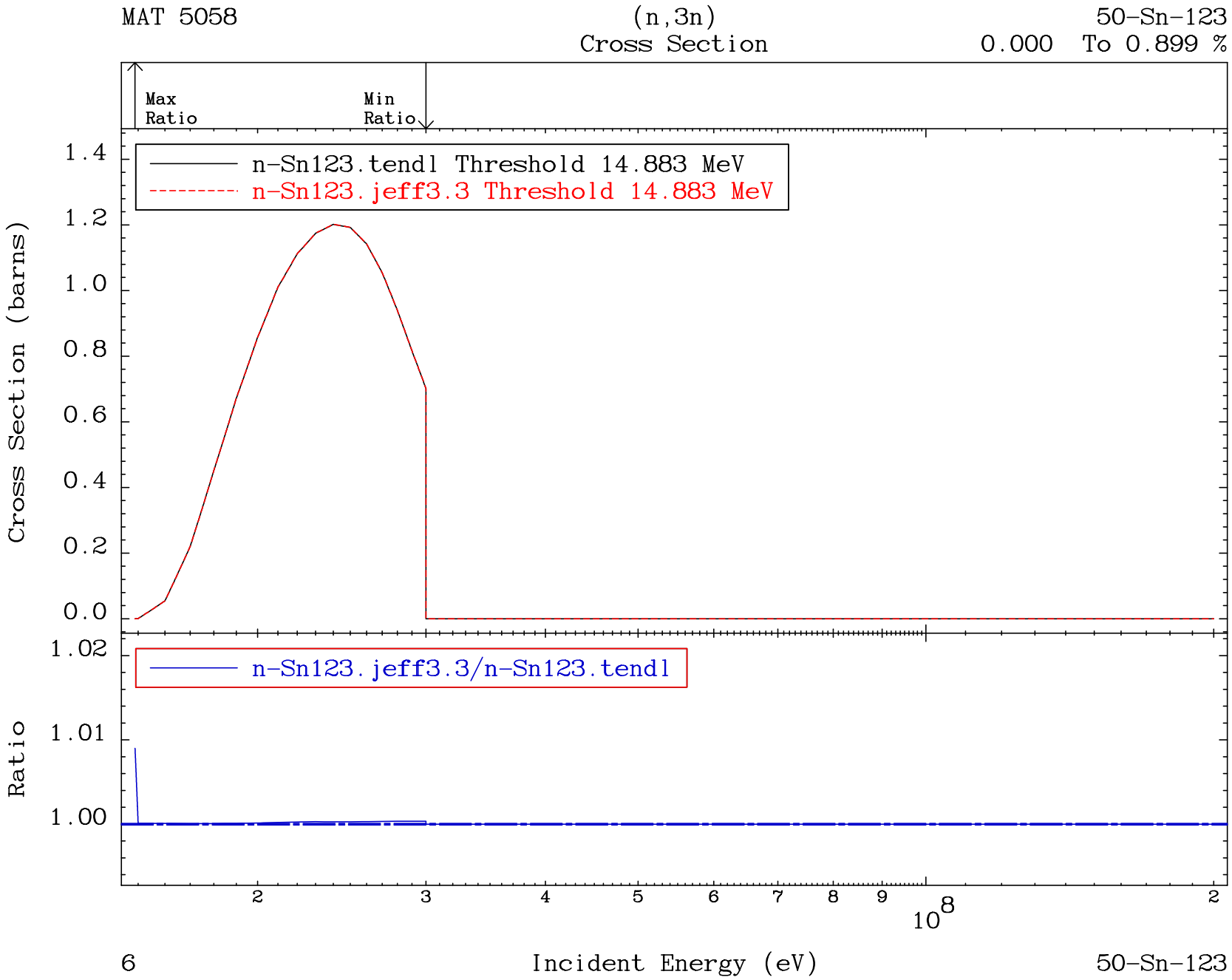

MAT 5058
Total
Cross Section
50-Sn-123
-99.84 To 9088. %
Min
Ratio
Max
Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
Incident Energy (eV)
1
50-Sn-123

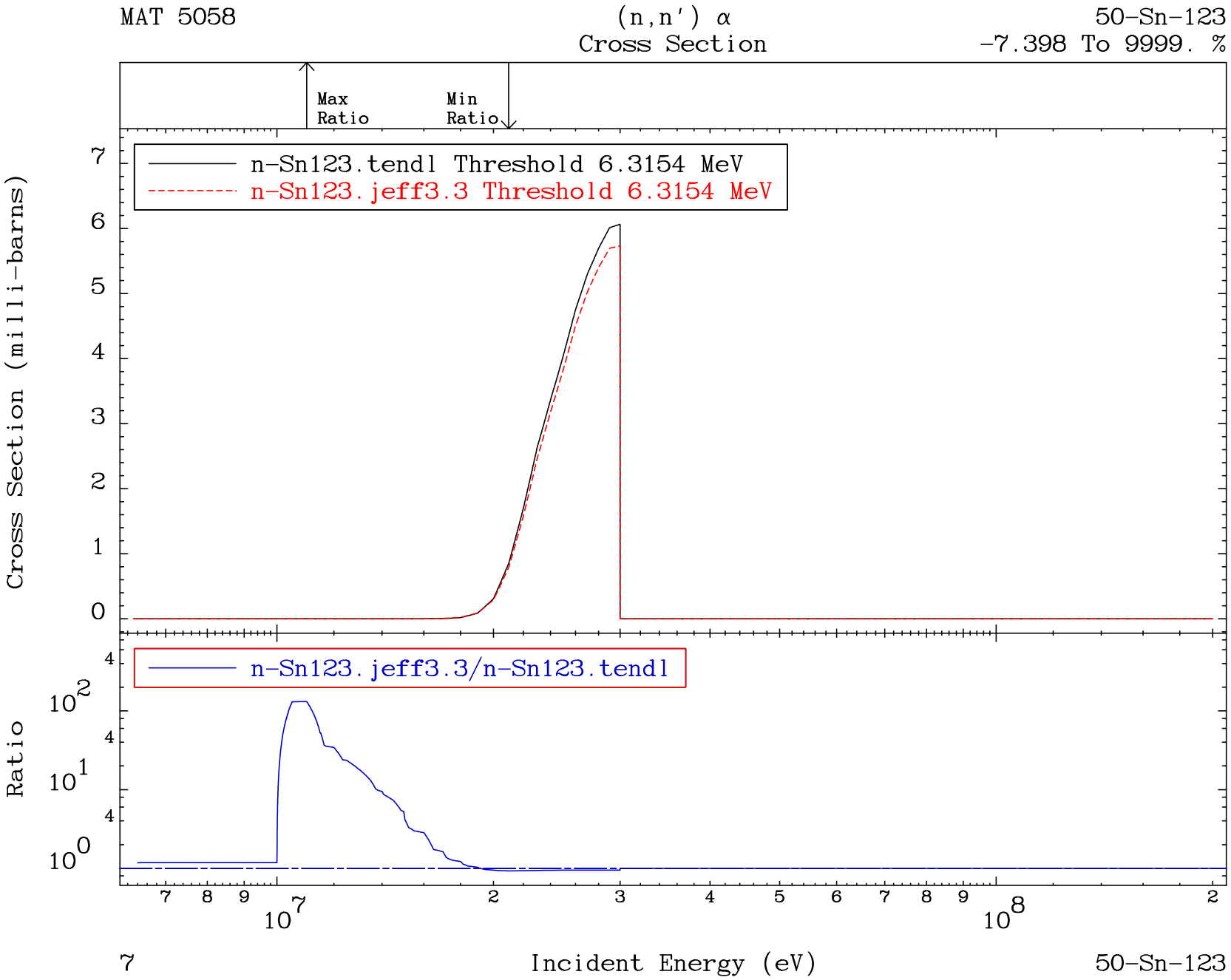

MAT 5058
Elastic
Cross Section
50-Sn-123
-99.38 To 5179. %
Min
Ratio
Max
Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
Incident Energy (eV)
2
50-Sn-123

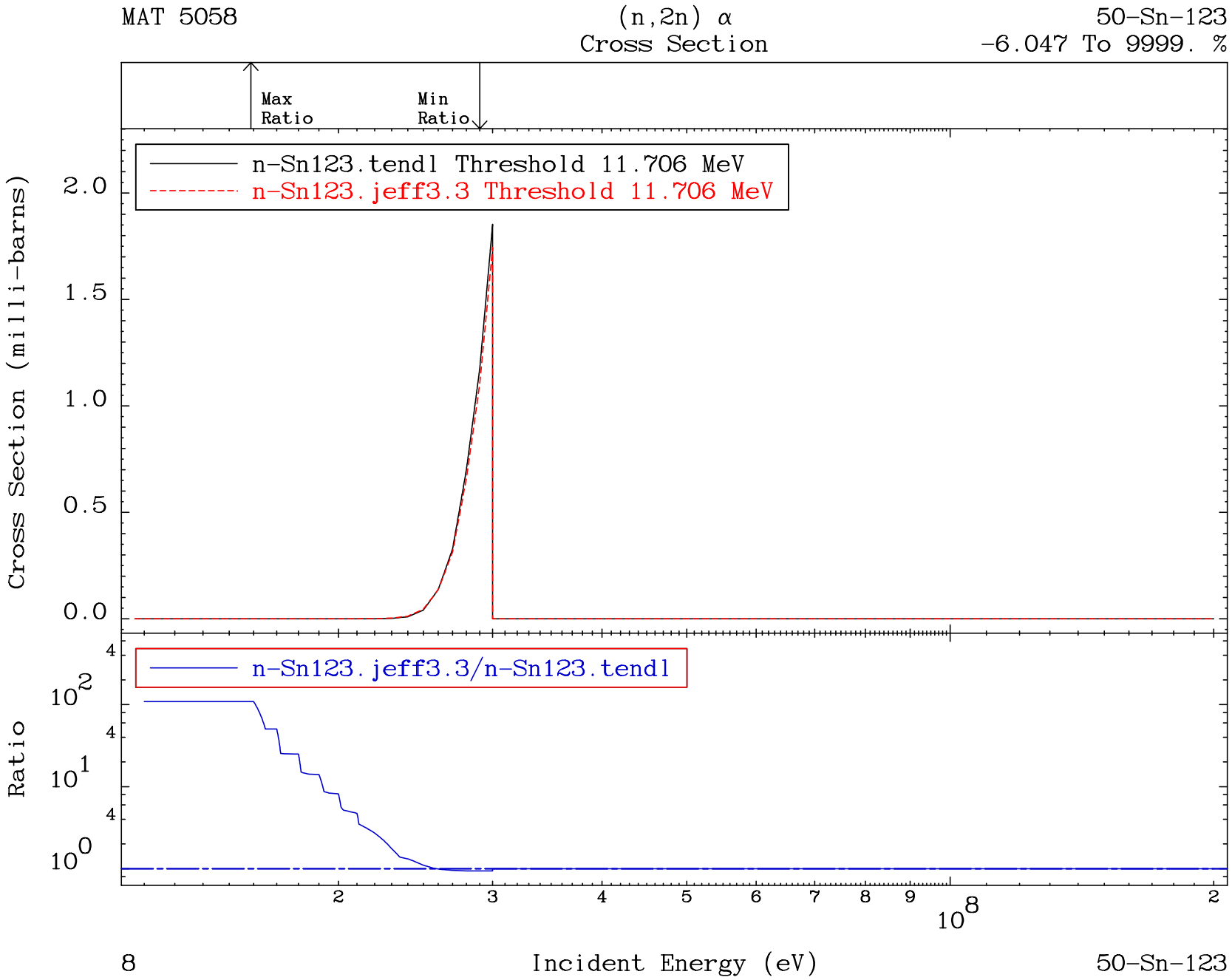

MAT 5058
Inelastic
Cross Section
50-Sn-123
0.000 To 0.015 %
Max
Ratio
Min
Ratio
n-Sn123.tendl Threshold 24.802 keV
n-Sn123.jeff3.3 Threshold 24.802 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
50-Sn-123

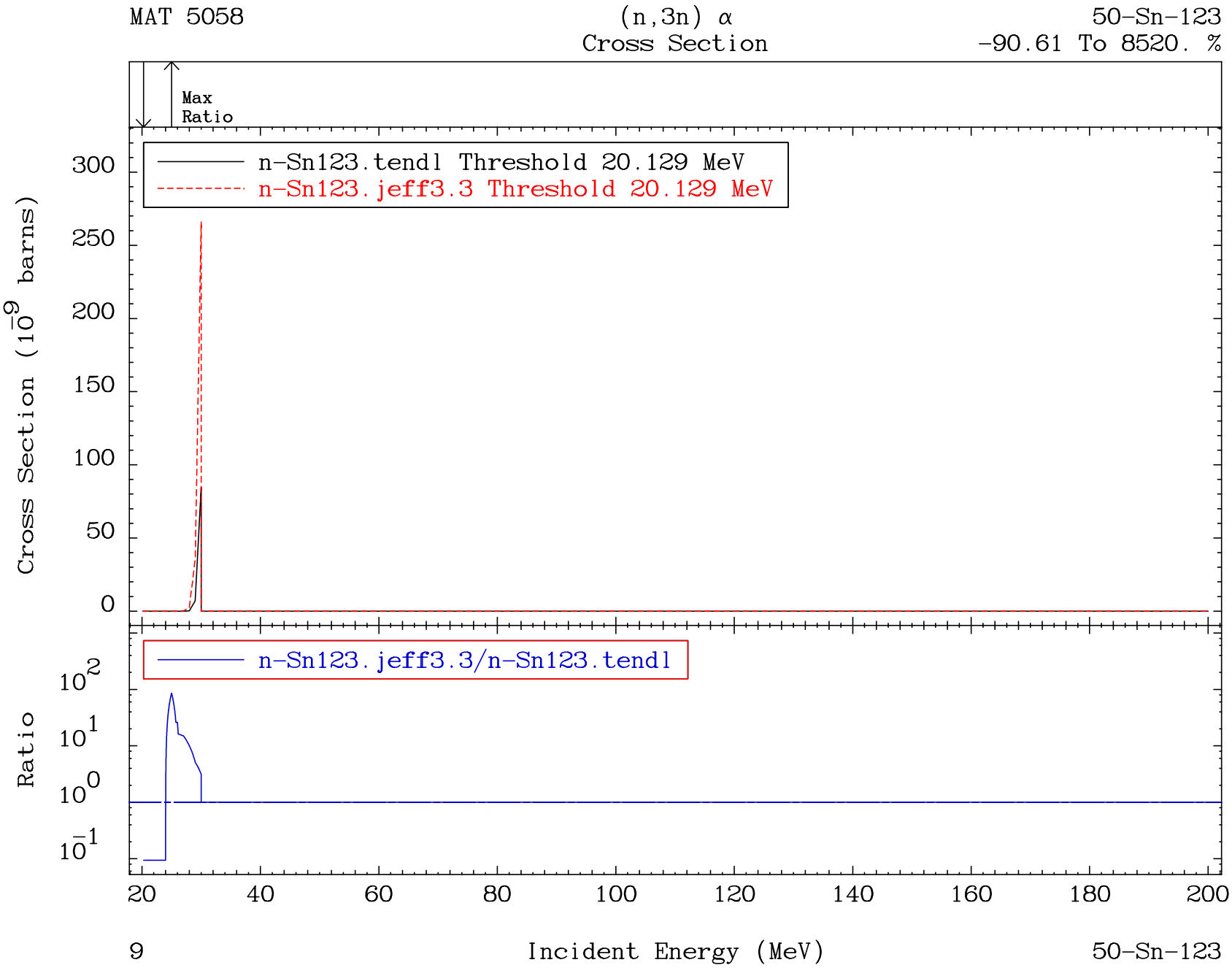

MAT 5058
(n,2n) d
Cross Section
50-Sn-123
0.000 To 0.127 %
Min
Ratio
n-Sn123.tendl Threshold 23.486 MeV
n-Sn123.jeff3.3 Threshold 23.486 MeV
Cross Section (micro-barns)
30
25
20
15
10
5
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
50-Sn-123

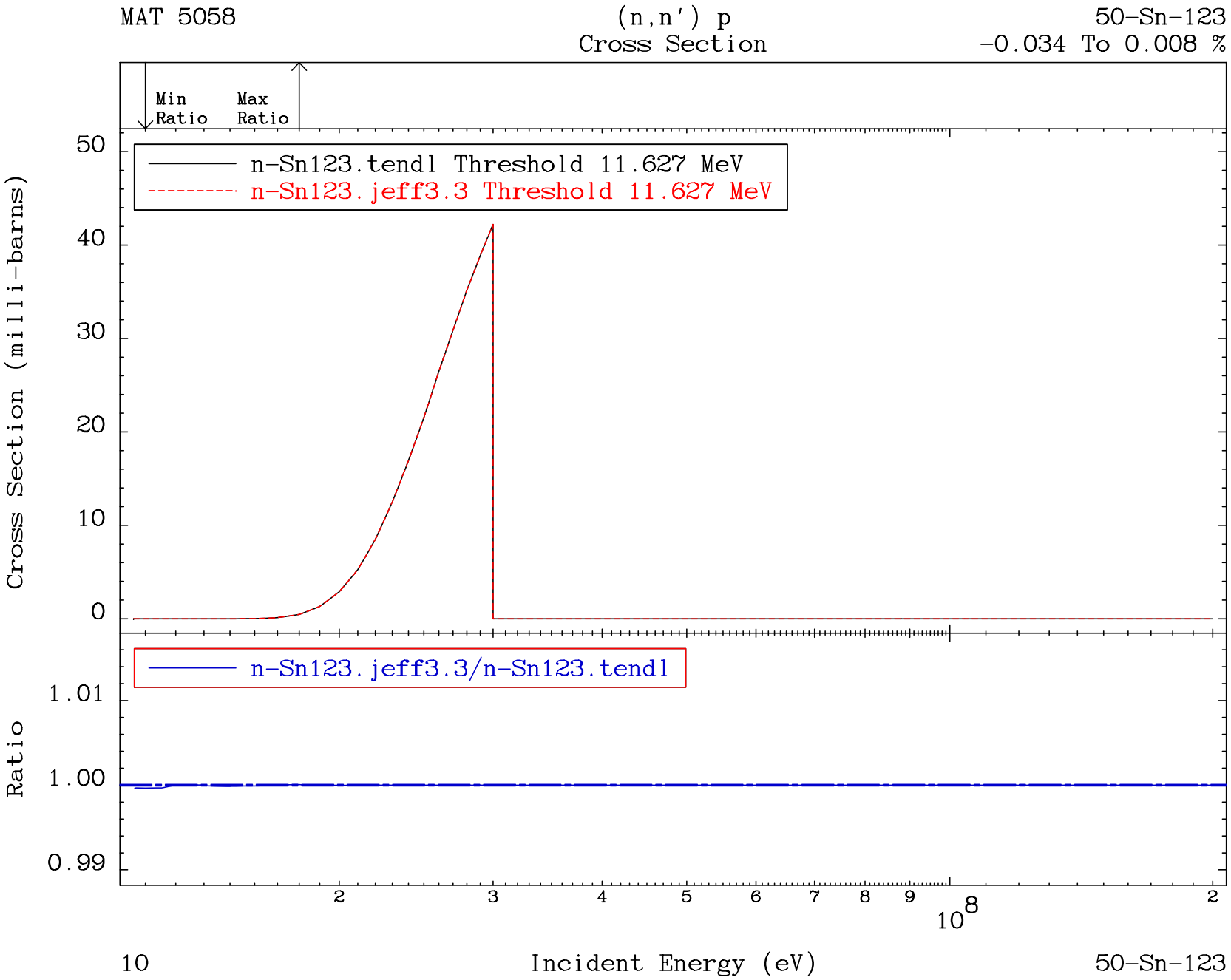

MAT 5058
(n,2n)
Cross Section
50-Sn-123
0.000 To 0.039 %
Min
Ratio
n-Sn123.tendl Threshold 5.9950 MeV
n-Sn123.jeff3.3 Threshold 5.9950 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
5
Incident Energy (eV)
50-Sn-123

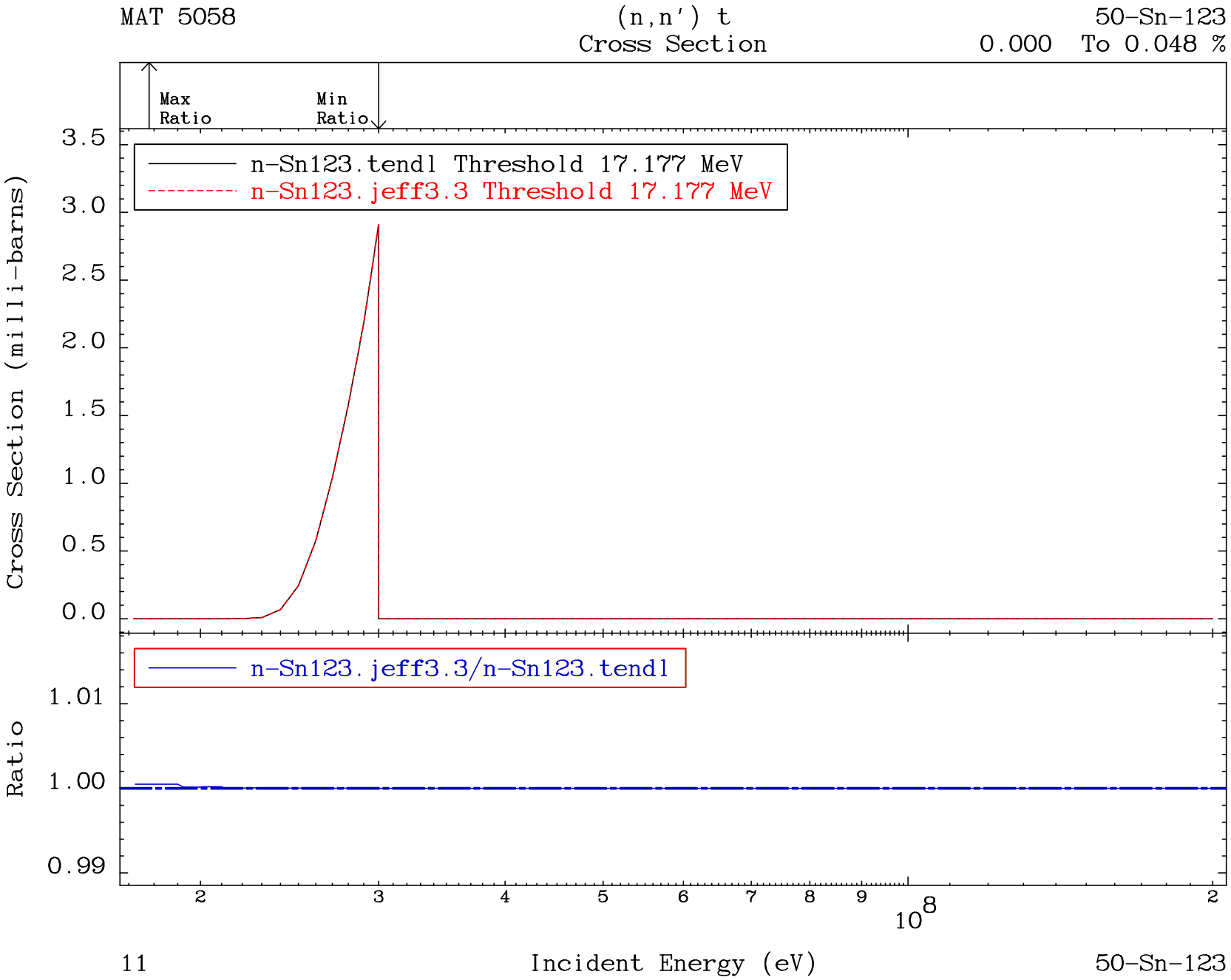

MAT 5058
(n,3n)
Cross Section
50-Sn-123
0.000 To 0.899 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 14.883 MeV
n-Sn123.jeff3.3 Threshold 14.883 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
50-Sn-123

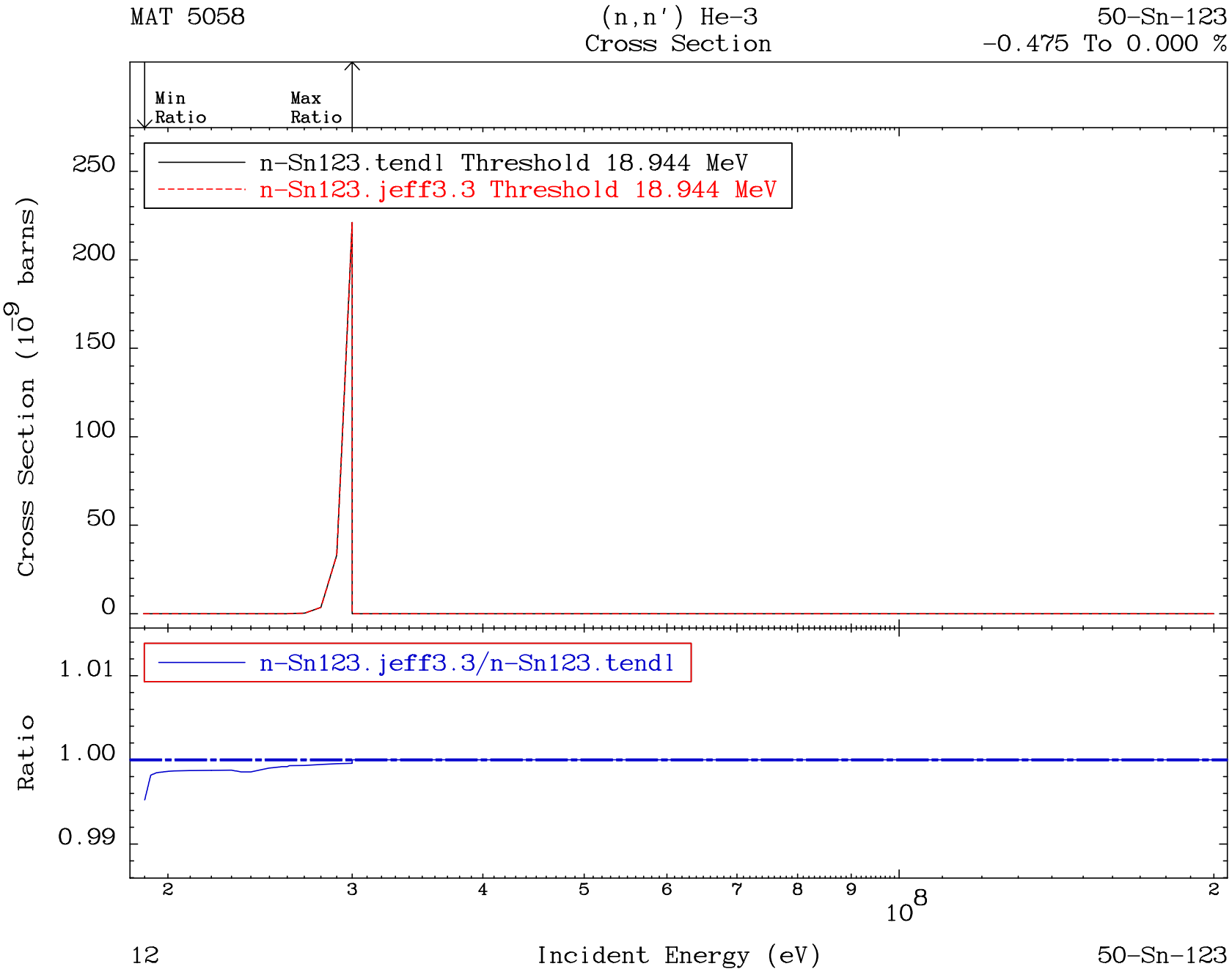

MAT 5058
(n,n') α
Cross Section
50-Sn-123
-7.398 To 9999. %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 6.3154 MeV
n-Sn123.jeff3.3 Threshold 6.3154 MeV
Cross Section (milli-barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
Incident Energy (eV)
50-Sn-123

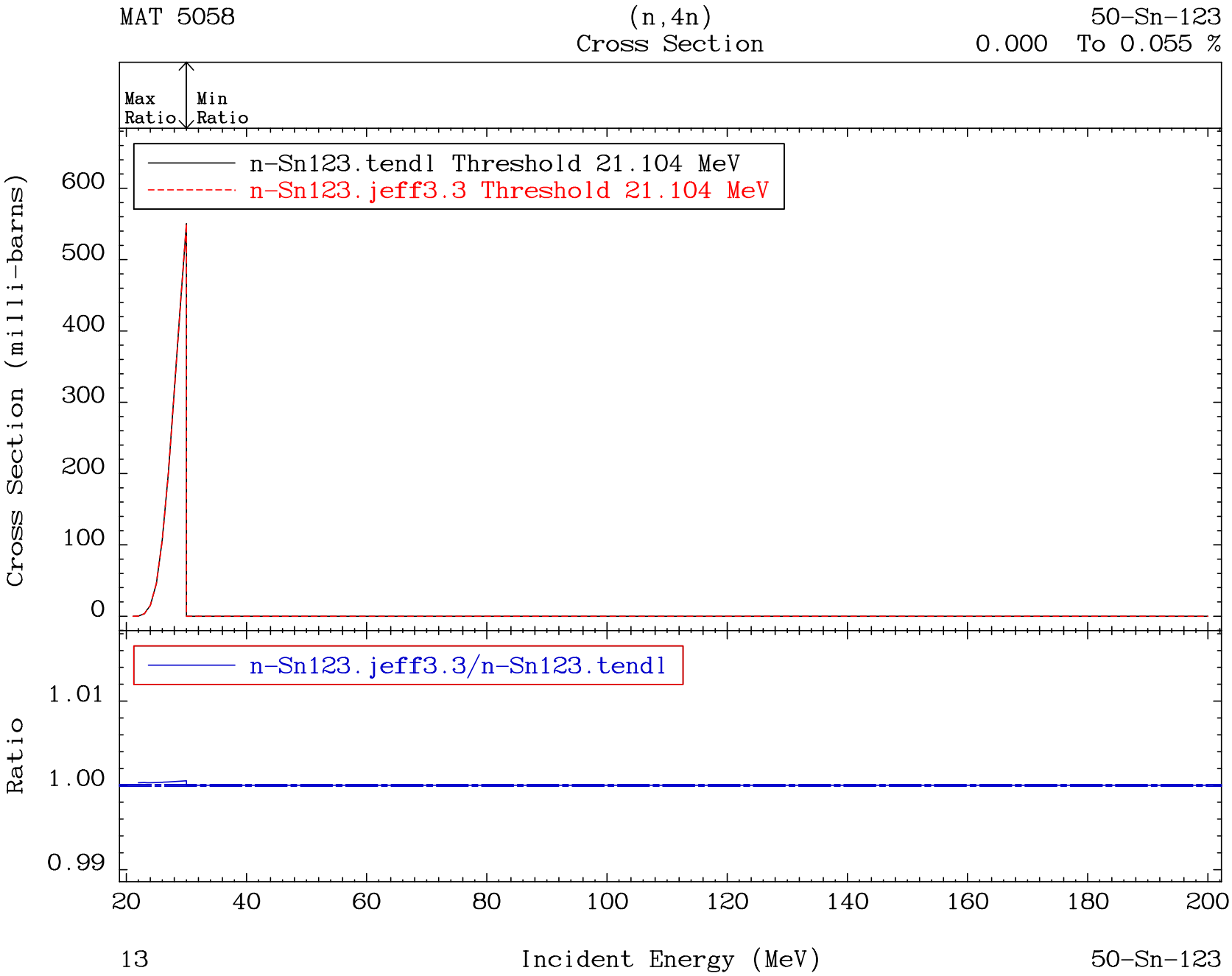

MAT 5058
(n,2n) α
Cross Section
50-Sn-123
-6.047 To 9999. %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 11.706 MeV
n-Sn123.jeff3.3 Threshold 11.706 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
50-Sn-123

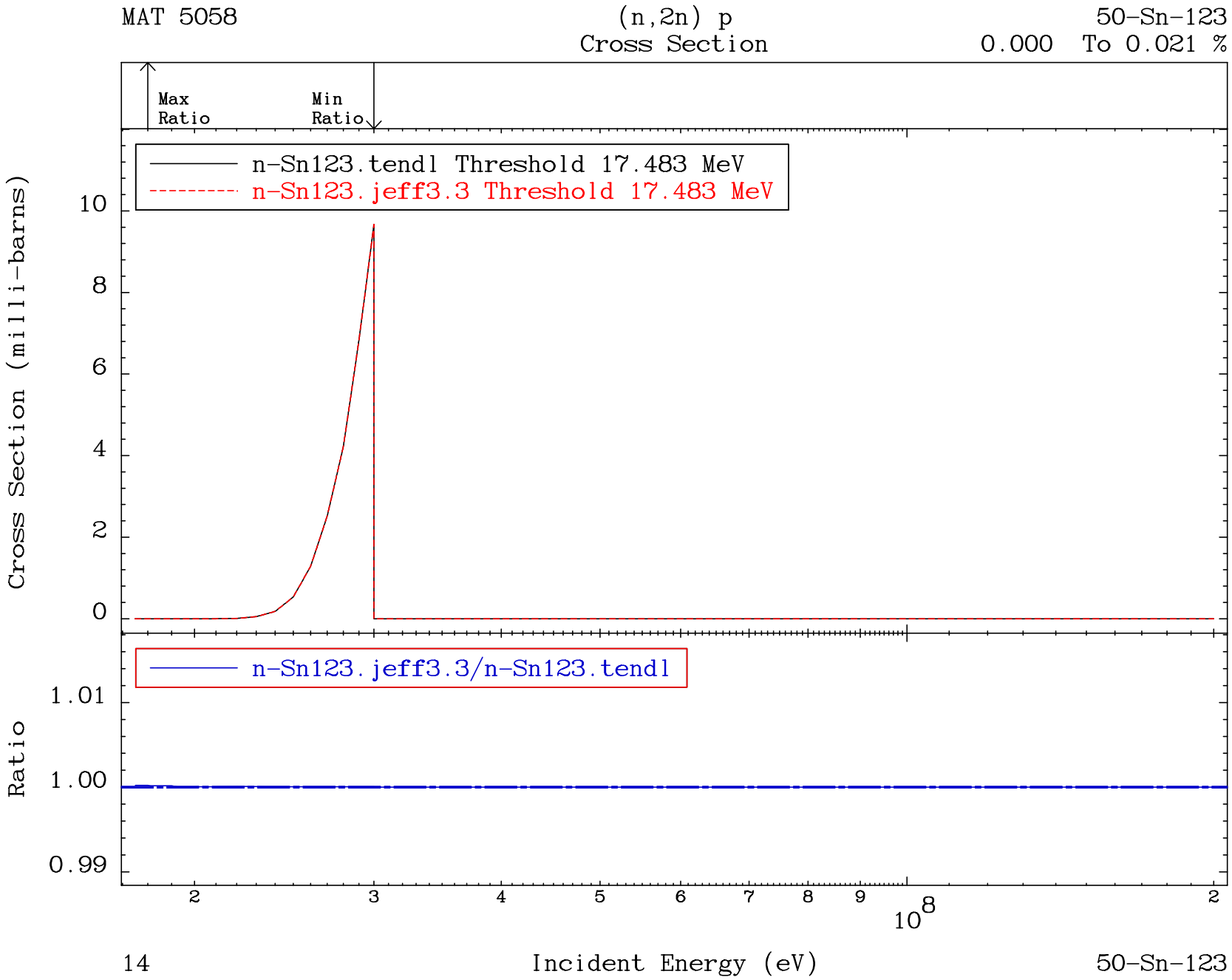

MAT 5058
(n,3n) α
Cross Section
50-Sn-123
-90.61 To 8520. %
Max
Ratio
n-Sn123.tendl Threshold 20.129 MeV
n-Sn123.jeff3.3 Threshold 20.129 MeV
Cross Section (10^-9 barns)
300
250
200
150
100
50
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
10^2
10^1
10^0
10^-1
20
40
60
80
100
120
140
160
180
200
9
Incident Energy (MeV)
50-Sn-123

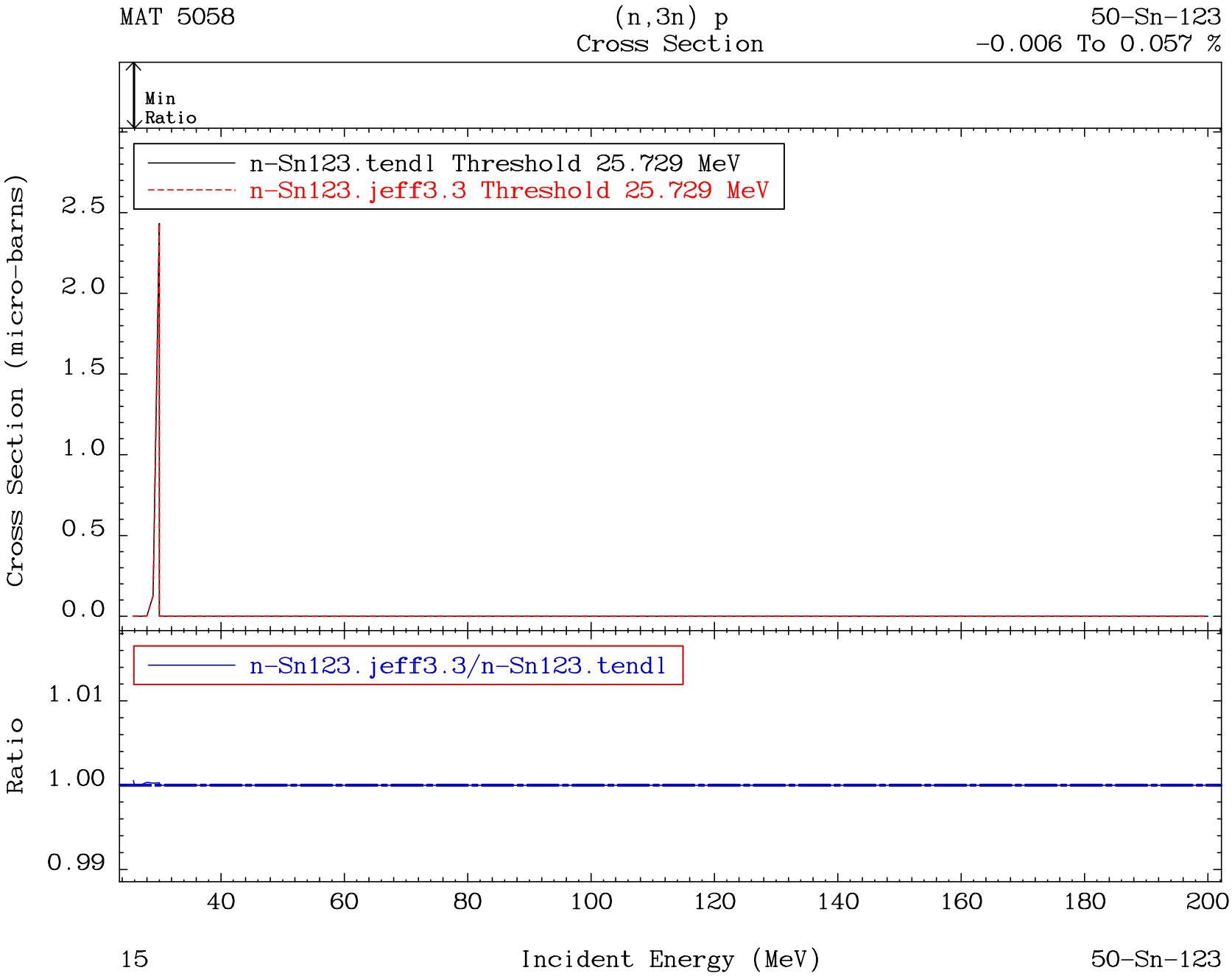

MAT 5058
(n,n') p
Cross Section
50-Sn-123
-0.034 To 0.008 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 11.627 MeV
n-Sn123.jeff3.3 Threshold 11.627 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
50-Sn-123

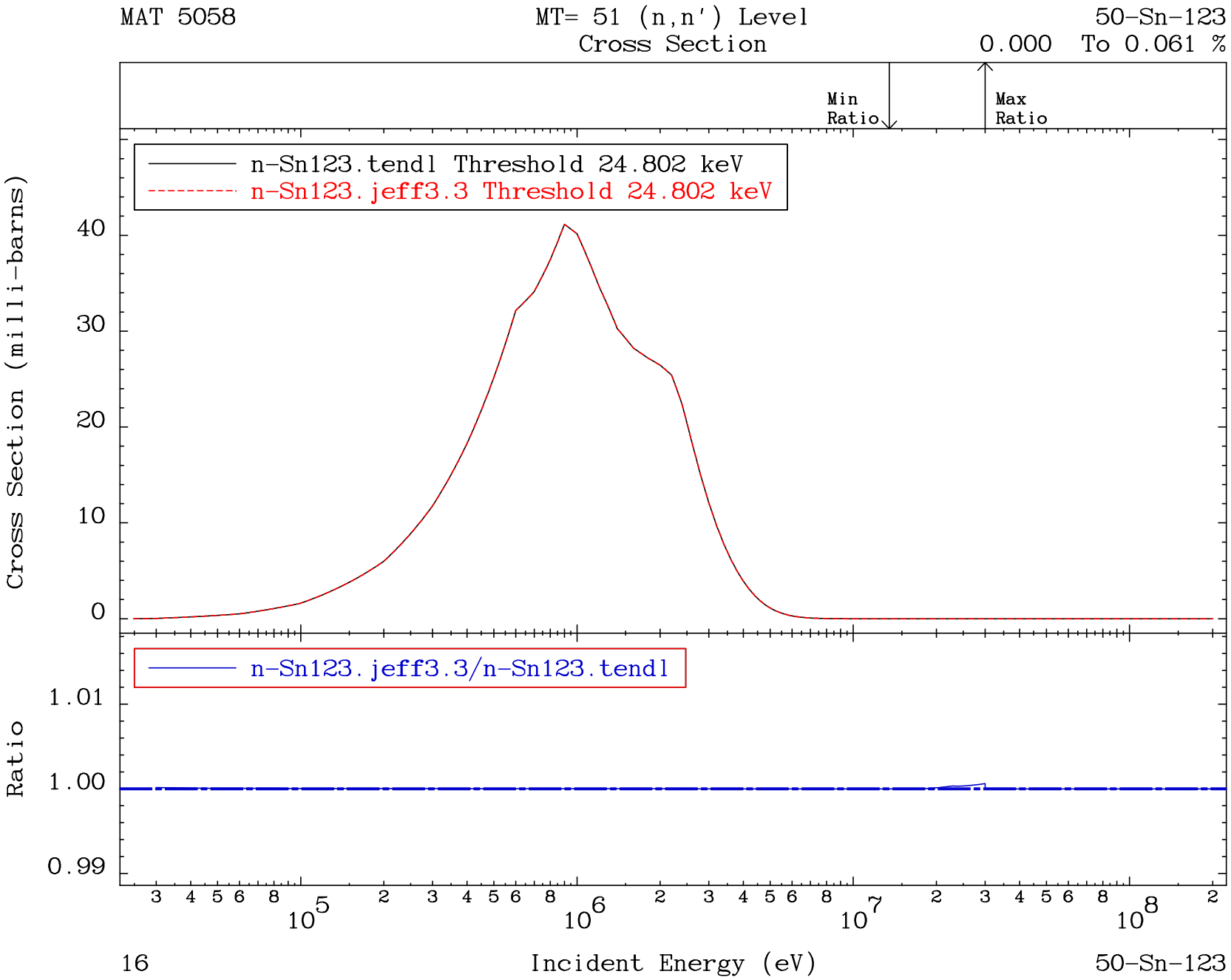

MAT 5058
(n,n') t
Cross Section
50-Sn-123
0.000 To 0.048 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 17.177 MeV
n-Sn123.jeff3.3 Threshold 17.177 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
50-Sn-123

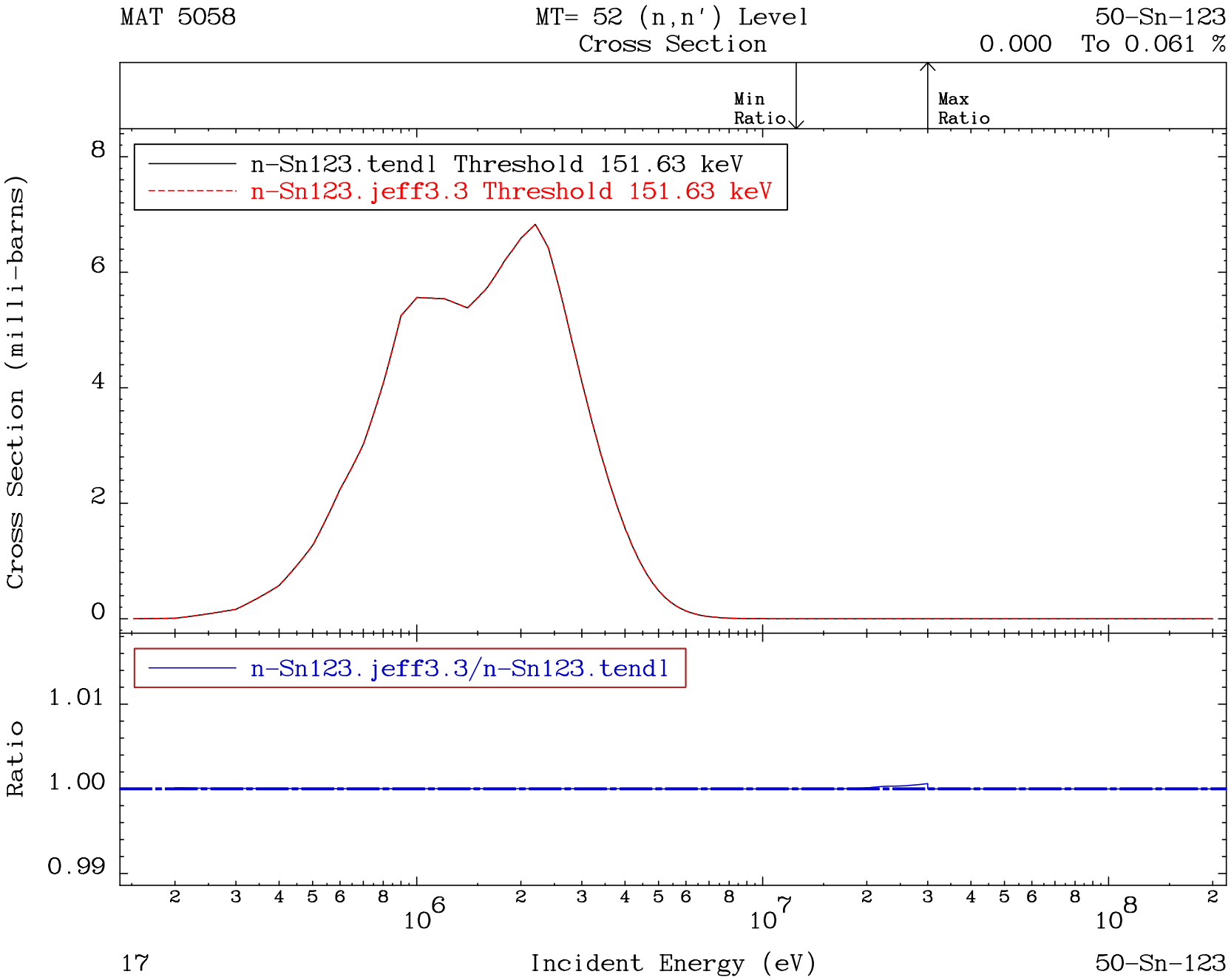

MAT 5058
(n,n') He-3
Cross Section
50-Sn-123
-0.475 To 0.000 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 18.944 MeV
n-Sn123.jeff3.3 Threshold 18.944 MeV
Cross Section (10^{-9} barns)
250
200
150
100
50
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^{8}
2
12
Incident Energy (eV)
50-Sn-123

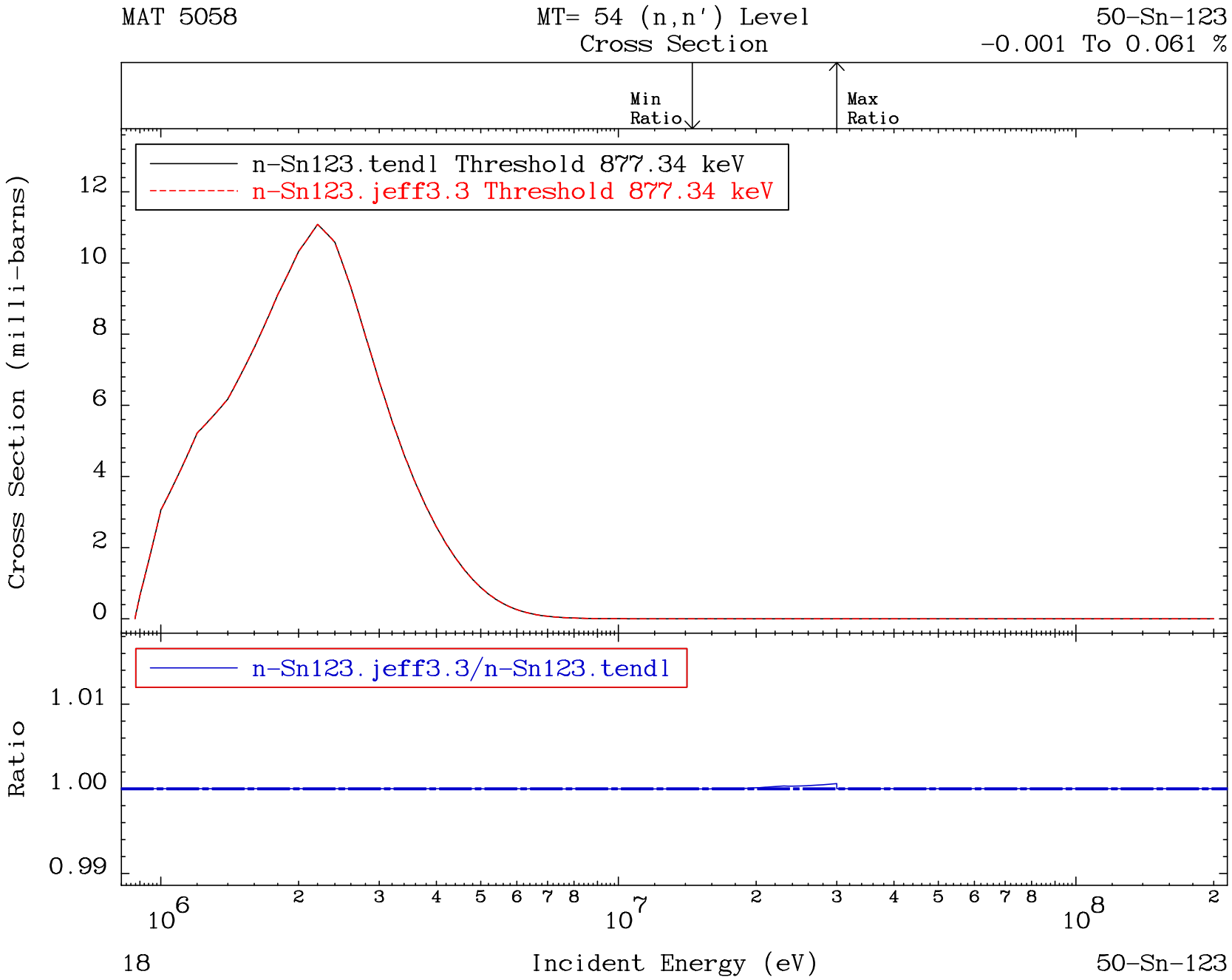

MAT 5058
(n,4n)
Cross Section
50-Sn-123
0.000 To 0.055 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 21.104 MeV
n-Sn123.jeff3.3 Threshold 21.104 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
20
40
60
80
100
120
140
160
180
200
13
Incident Energy (MeV)
50-Sn-123

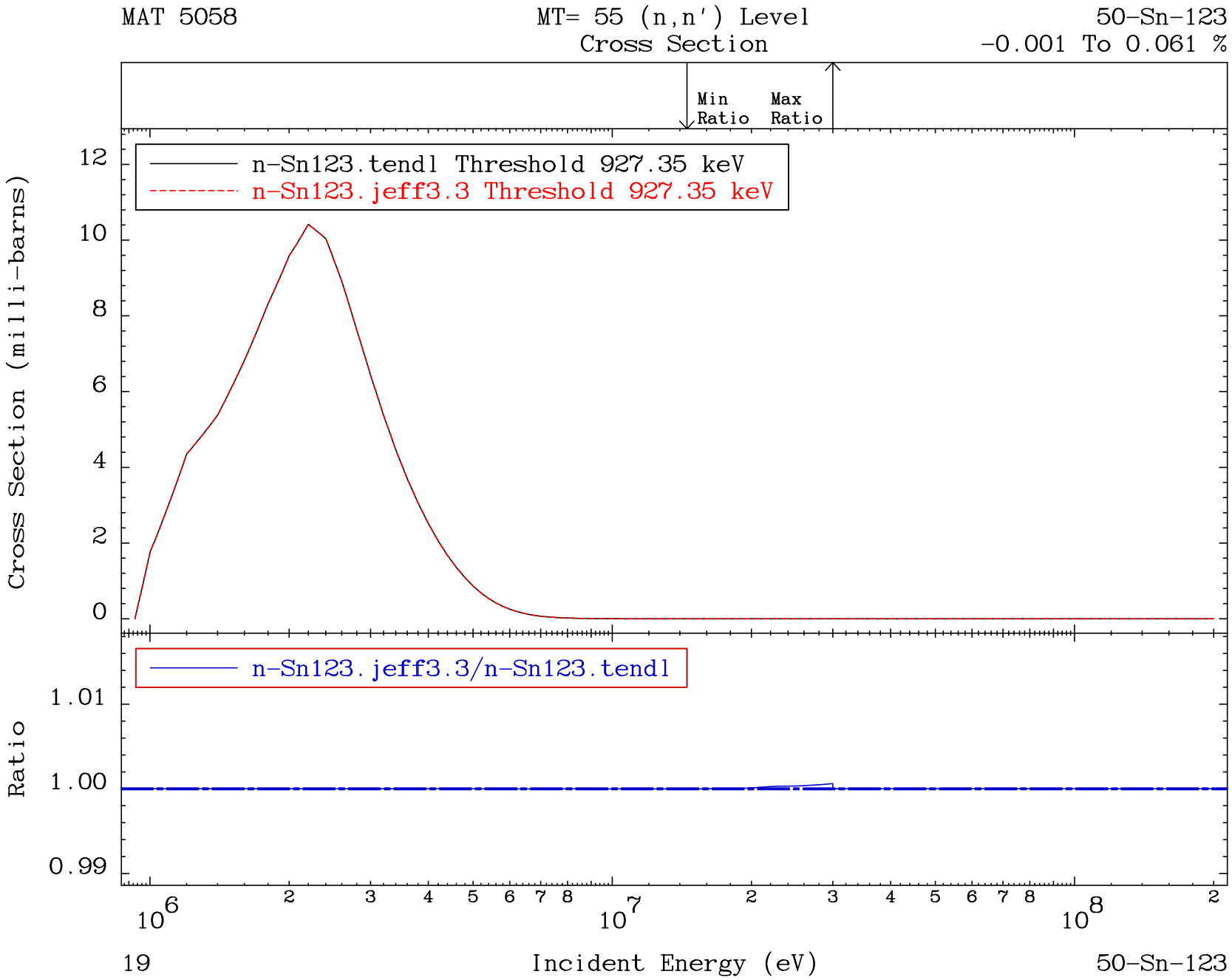

MAT 5058
(n,2n) p
Cross Section
50-Sn-123
0.000 To 0.021 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 17.483 MeV
n-Sn123.jeff3.3 Threshold 17.483 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
50-Sn-123

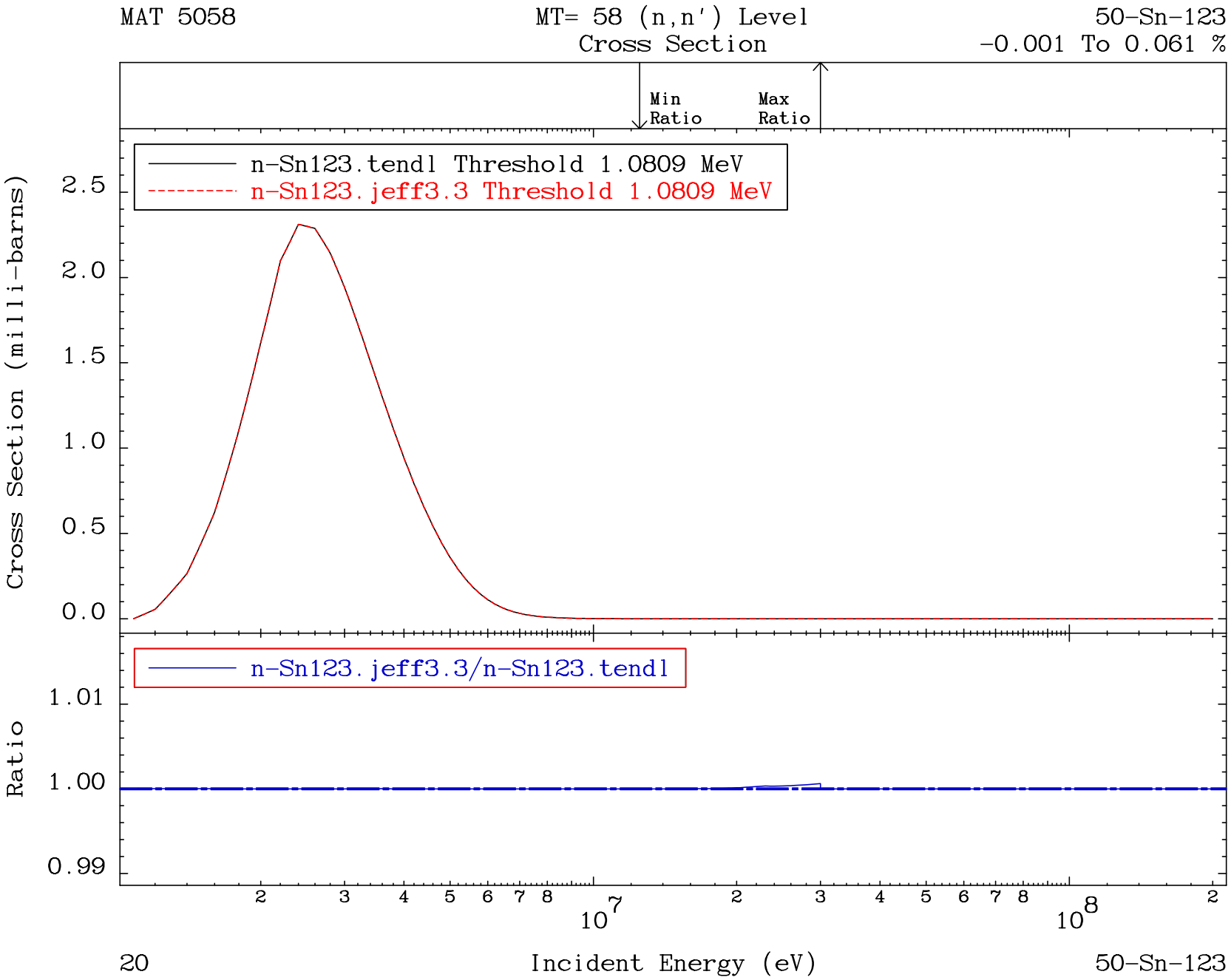

MAT 5058
(n,3n) p
Cross Section
50-Sn-123
-0.006 To 0.057 %
Min
Ratio
n-Sn123.tendl Threshold 25.729 MeV
n-Sn123.jeff3.3 Threshold 25.729 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
50-Sn-123

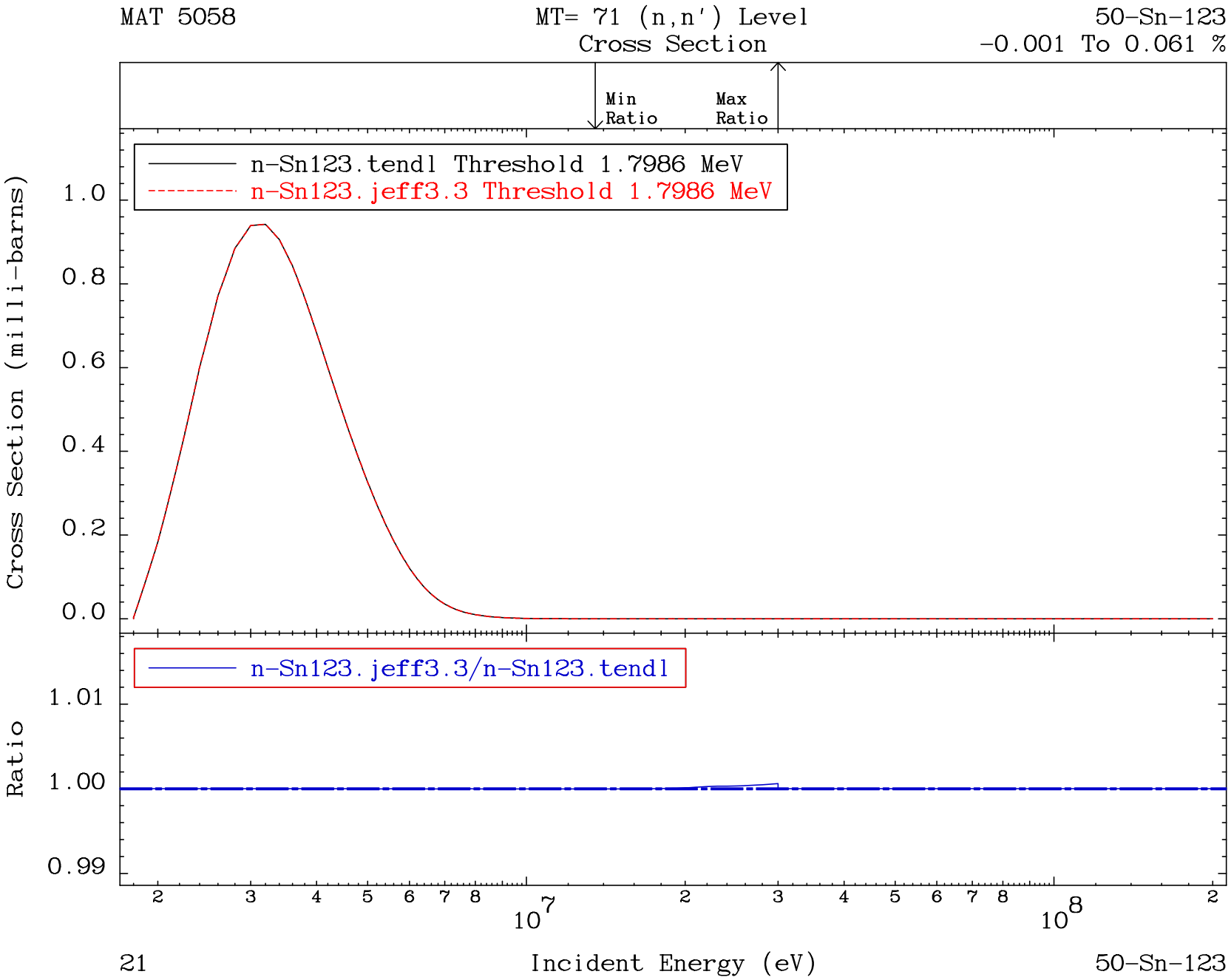

MAT 5058
MT= 51 (n,n') Level
Cross Section
50-Sn-123
0.000 To 0.061 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 24.802 keV
n-Sn123.jeff3.3 Threshold 24.802 keV
Cross Section (milli-barns)
40
30
20
10
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
16
Incident Energy (eV)
50-Sn-123

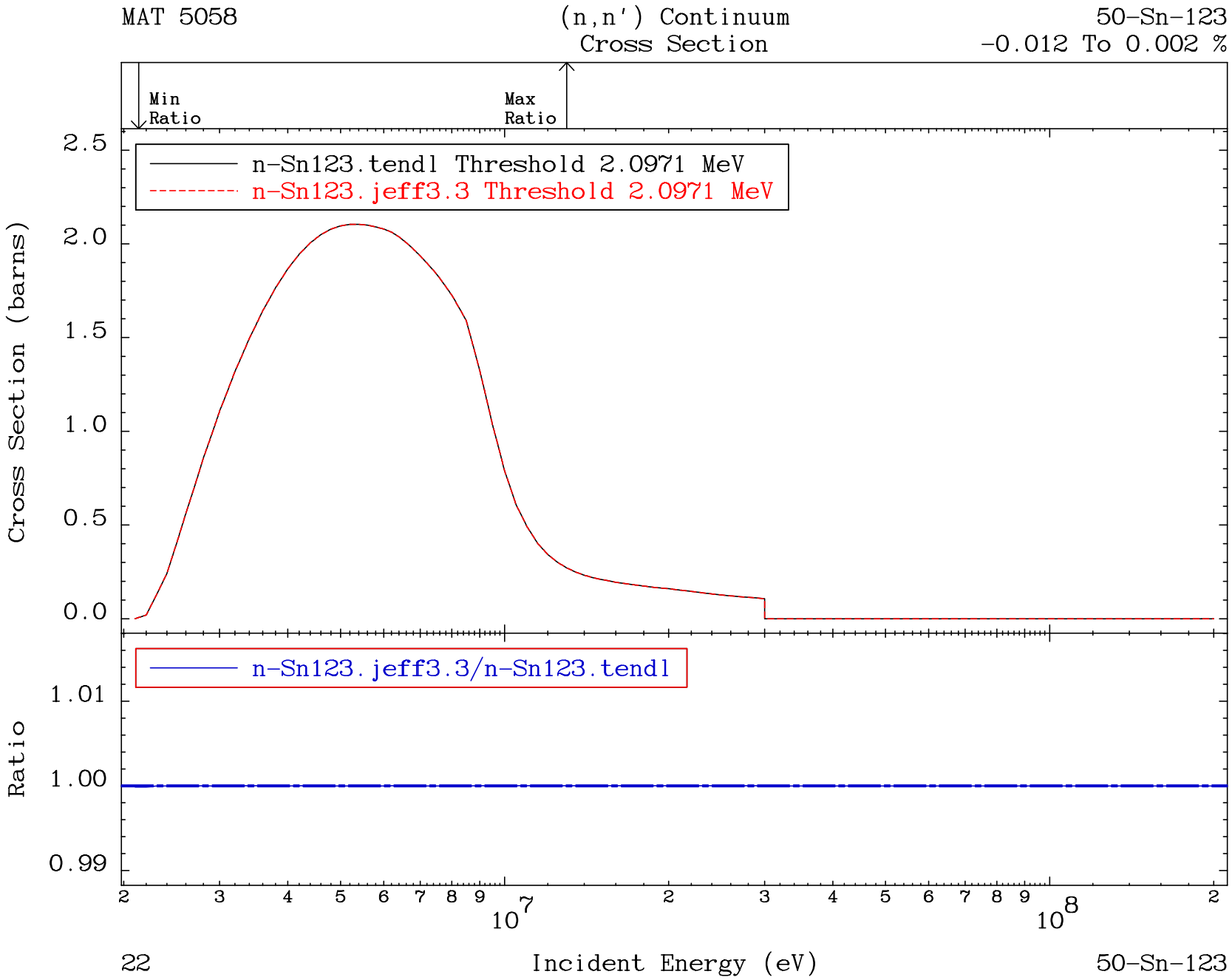

MAT 5058
MT= 52 (n,n') Level
Cross Section
50-Sn-123
0.000 To 0.061 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 151.63 keV
n-Sn123.jeff3.3 Threshold 151.63 keV
Cross Section (milli-barns)
8
6
4
2
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
50-Sn-123

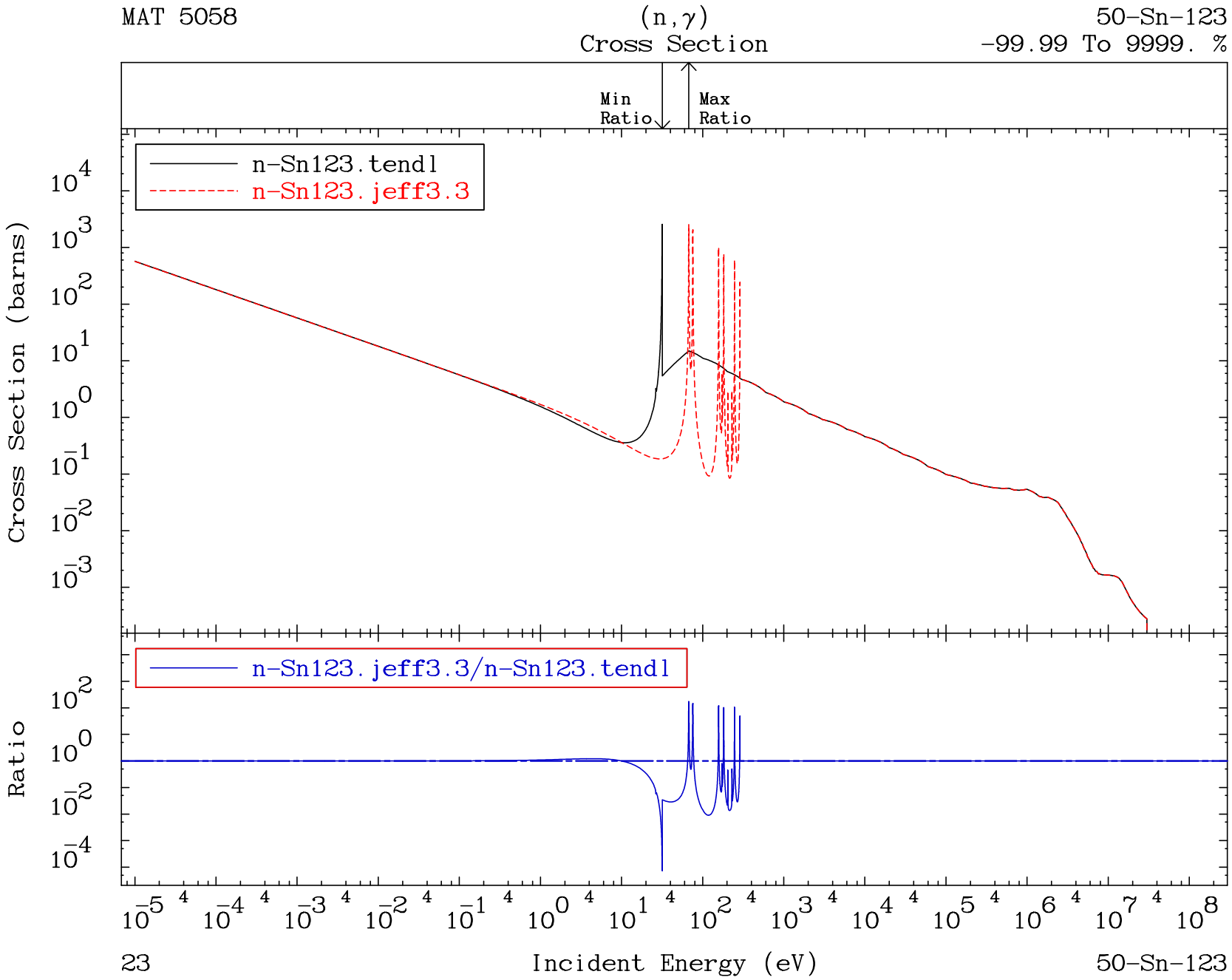

MAT 5058
MT= 54 (n,n') Level
Cross Section
50-Sn-123
-0.001 To 0.061 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 877.34 keV
n-Sn123.jeff3.3 Threshold 877.34 keV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
0.99
1.00
1.01
10^6
10^7
10^8
Incident Energy (eV)
18
50-Sn-123

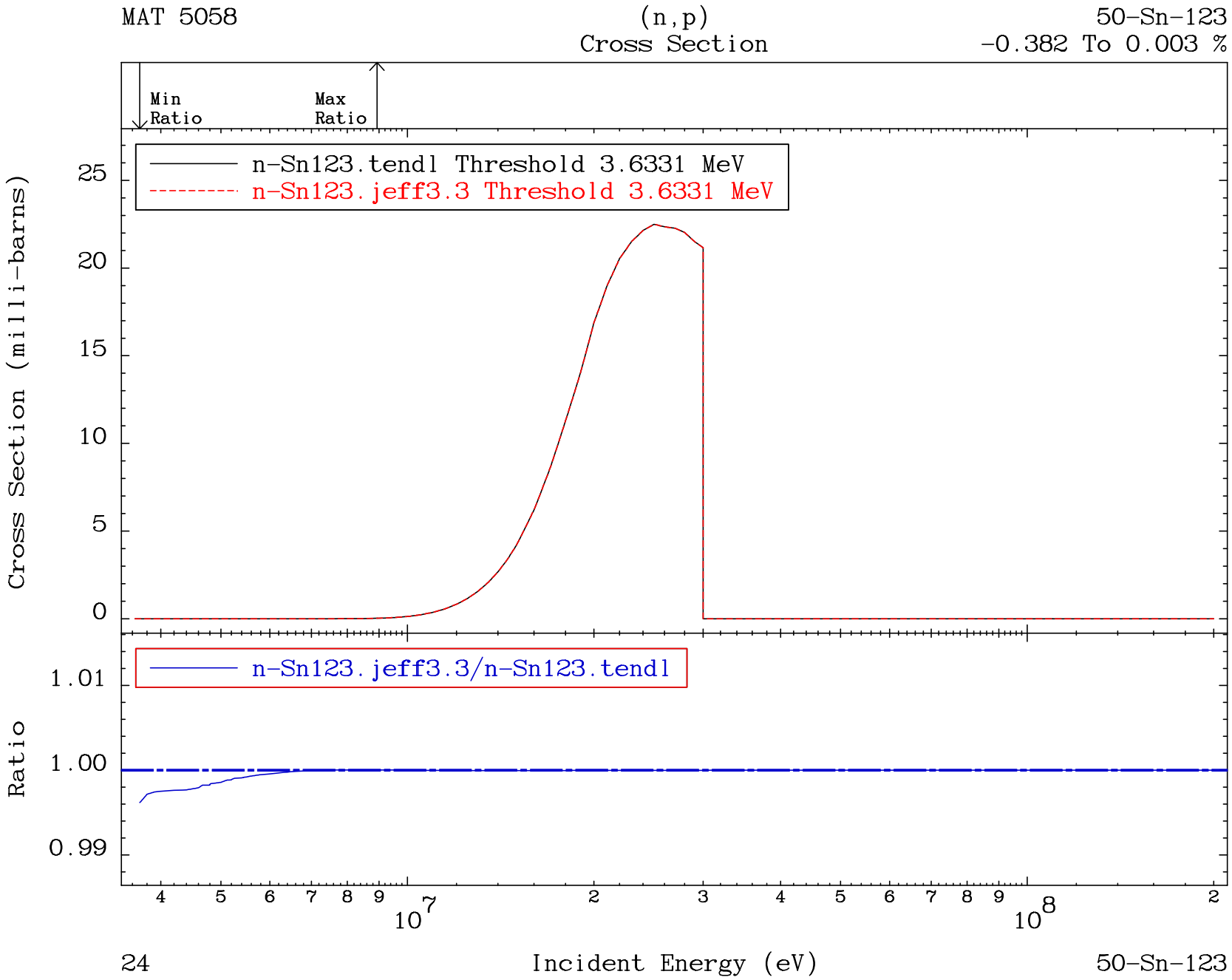

MAT 5058
MT= 55 (n,n') Level
Cross Section
50-Sn-123
-0.001 To 0.061 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 927.35 keV
n-Sn123.jeff3.3 Threshold 927.35 keV
Cross Section (milli-barns)
12
10
8
6
4
2
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
10^6
10^7
10^8
19
Incident Energy (eV)
50-Sn-123

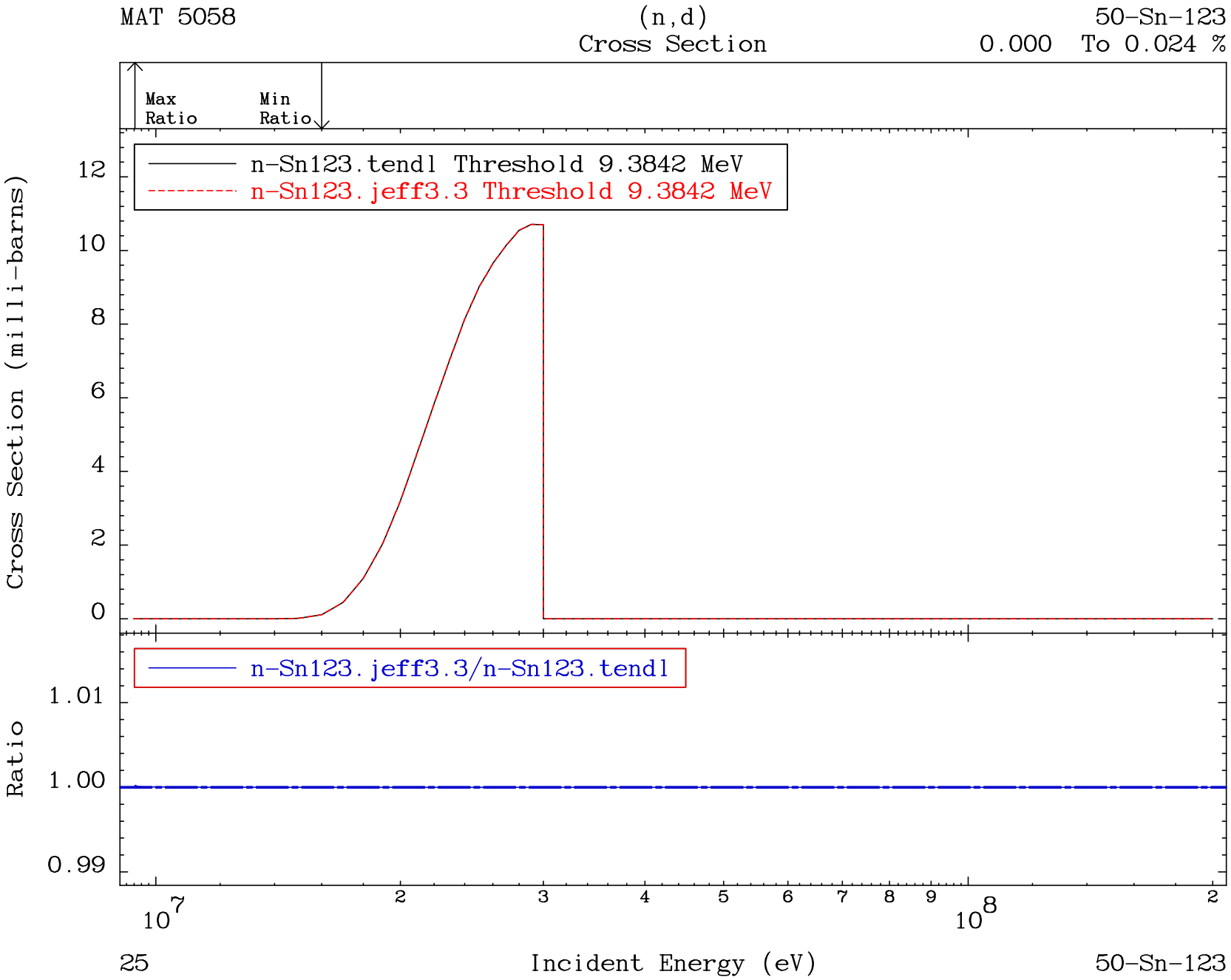

MAT 5058
MT= 58 (n,n') Level
Cross Section
50-Sn-123
-0.001 To 0.061 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 1.0809 MeV
n-Sn123.jeff3.3 Threshold 1.0809 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
50-Sn-123

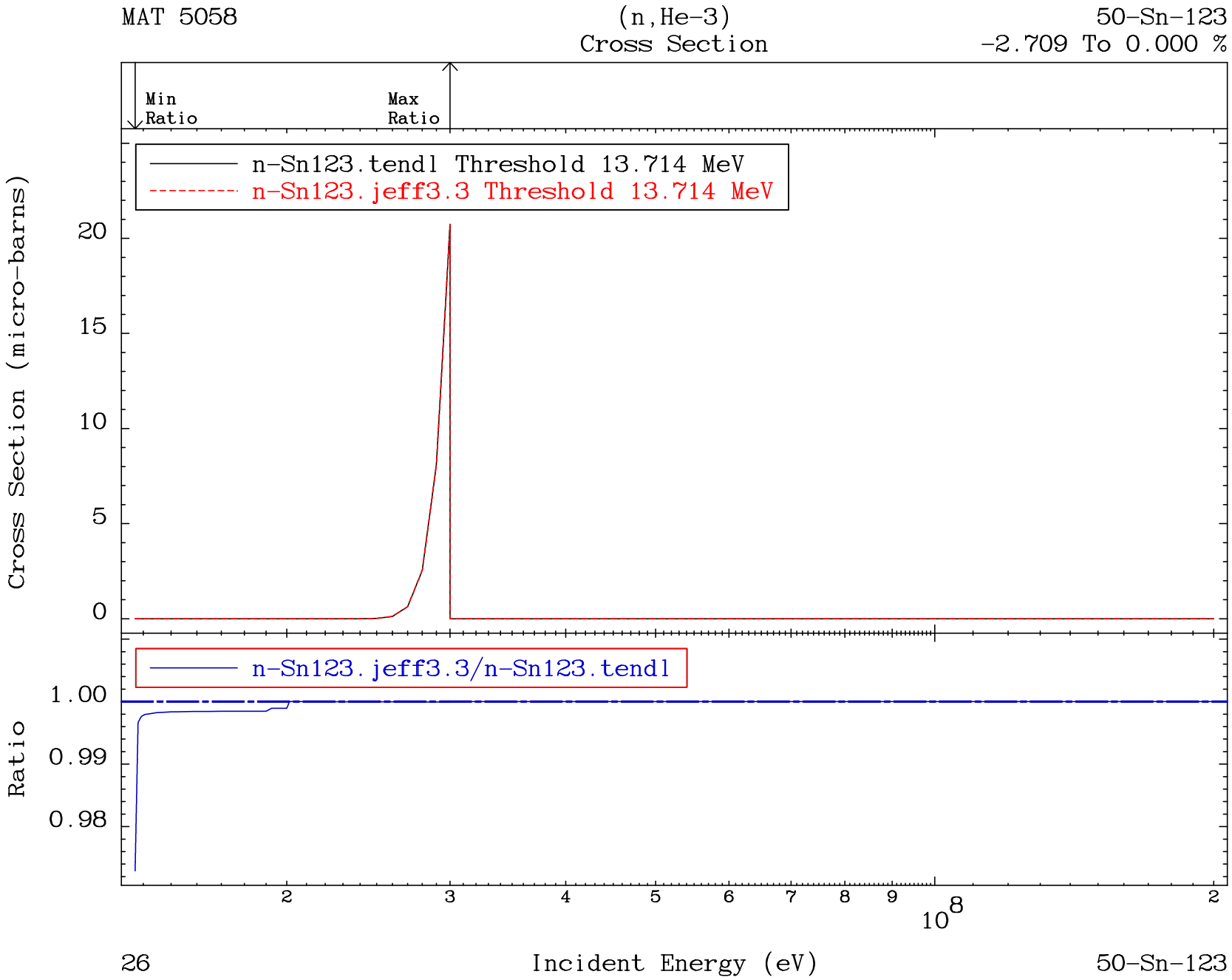

MAT 5058
MT= 71 (n,n') Level
Cross Section
50-Sn-123
-0.001 To 0.061 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 1.7986 MeV
n-Sn123.jeff3.3 Threshold 1.7986 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
50-Sn-123

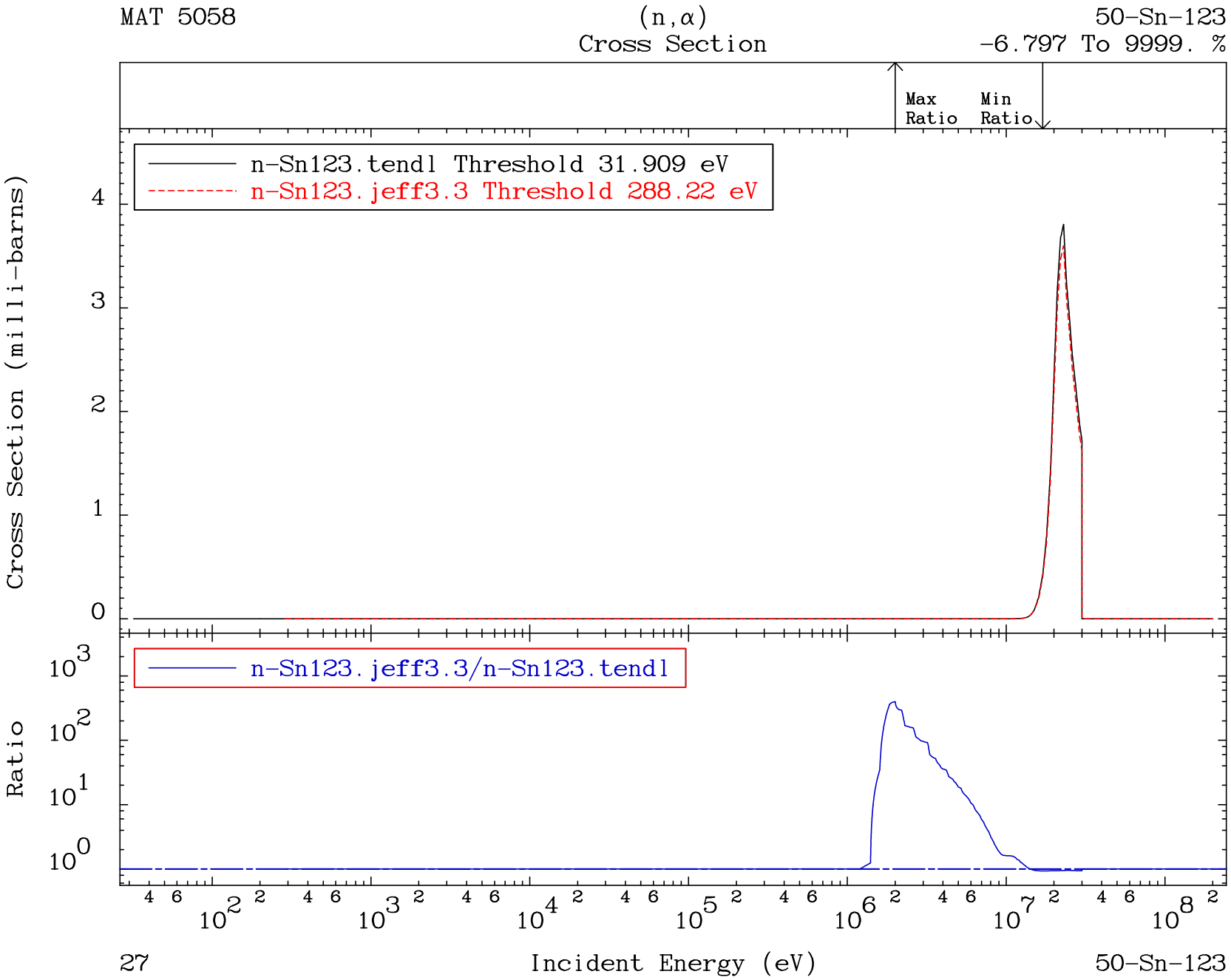

MAT 5058
(n,n') Continuum
Cross Section
50-Sn-123
-0.012 To 0.002 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 2.0971 MeV
n-Sn123.jeff3.3 Threshold 2.0971 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
50-Sn-123

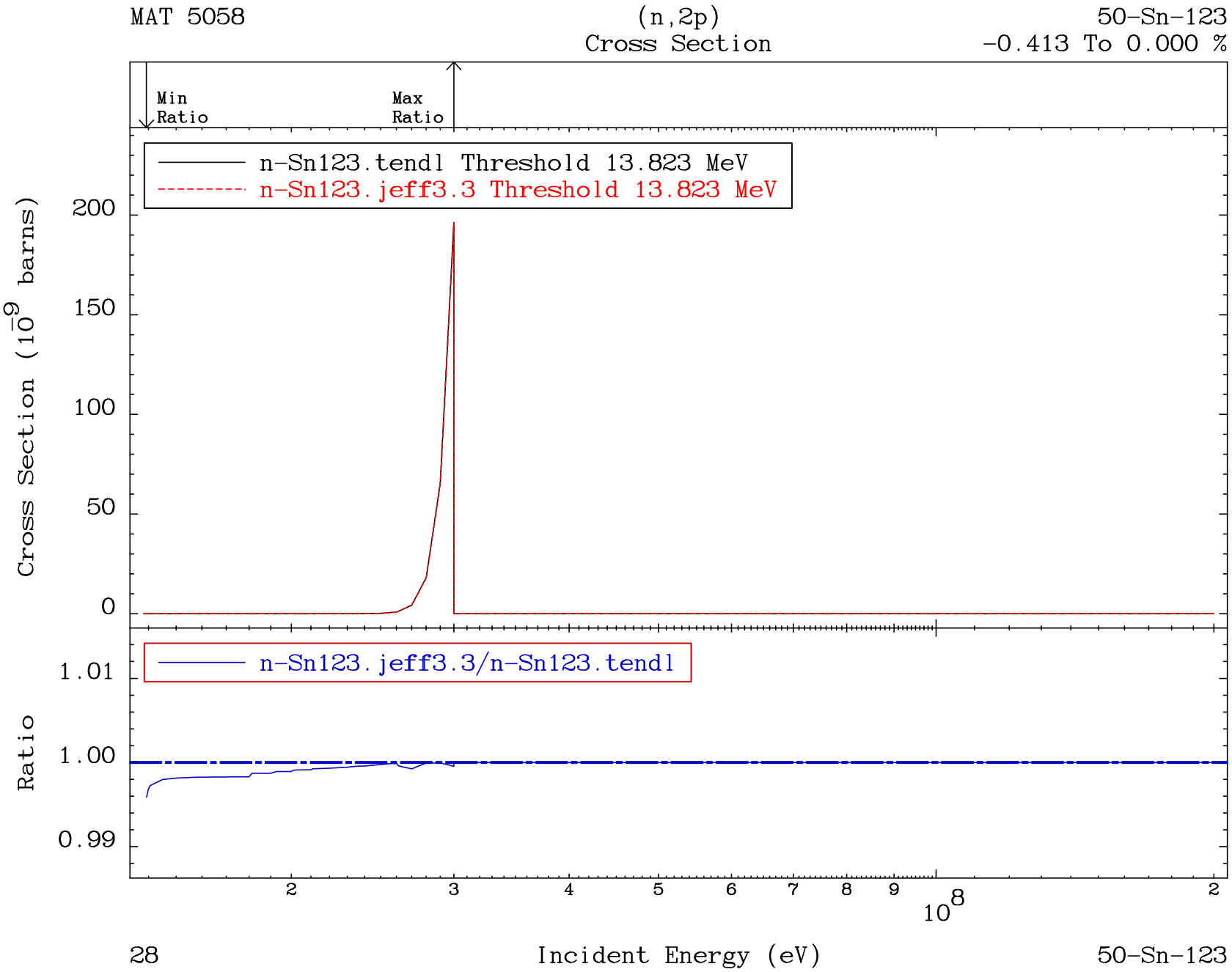

MAT 5058
(n,γ)
Cross Section
50-Sn-123
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
23
Incident Energy (eV)
50-Sn-123

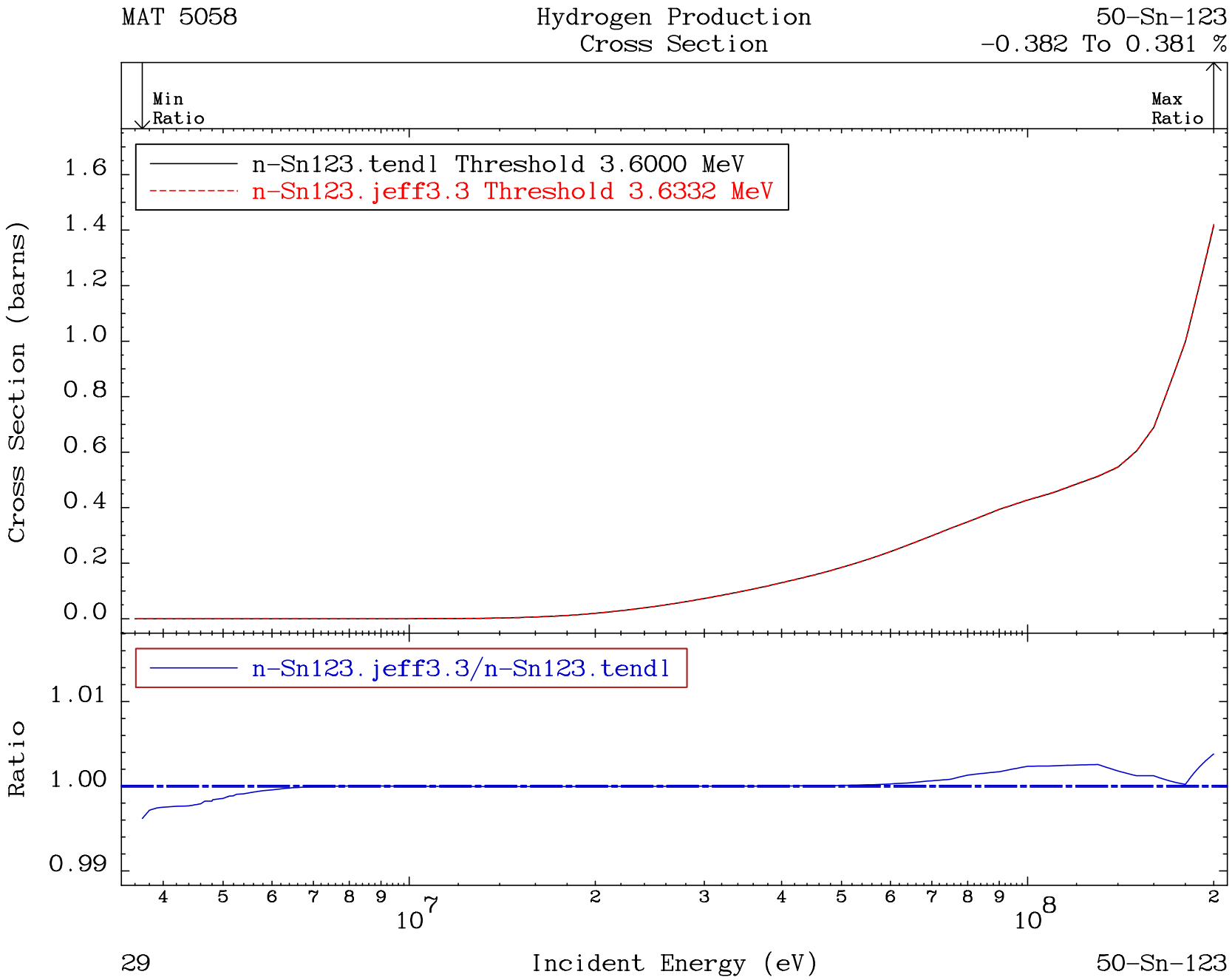

MAT 5058
(n,p)
Cross Section
50-Sn-123
-0.382 To 0.003 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 3.6331 MeV
n-Sn123.jeff3.3 Threshold 3.6331 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
50-Sn-123

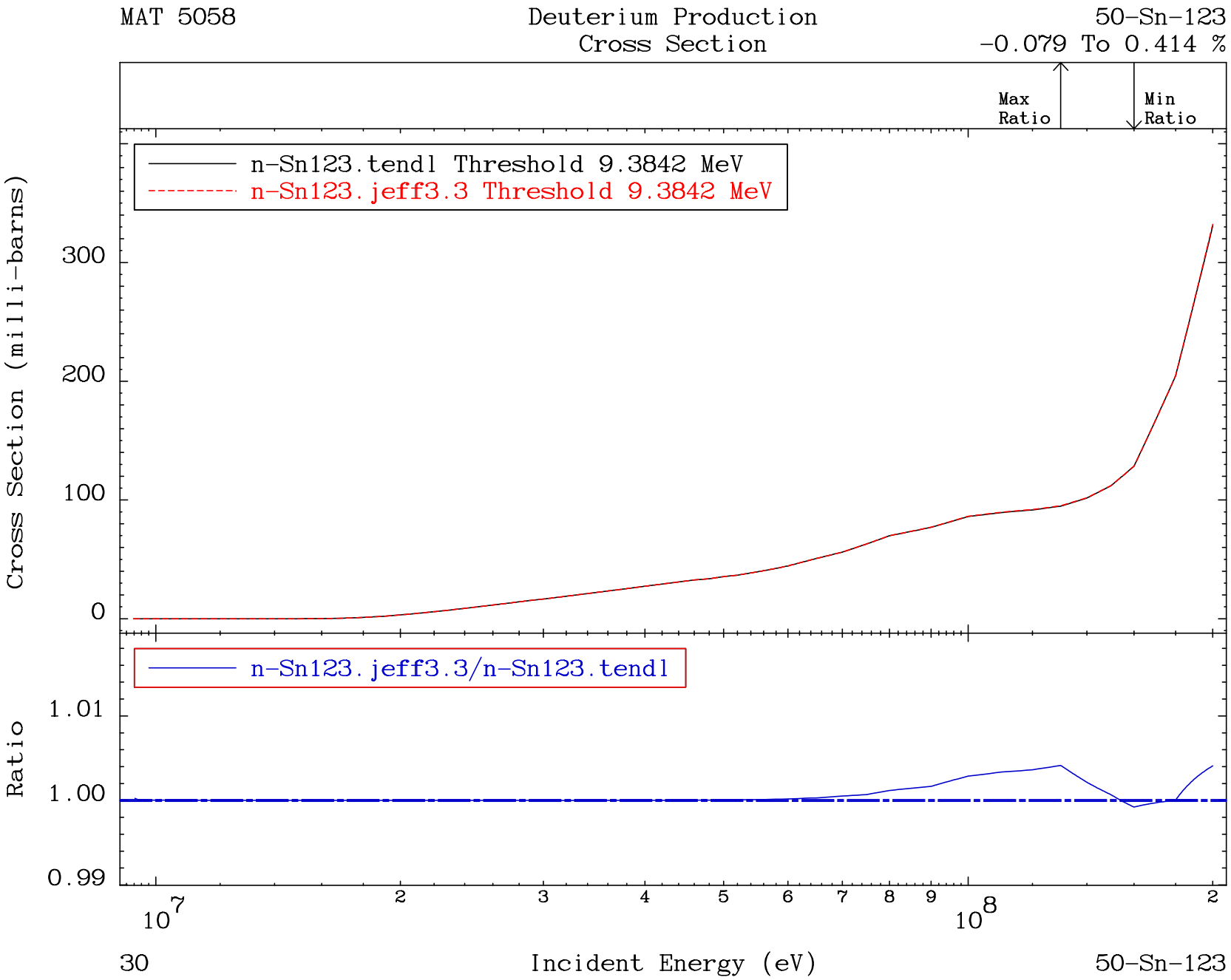

MAT 5058
(n,d)
Cross Section
50-Sn-123
0.000 To 0.024 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 9.3842 MeV
n-Sn123.jeff3.3 Threshold 9.3842 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
10^7
2
3
4
5
6
7
8
9
10^8
2
25
Incident Energy (eV)
50-Sn-123

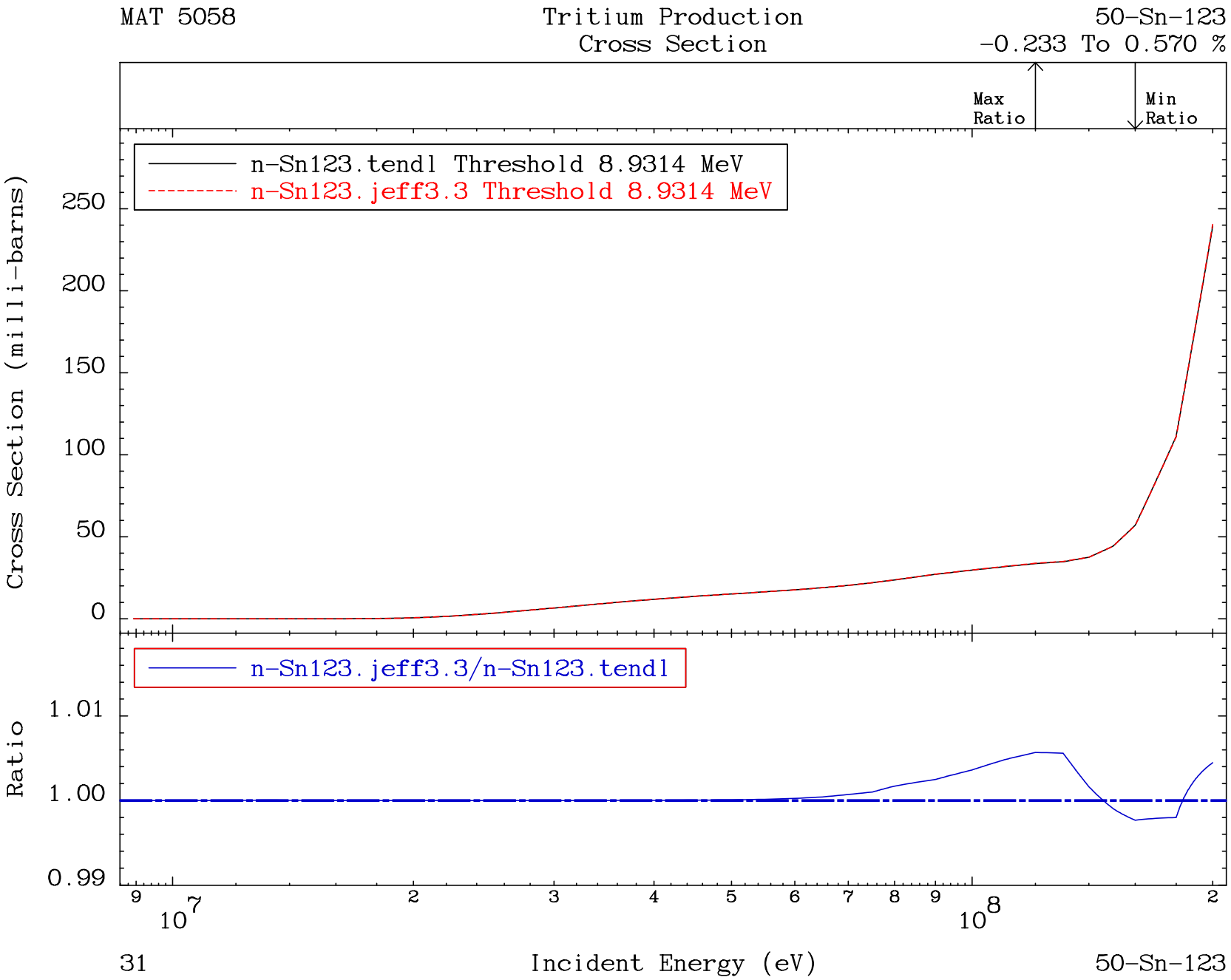

MAT 5058
(n,He-3)
Cross Section
50-Sn-123
-2.709 To 0.000 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 13.714 MeV
n-Sn123.jeff3.3 Threshold 13.714 MeV
Cross Section (micro-barns)
20
15
10
5
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.00
0.99
0.98
2
3
4
5
6
7
8
9
10^8
2
26
Incident Energy (eV)
50-Sn-123

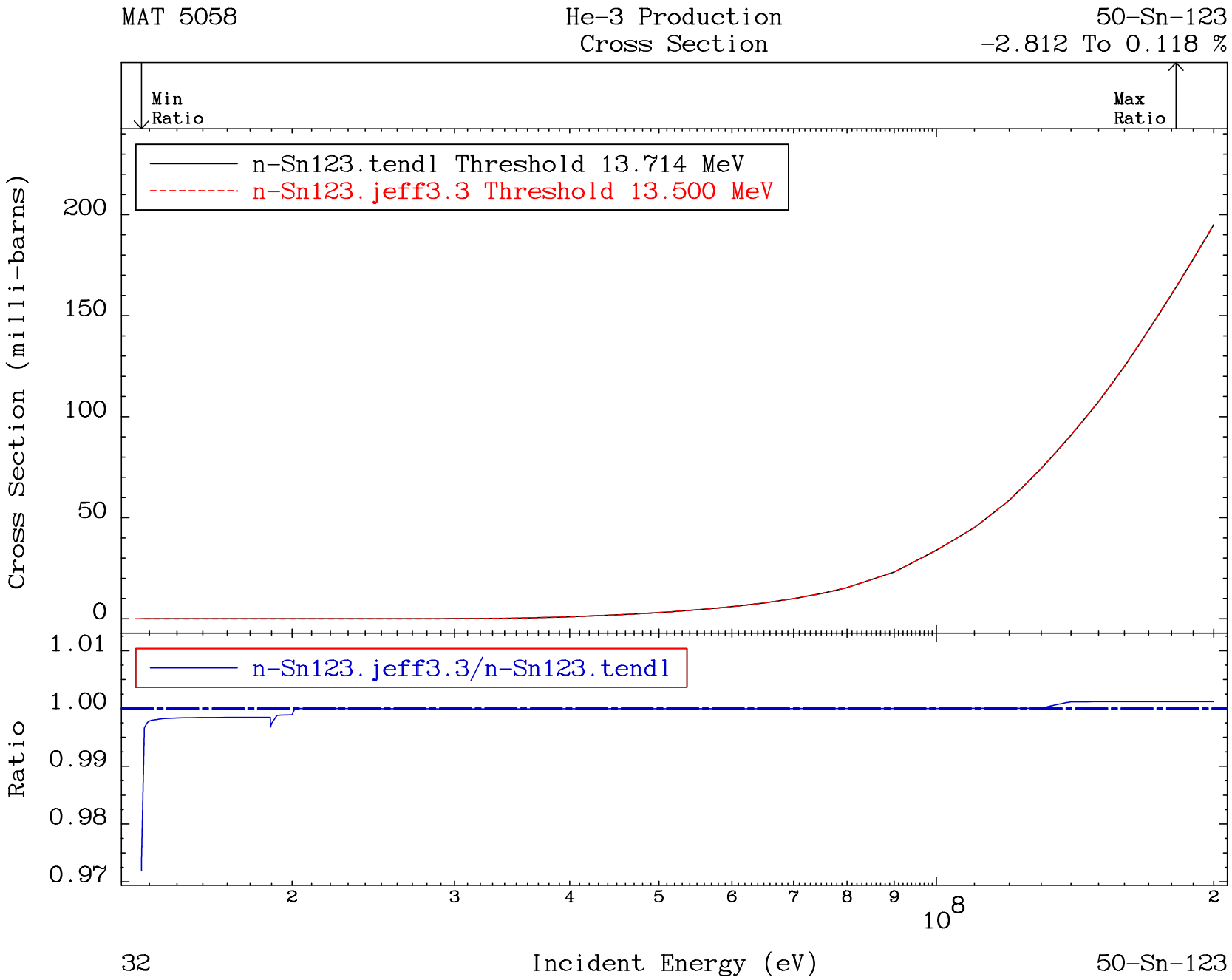

MAT 5058
(n,α)
Cross Section
50-Sn-123
-6.797 To 9999. %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 31.909 eV
n-Sn123.jeff3.3 Threshold 288.22 eV
Cross Section (milli-barns)
0
1
2
3
4
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
10^0
10^1
10^2
10^3
10^2
10^3
10^4
10^5
10^6
10^7
10^8
Incident Energy (eV)
27
50-Sn-123

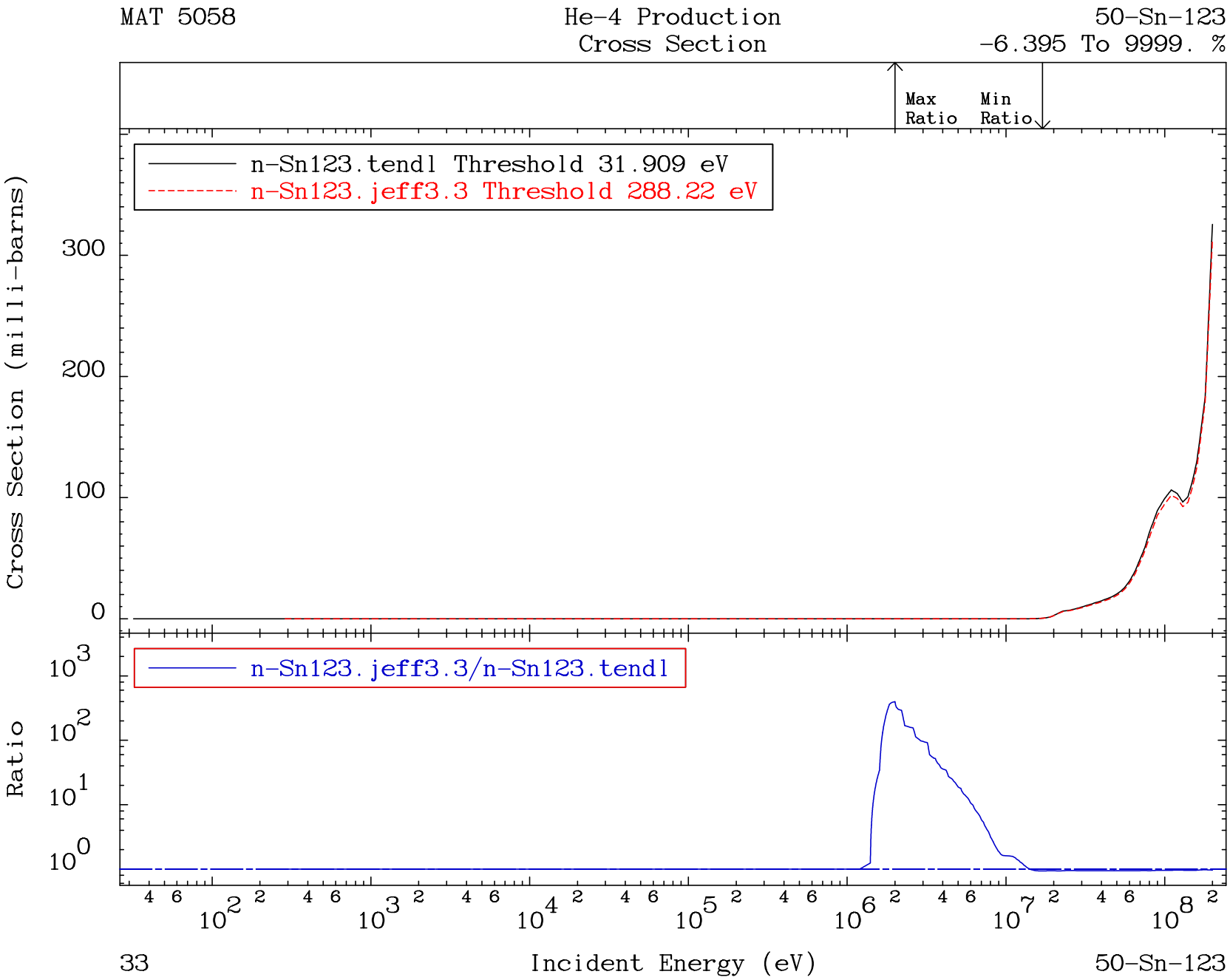

MAT 5058
(n,2p)
Cross Section
50-Sn-123
-0.413 To 0.000 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 13.823 MeV
n-Sn123.jeff3.3 Threshold 13.823 MeV
Cross Section (10^-9 barns)
200
150
100
50
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
28
Incident Energy (eV)
50-Sn-123

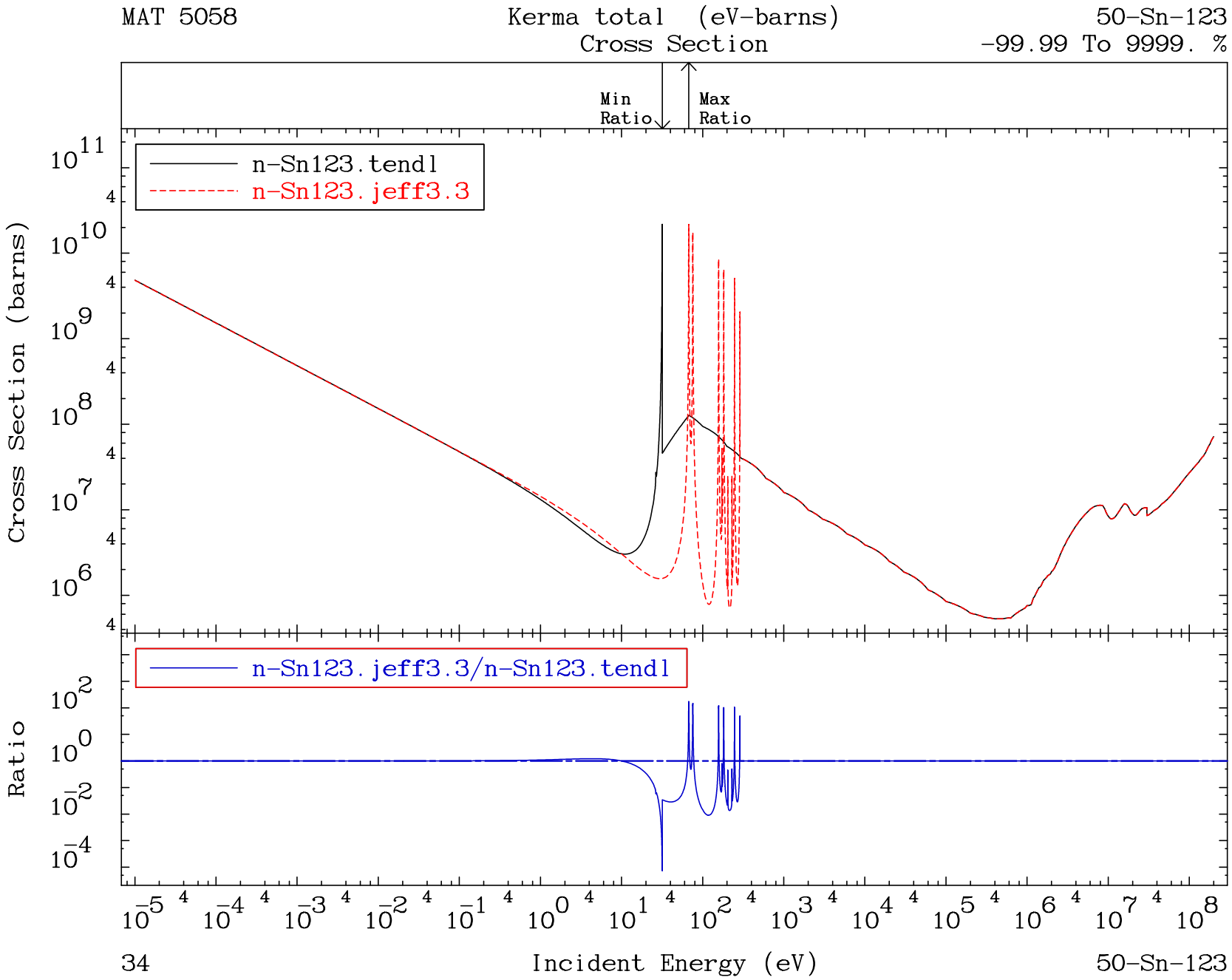

MAT 5058
Hydrogen Production
Cross Section
50-Sn-123
-0.382 To 0.381 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 3.6000 MeV
n-Sn123.jeff3.3 Threshold 3.6332 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
50-Sn-123

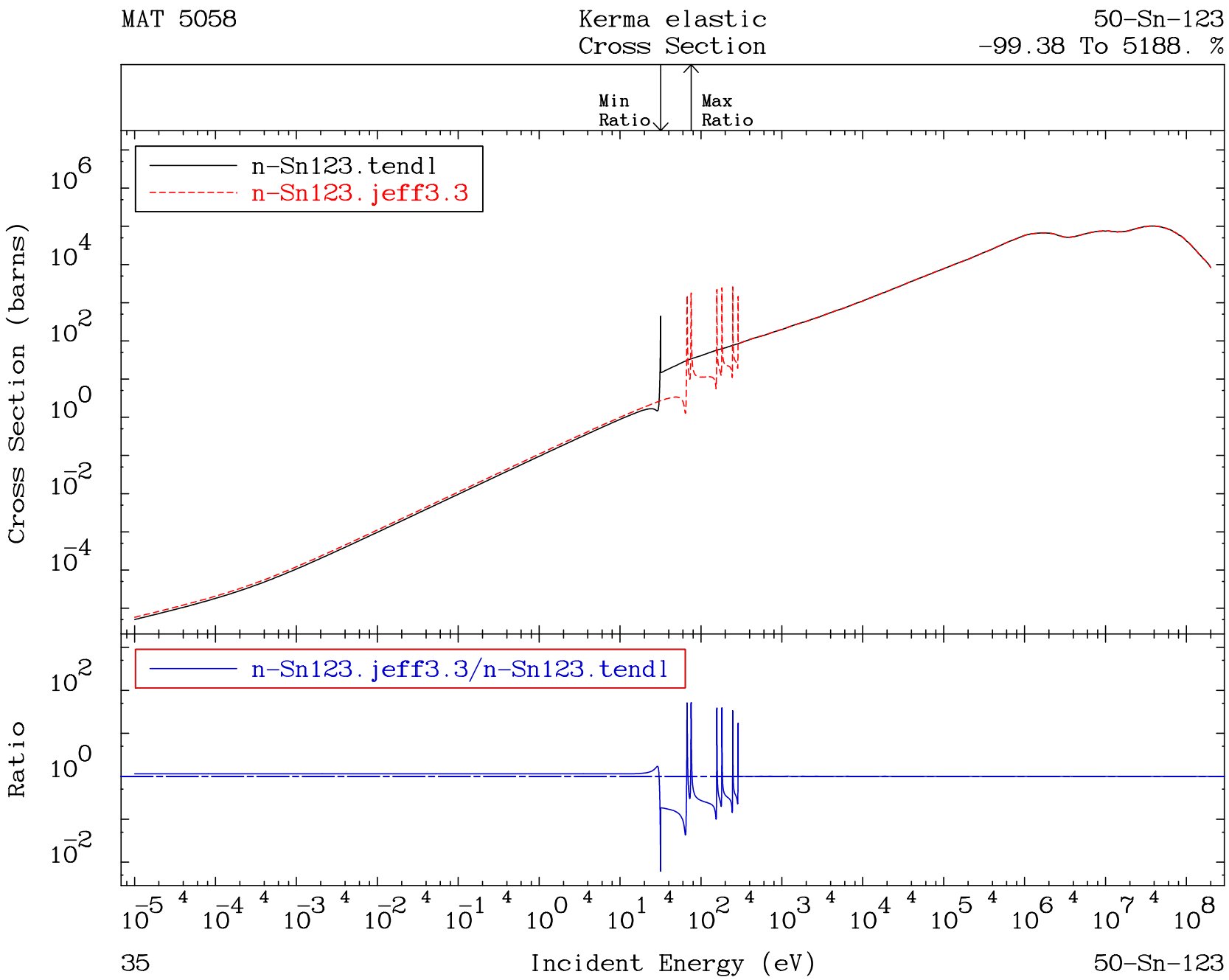

MAT 5058
Deuterium Production
Cross Section
50-Sn-123
-0.079 To 0.414 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 9.3842 MeV
n-Sn123.jeff3.3 Threshold 9.3842 MeV
Cross Section (milli-barns)
300
200
100
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
10^7
2
3
4
5
6
7
8
9
10^8
2
30
Incident Energy (eV)
50-Sn-123

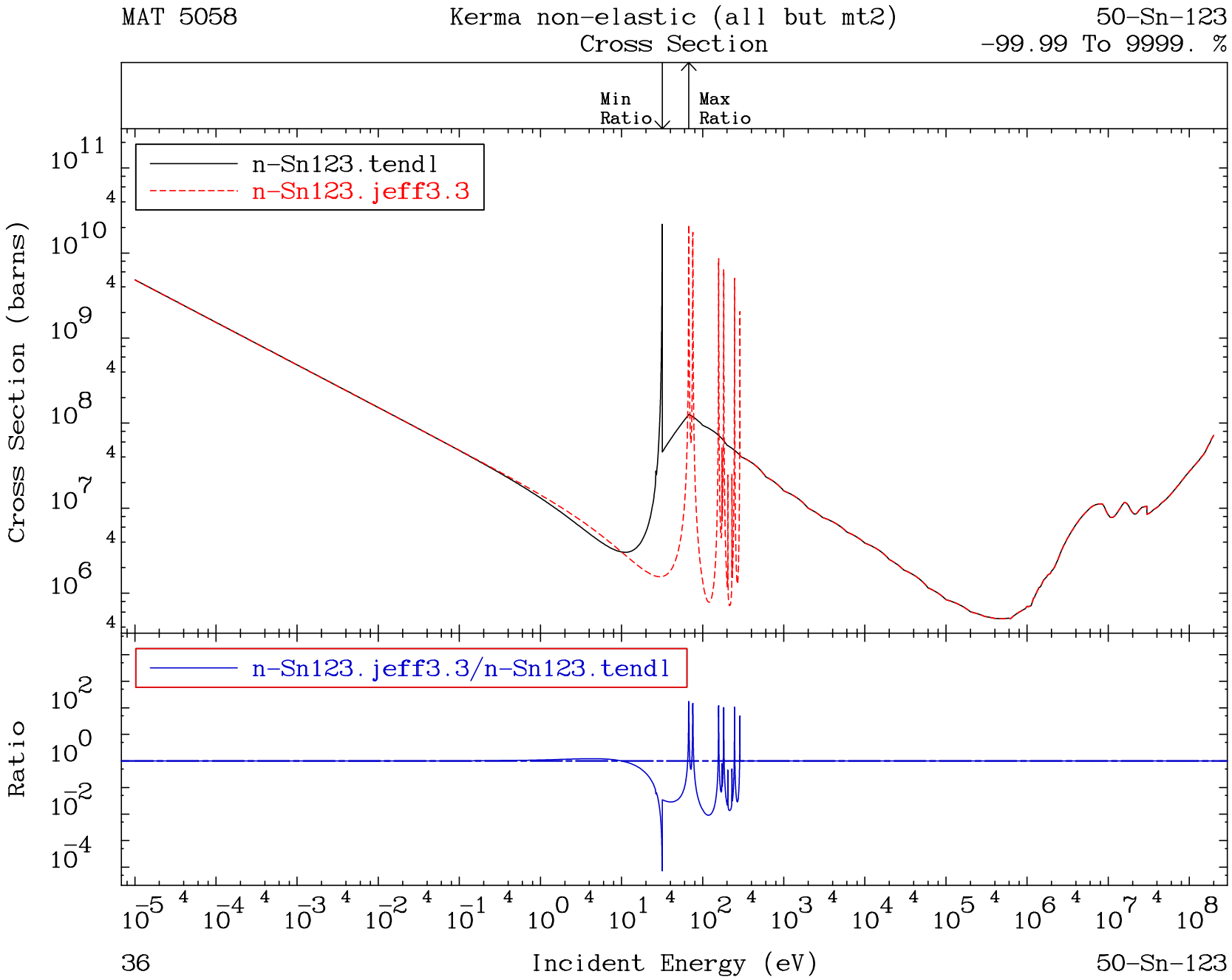

MAT 5058
Tritium Production
Cross Section
50-Sn-123
-0.233 To 0.570 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 8.9314 MeV
n-Sn123.jeff3.3 Threshold 8.9314 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
31
Incident Energy (eV)
50-Sn-123

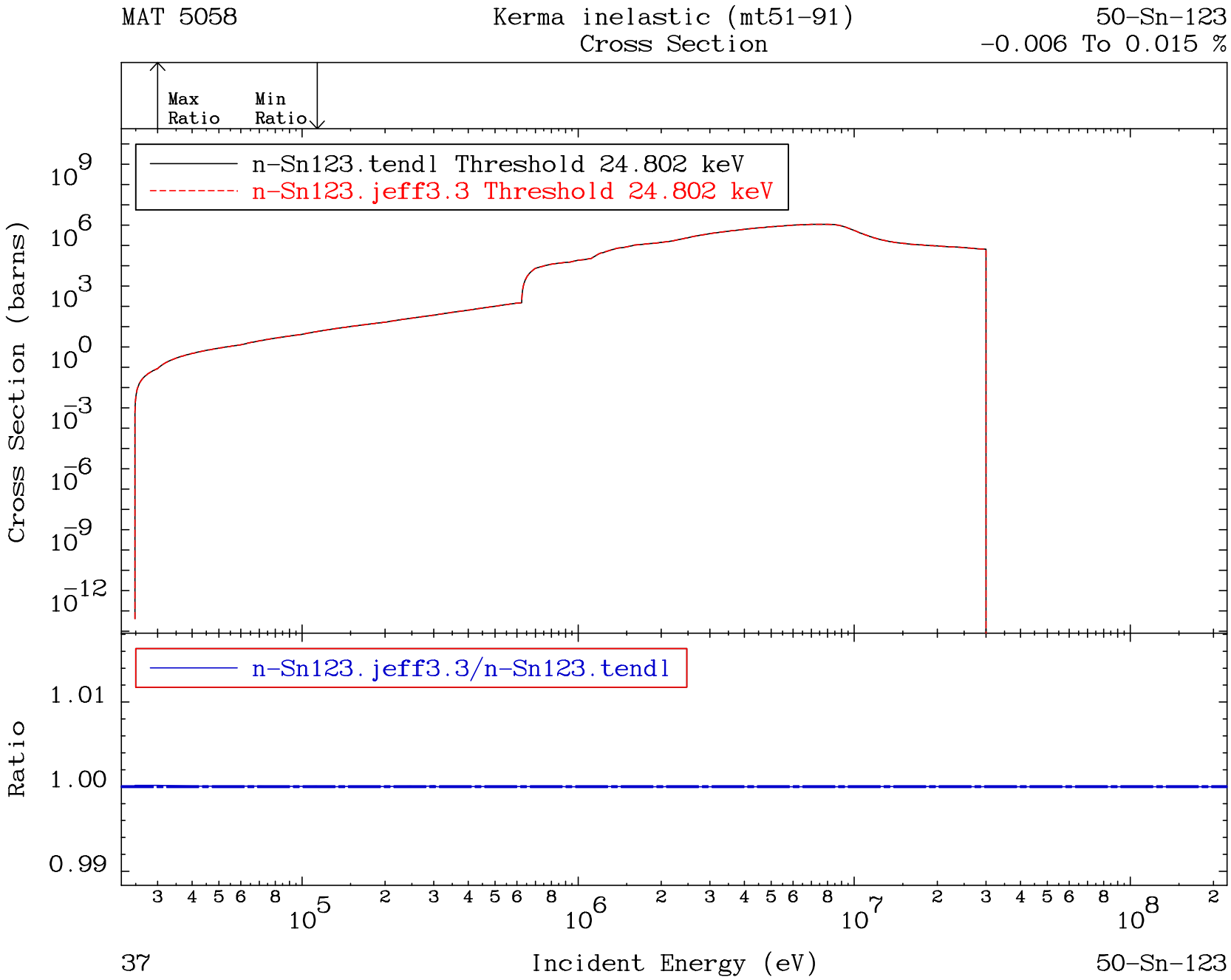

MAT 5058
He-3 Production
Cross Section
50-Sn-123
-2.812 To 0.118 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 13.714 MeV
n-Sn123.jeff3.3 Threshold 13.500 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
0.98
0.97
2
3
4
5
6
7
8
9
10^8
2
32
Incident Energy (eV)
50-Sn-123

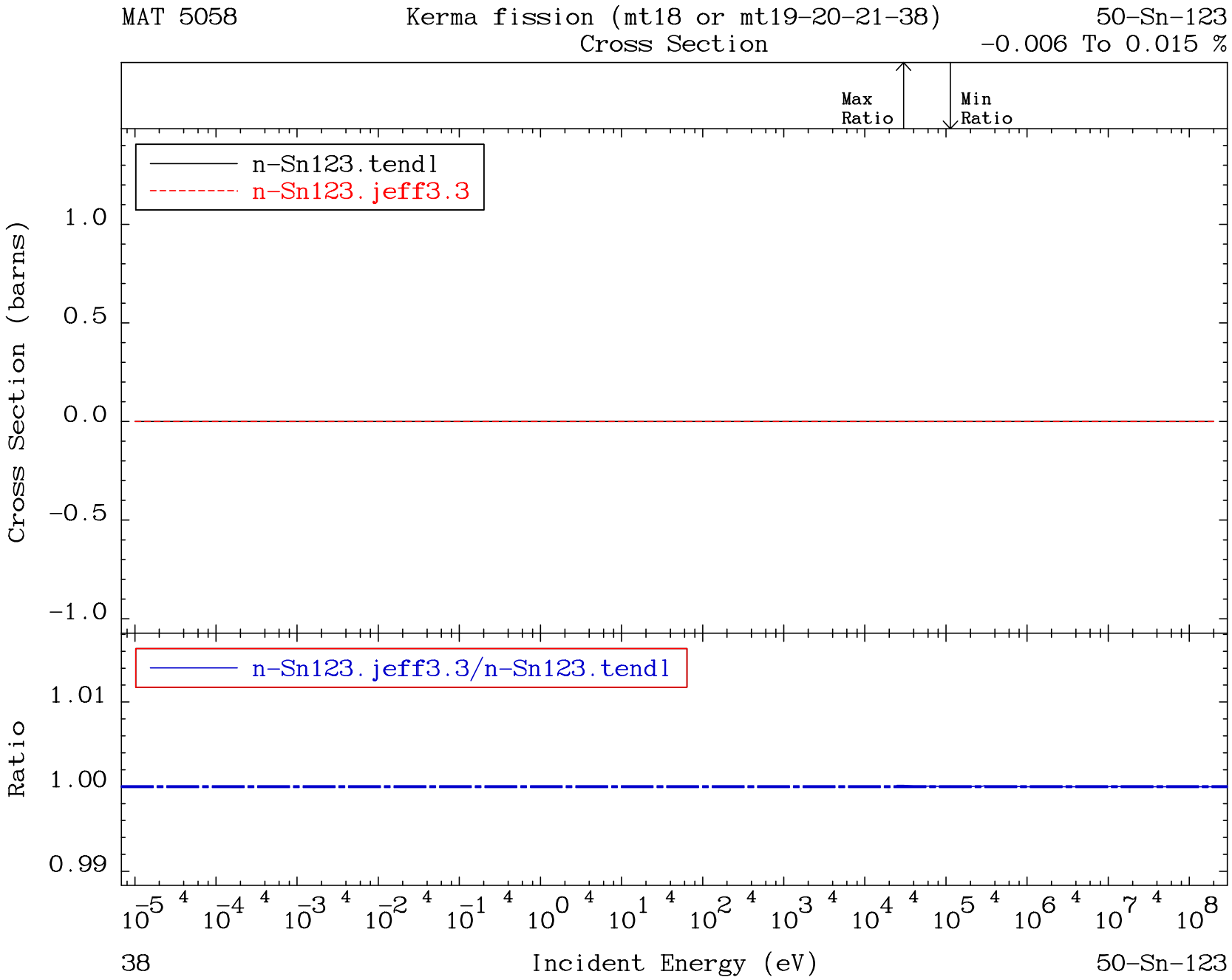

MAT 5058
He-4 Production
Cross Section
50-Sn-123
-6.395 To 9999. %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 31.909 eV
n-Sn123.jeff3.3 Threshold 288.22 eV
Cross Section (milli-barns)
300
200
100
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
10^3
10^2
10^1
10^0
4 6 10^2 2 4 6 10^3 2 4 6 10^4 2 4 6 10^5 2 4 6 10^6 2 4 6 10^7 2 4 6 10^8 2
33
Incident Energy (eV)
50-Sn-123

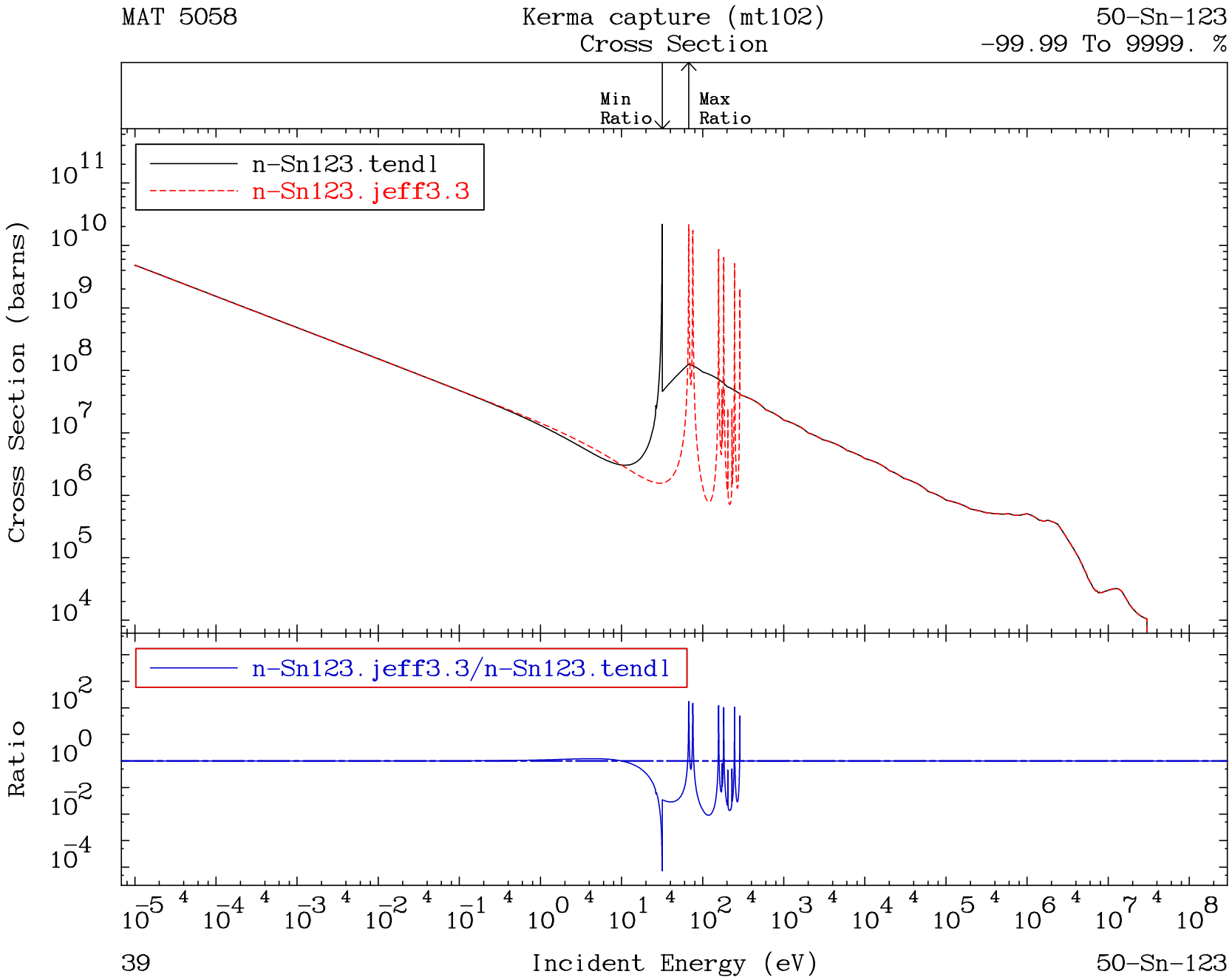

MAT 5058
Kerma total (eV-barns)
Cross Section
50-Sn-123
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
34
Incident Energy (eV)
50-Sn-123

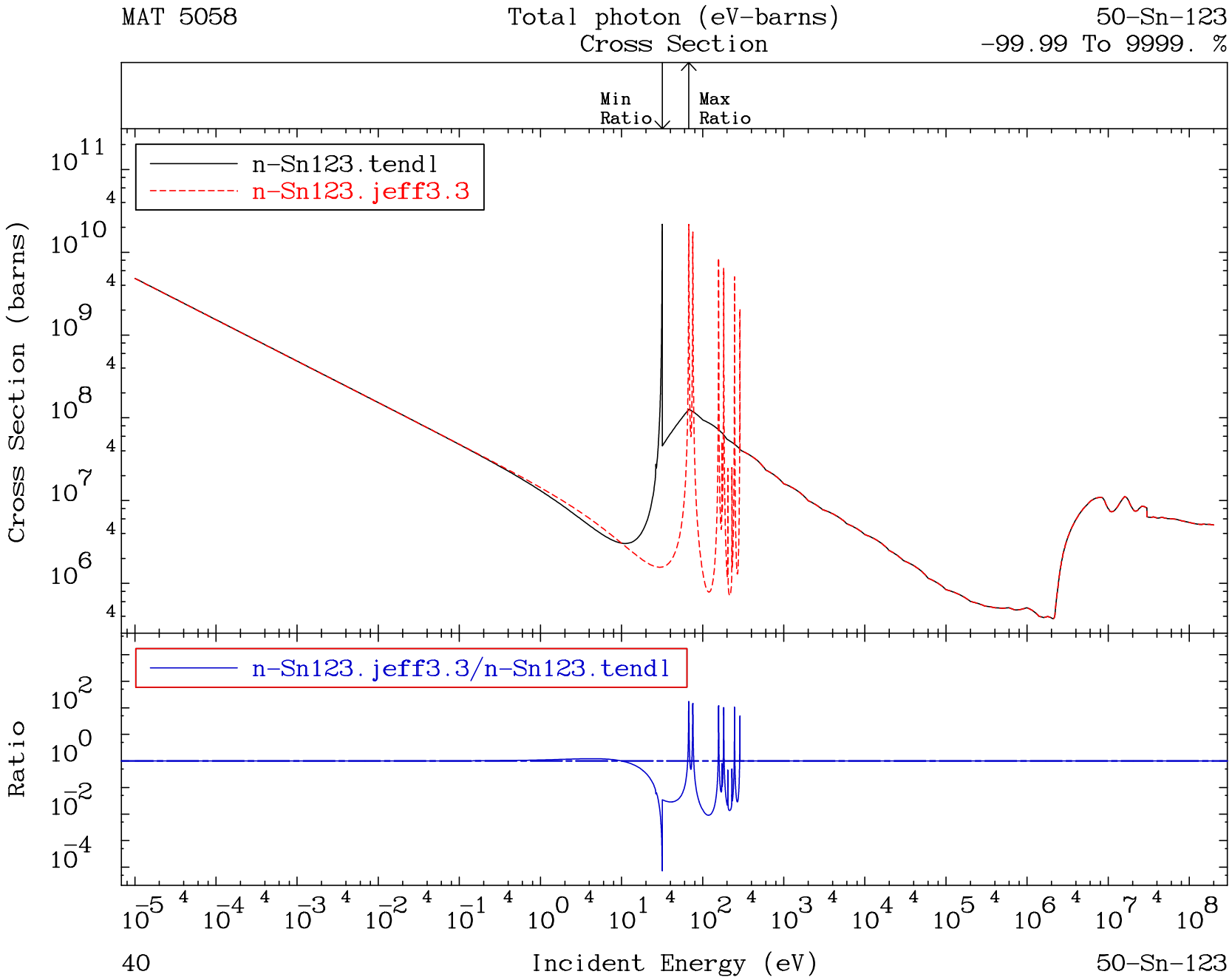

MAT 5058
Kerma elastic
Cross Section
50-Sn-123
-99.38 To 5188. %
Min
Ratio
Max
Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
Incident Energy (eV)
35
50-Sn-123

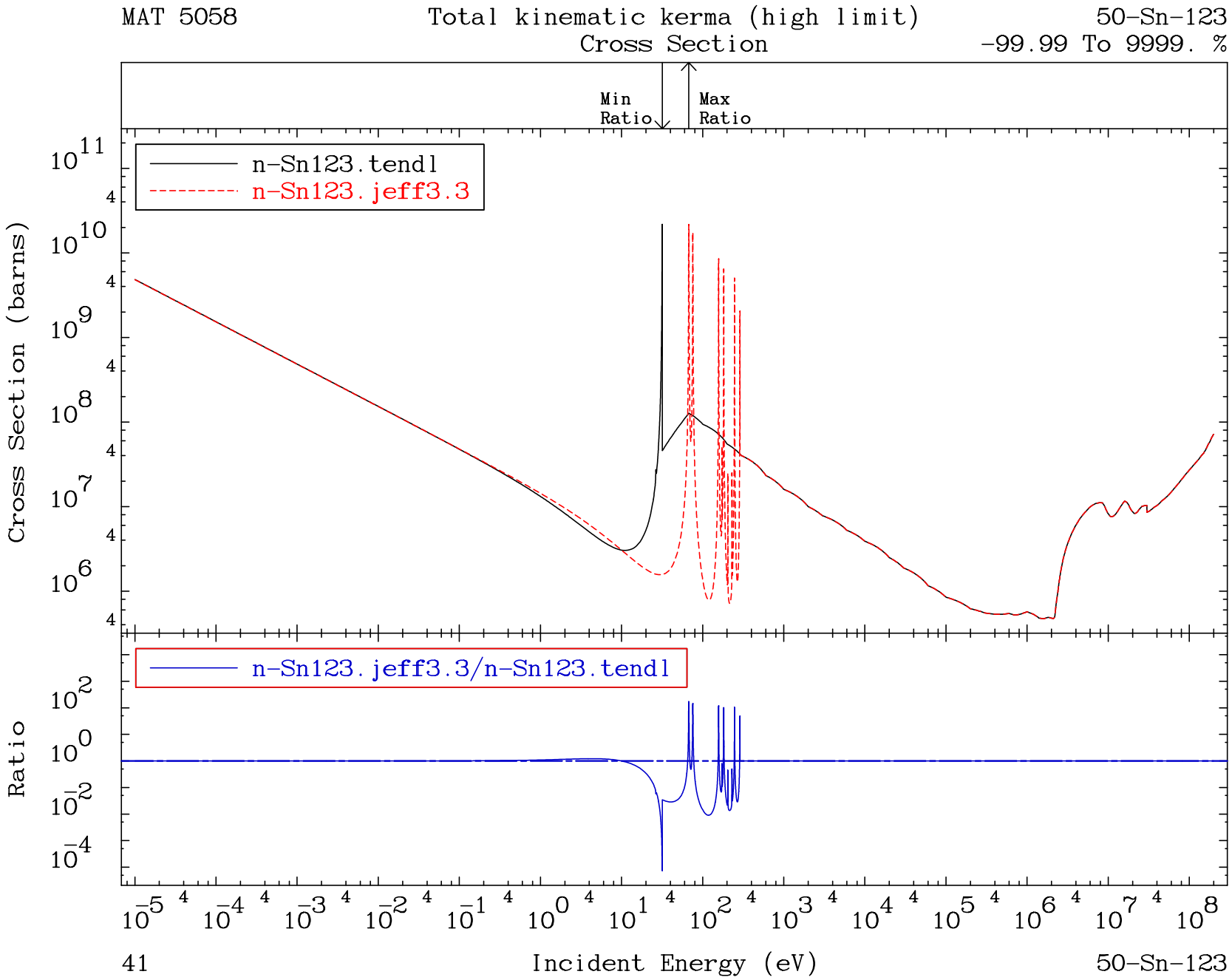

MAT 5058
Kerma non-elastic (all but mt2)
Cross Section
50-Sn-123
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
36
Incident Energy (eV)
50-Sn-123

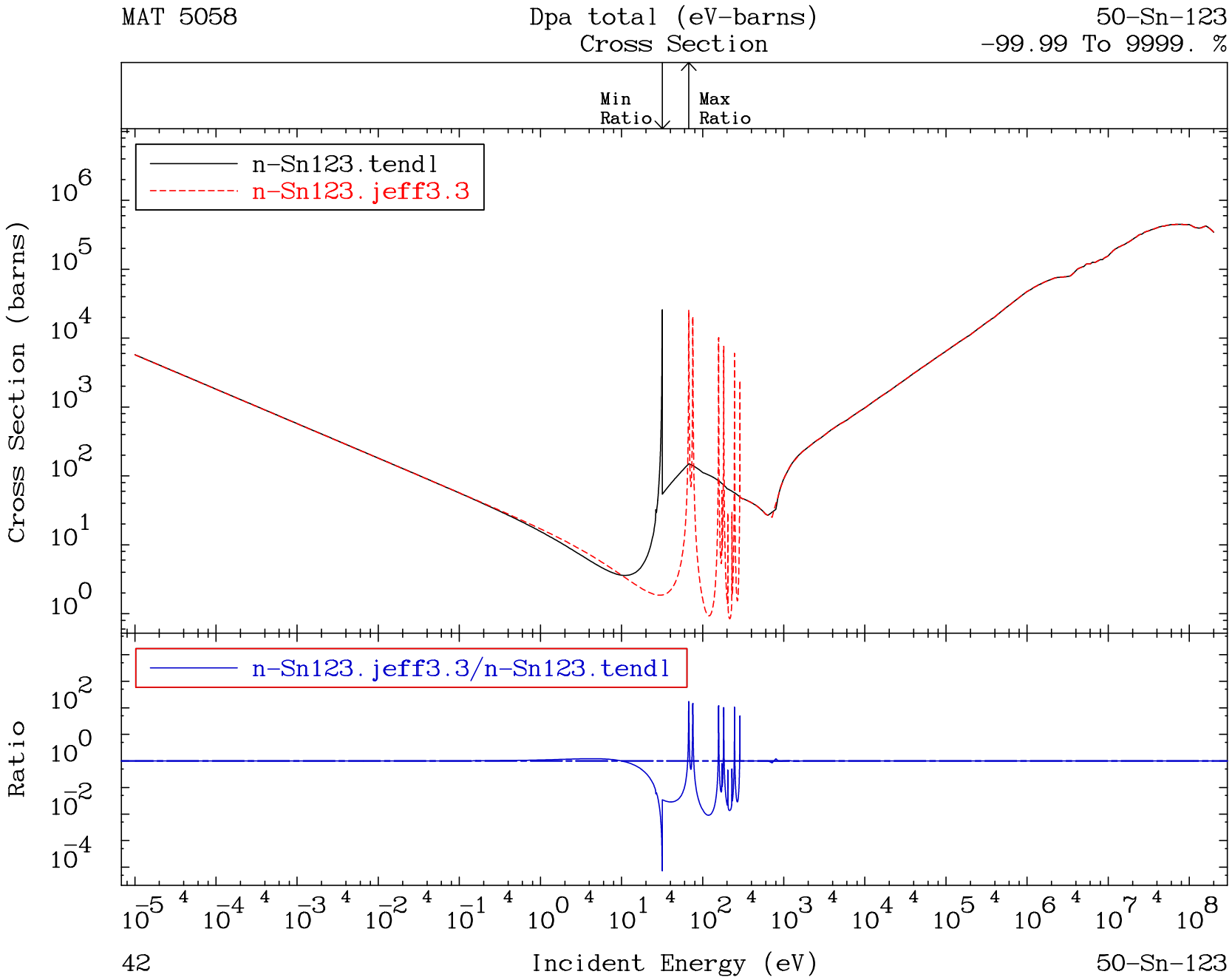

MAT 5058
Kerma inelastic (mt51-91)
Cross Section
50-Sn-123
-0.006 To 0.015 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 24.802 keV
n-Sn123.jeff3.3 Threshold 24.802 keV
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
Incident Energy (eV)
37
50-Sn-123

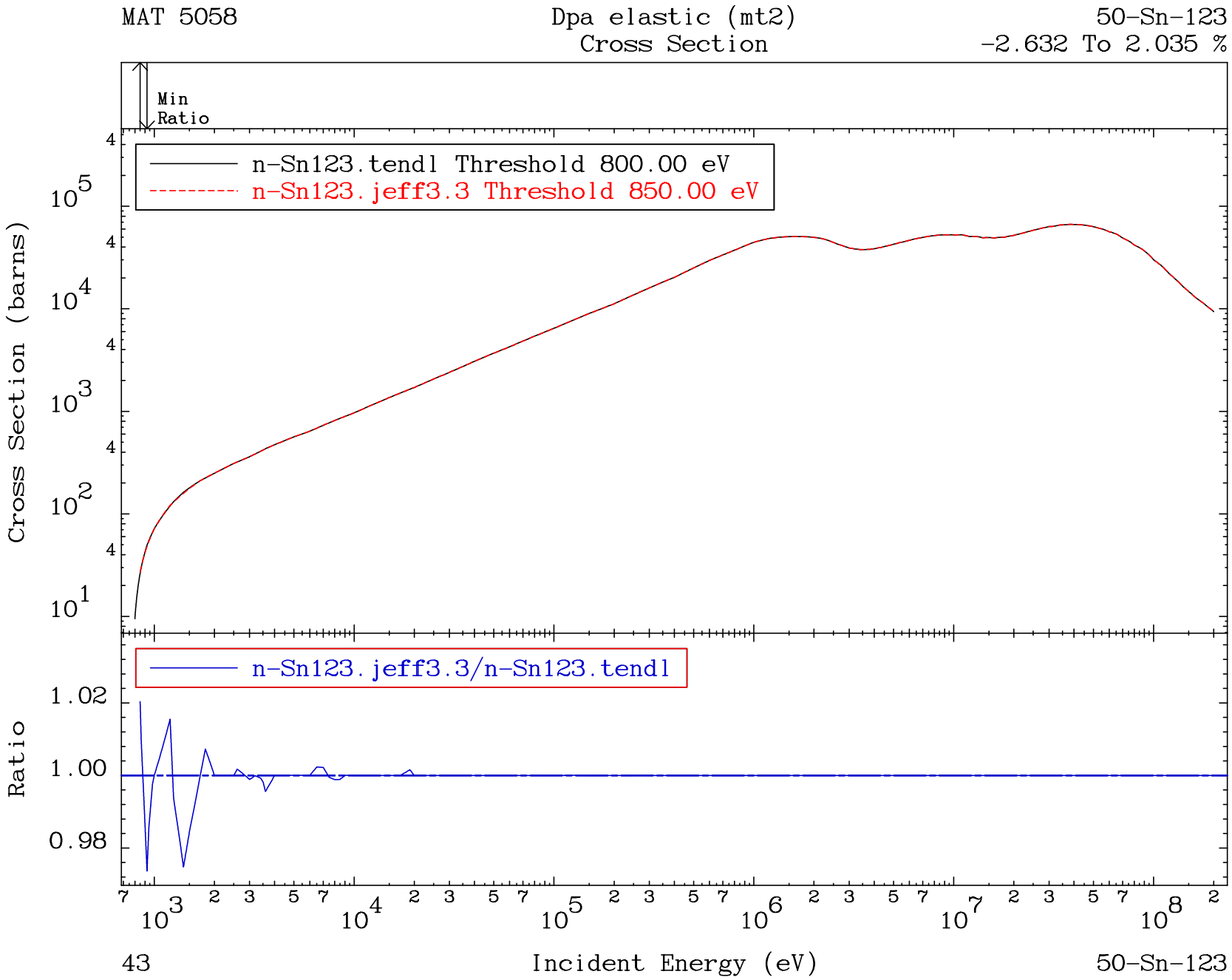

MAT 5058
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
50-Sn-123
-0.006 To 0.015 %
Max Ratio
Min Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
38
Incident Energy (eV)
50-Sn-123

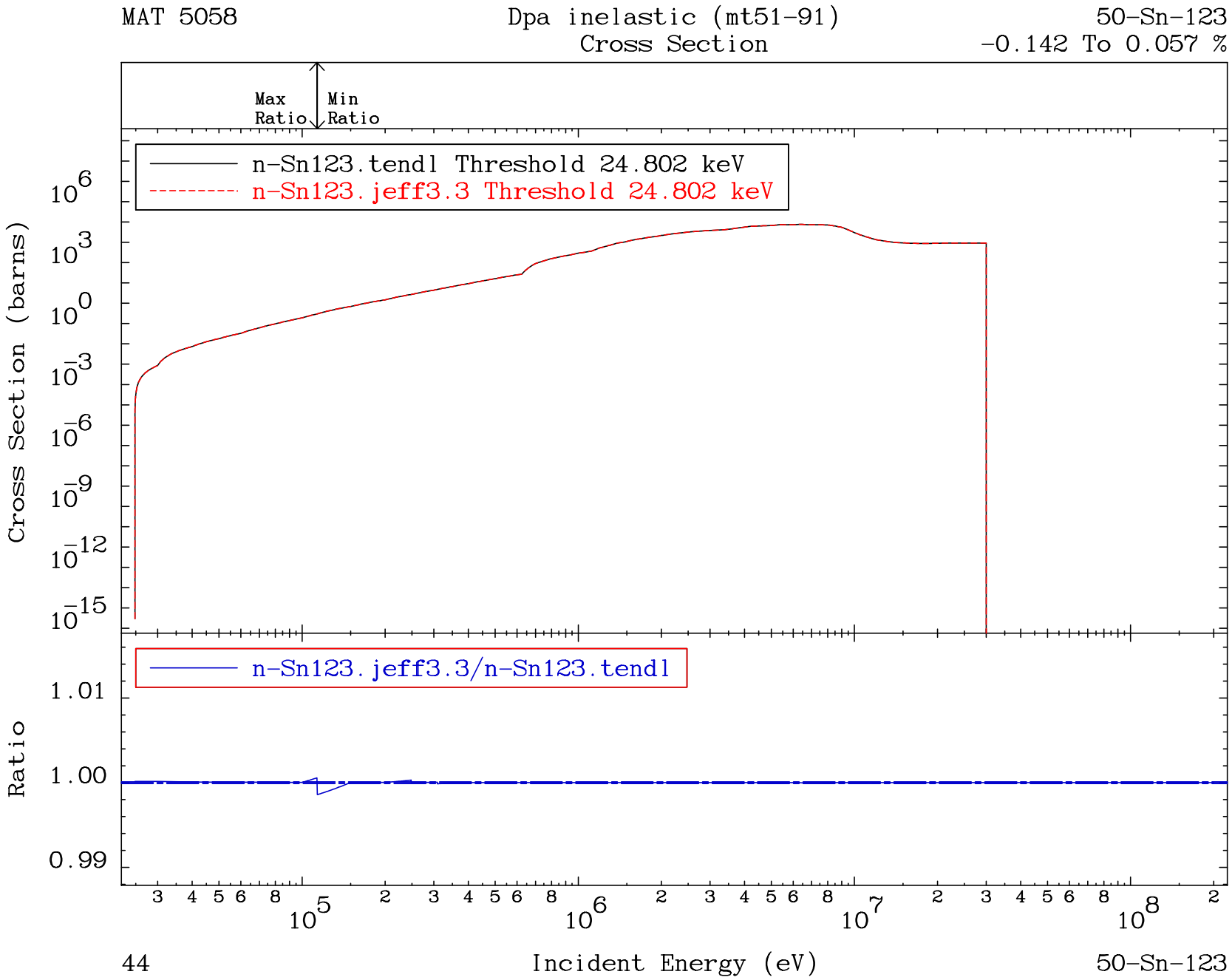

MAT 5058
Kerma capture (mt102)
Cross Section
50-Sn-123
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
39
Incident Energy (eV)
50-Sn-123

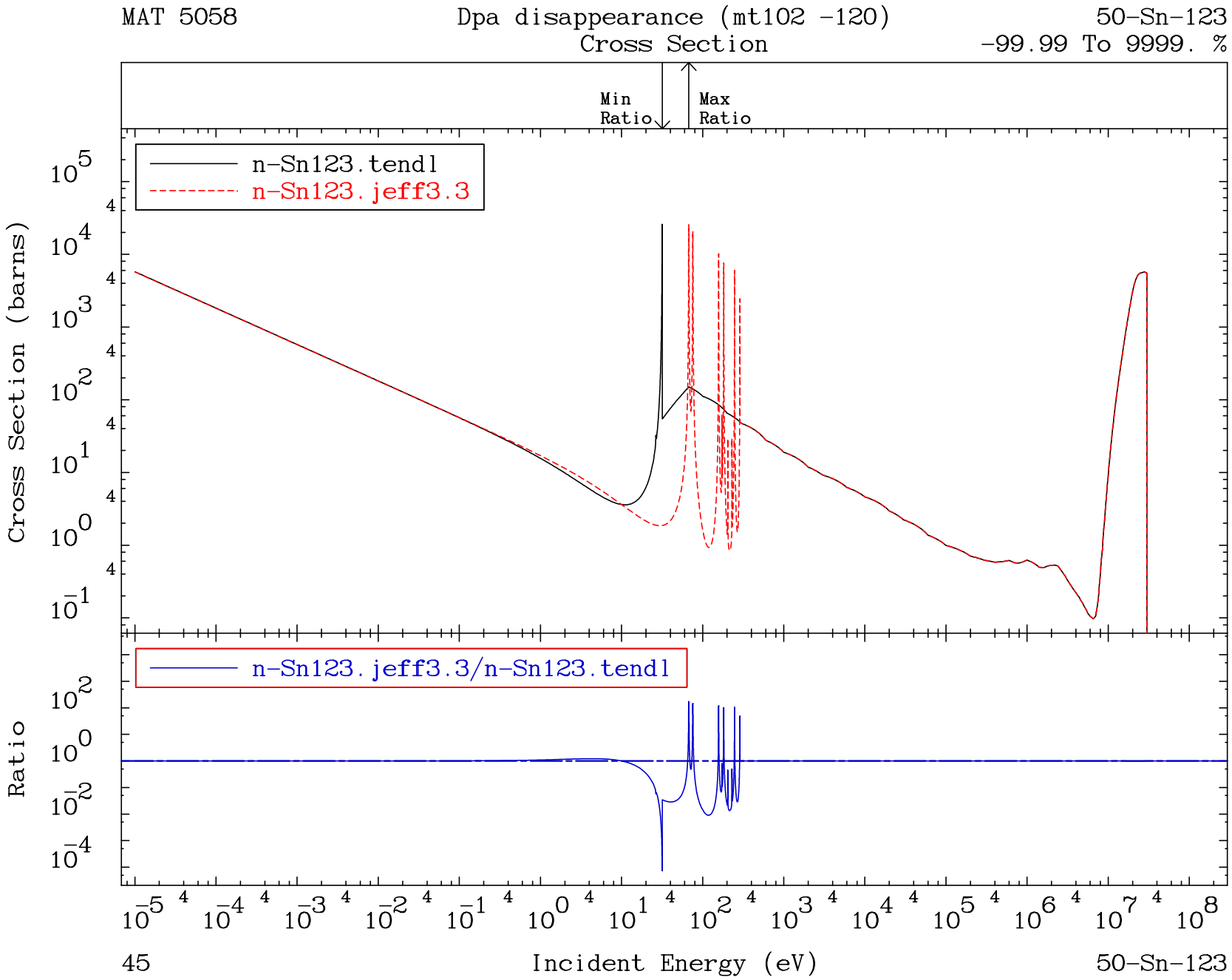

MAT 5058
Total photon (eV-barns)
Cross Section
50-Sn-123
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
Incident Energy (eV)
40
50-Sn-123

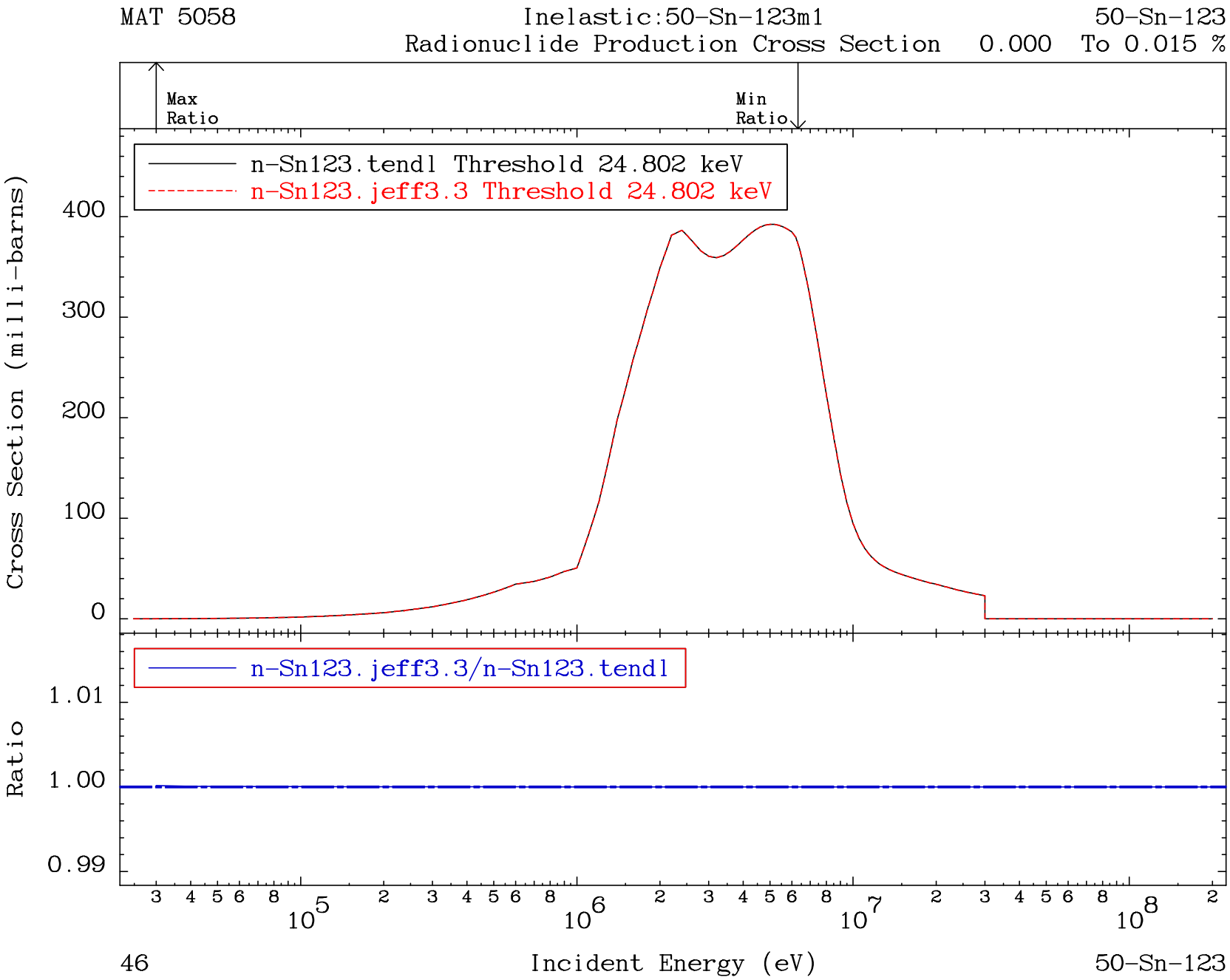

MAT 5058
Total kinematic kerma (high limit)
Cross Section
50-Sn-123
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
41
Incident Energy (eV)
50-Sn-123

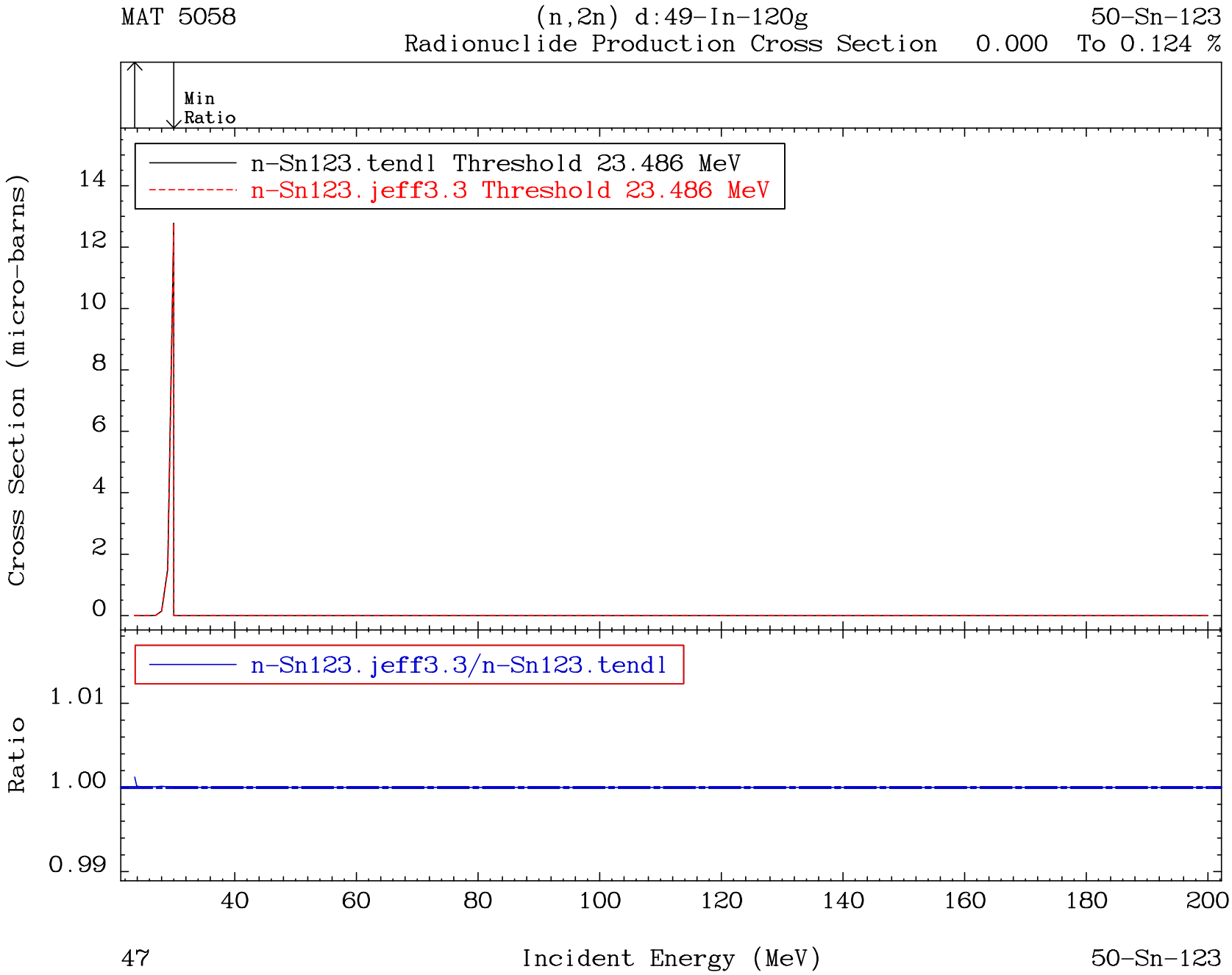

MAT 5058
Dpa total (eV-barns)
Cross Section
50-Sn-123
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
Incident Energy (eV)
42
50-Sn-123

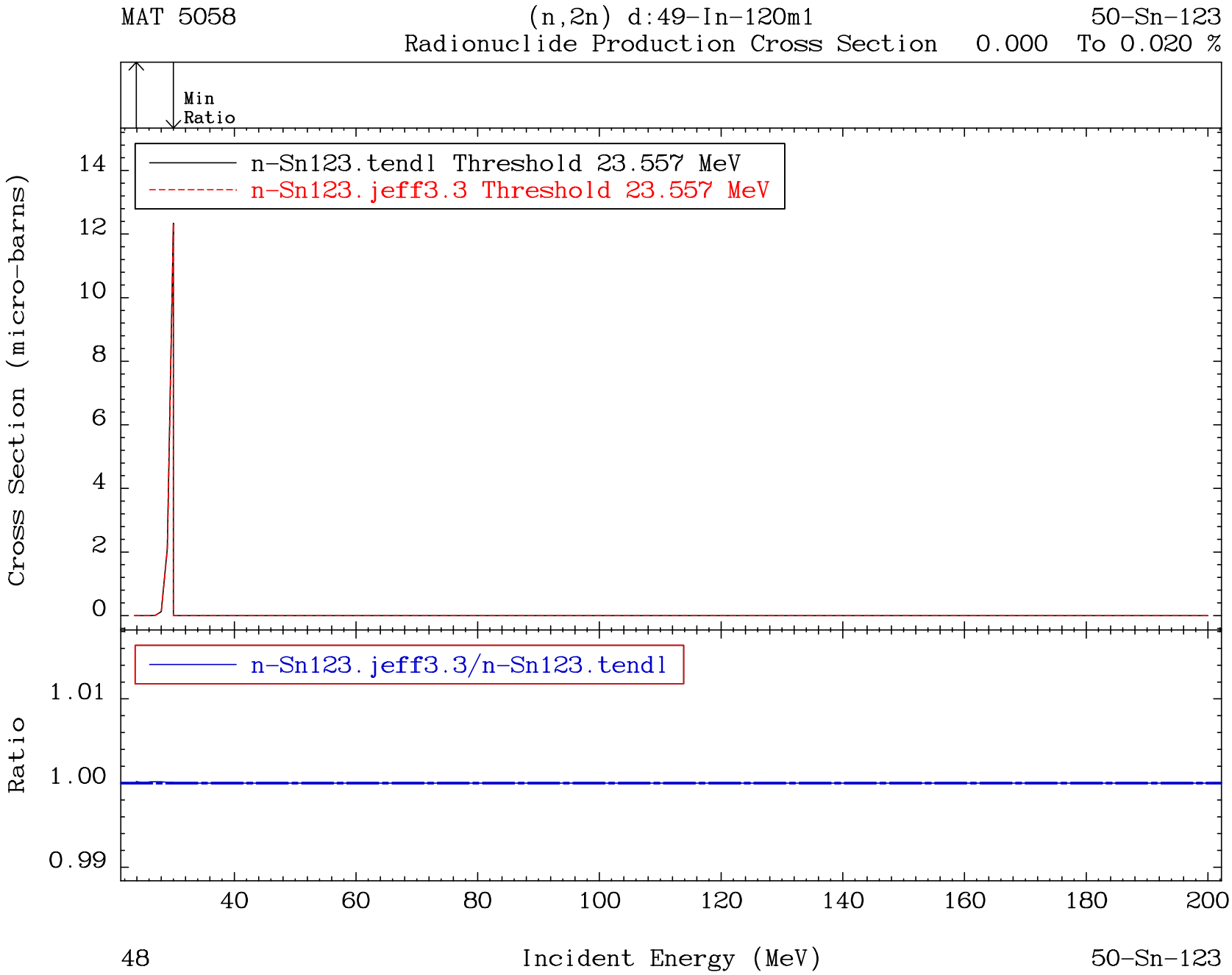

MAT 5058
Dpa elastic (mt2)
Cross Section
50-Sn-123
-2.632 To 2.035 %
Min
Ratio
n-Sn123.tendl Threshold 800.00 eV
n-Sn123.jeff3.3 Threshold 850.00 eV
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
Incident Energy (eV)
43
50-Sn-123

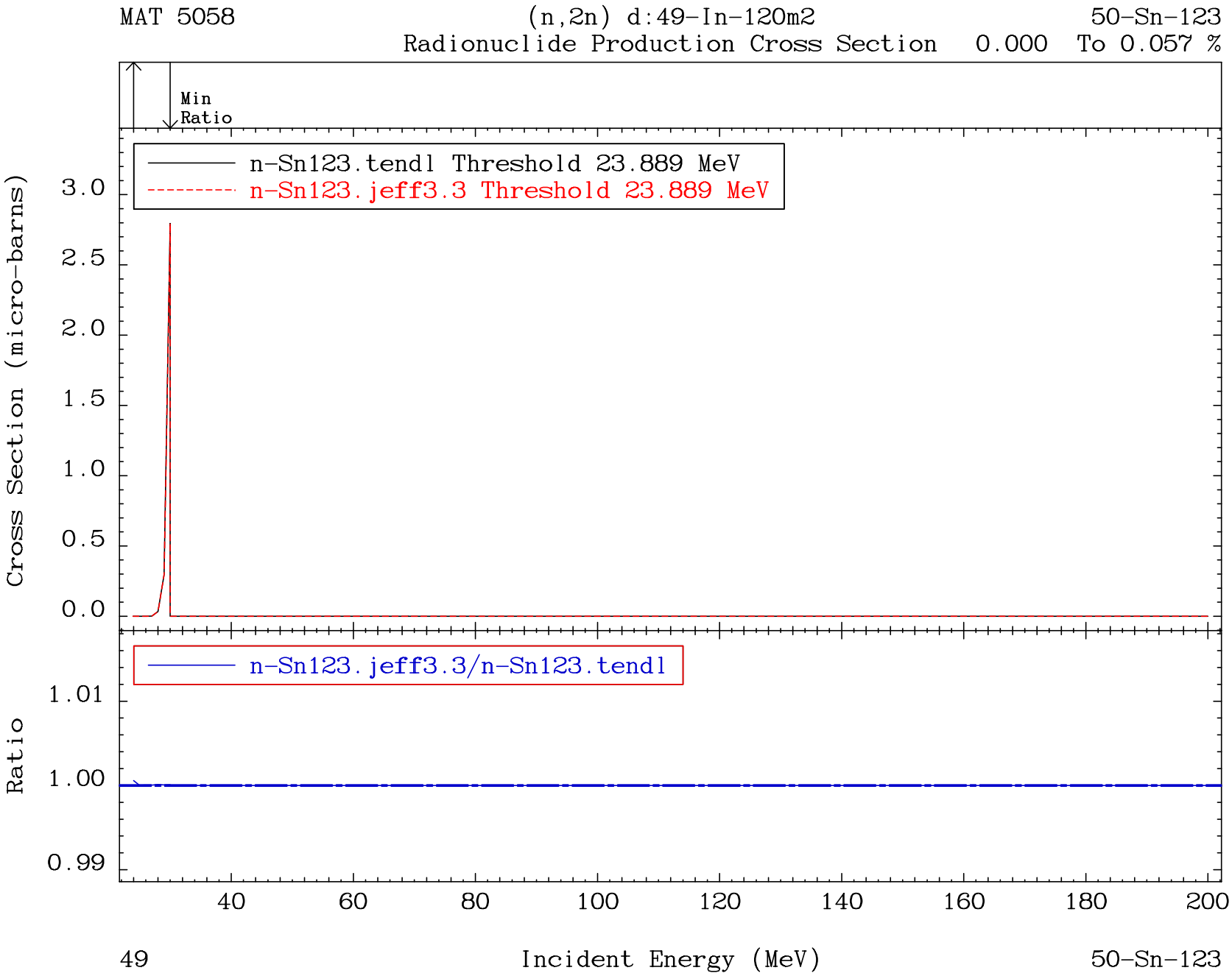

MAT 5058
Dpa inelastic (mt51-91)
Cross Section
50-Sn-123
-0.142 To 0.057 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 24.802 keV
n-Sn123.jeff3.3 Threshold 24.802 keV
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
Incident Energy (eV)
44
50-Sn-123

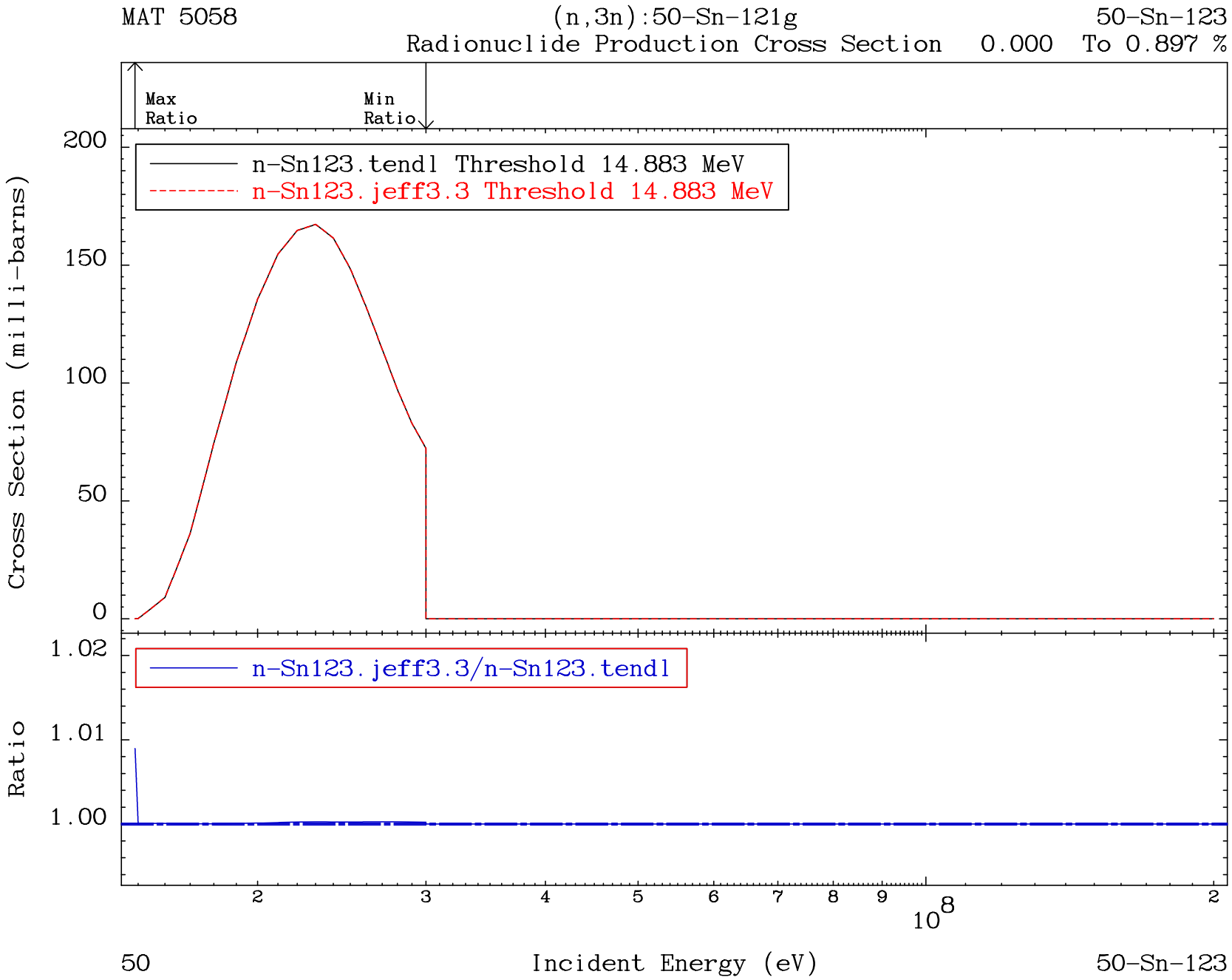

MAT 5058
Dpa disappearance (mt102 -120)
Cross Section
50-Sn-123
-99.99 To 9999. %
Min Ratio
Max Ratio
n-Sn123.tendl
n-Sn123.jeff3.3
Cross Section (barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
Incident Energy (eV)
45
50-Sn-123

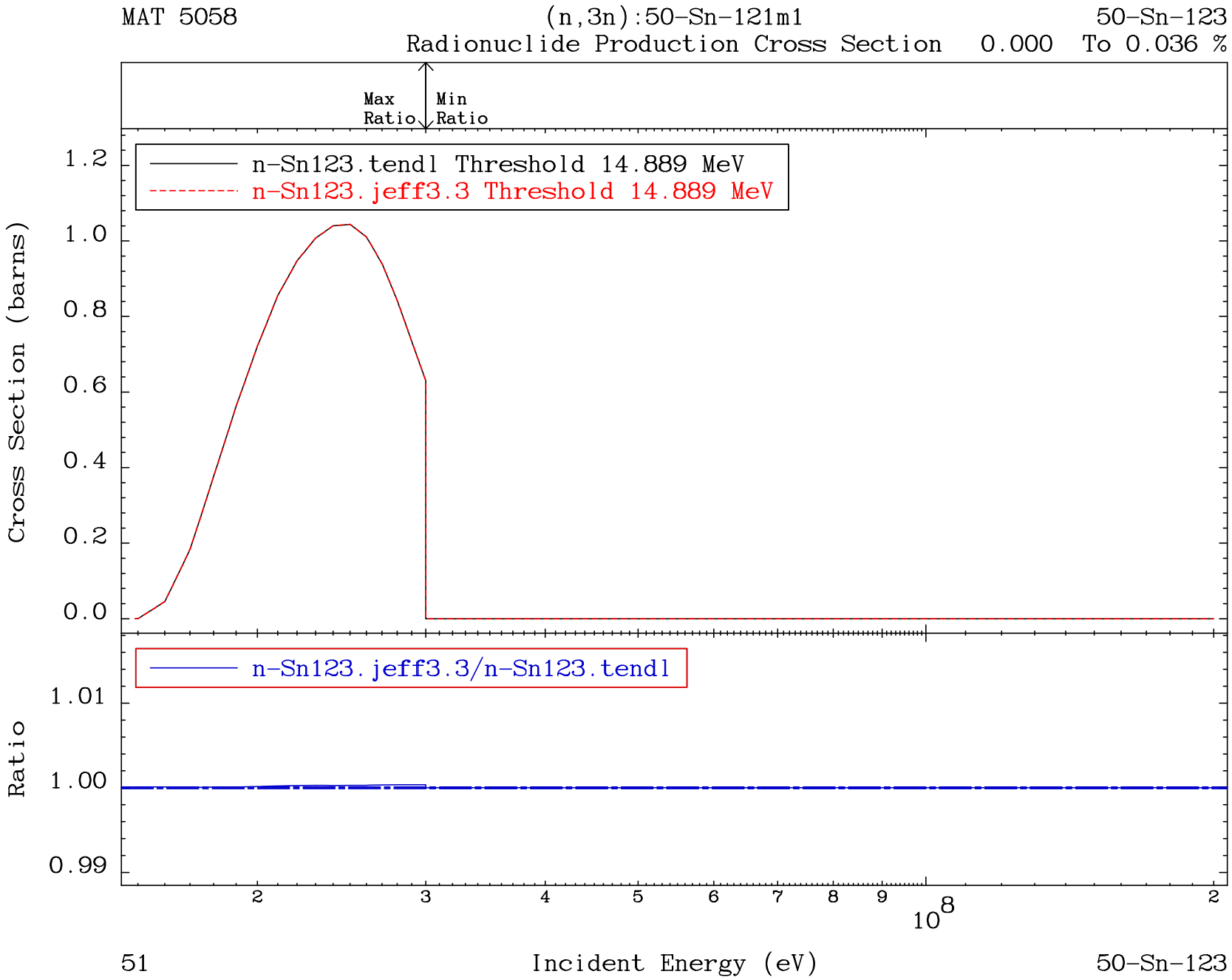

MAT 5058
Inelastic:50-Sn-123m1
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.015 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 24.802 keV
n-Sn123.jeff3.3 Threshold 24.802 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
46
Incident Energy (eV)
50-Sn-123

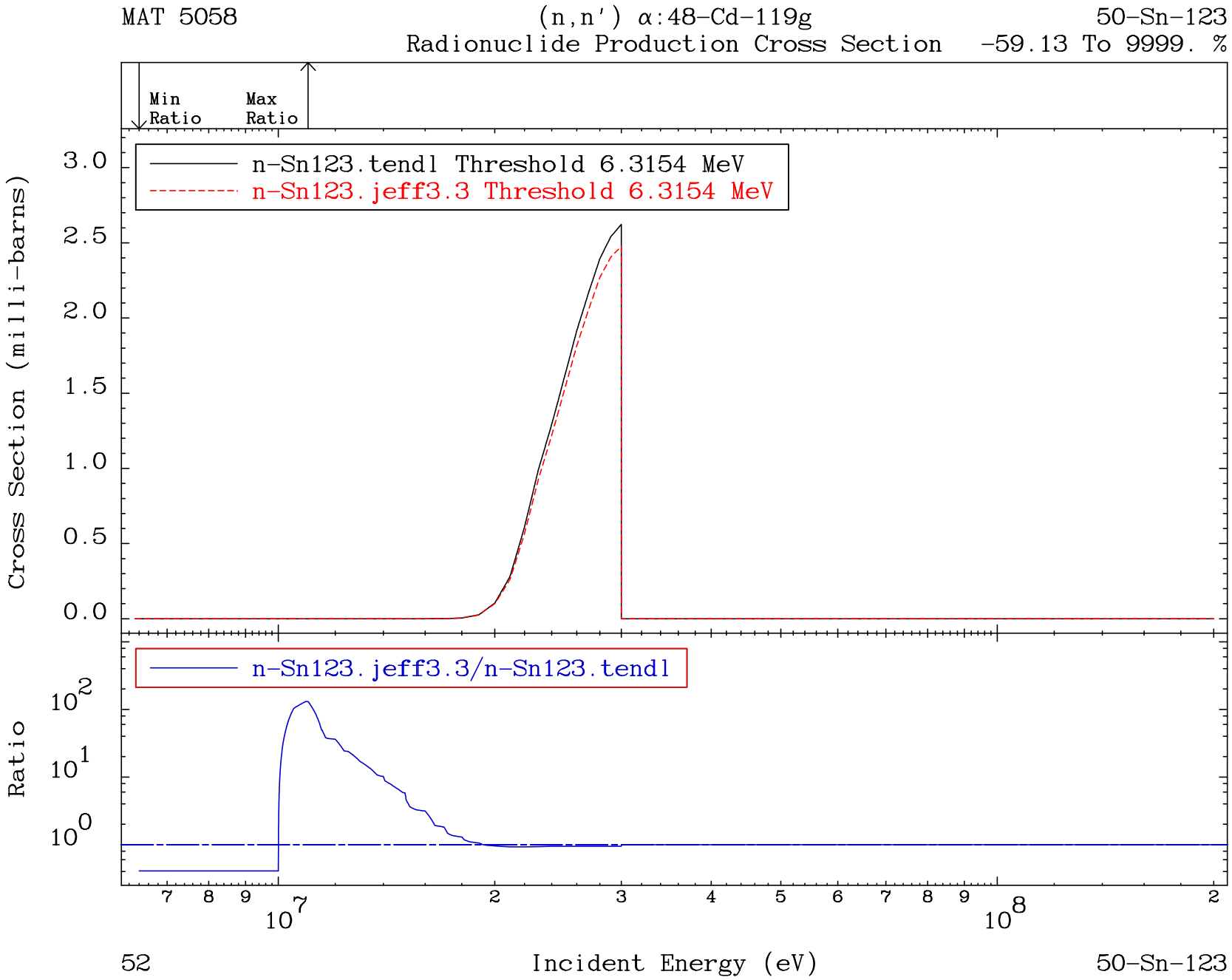

MAT 5058
(n,2n) d:49-In-120g
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.124 %
Min Ratio
n-Sn123.tendl Threshold 23.486 MeV
n-Sn123.jeff3.3 Threshold 23.486 MeV
Cross Section (micro-barns)
0
2
4
6
8
10
12
14
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
0.99
1.00
1.01
40
60
80
100
120
140
160
180
200
47
Incident Energy (MeV)
50-Sn-123

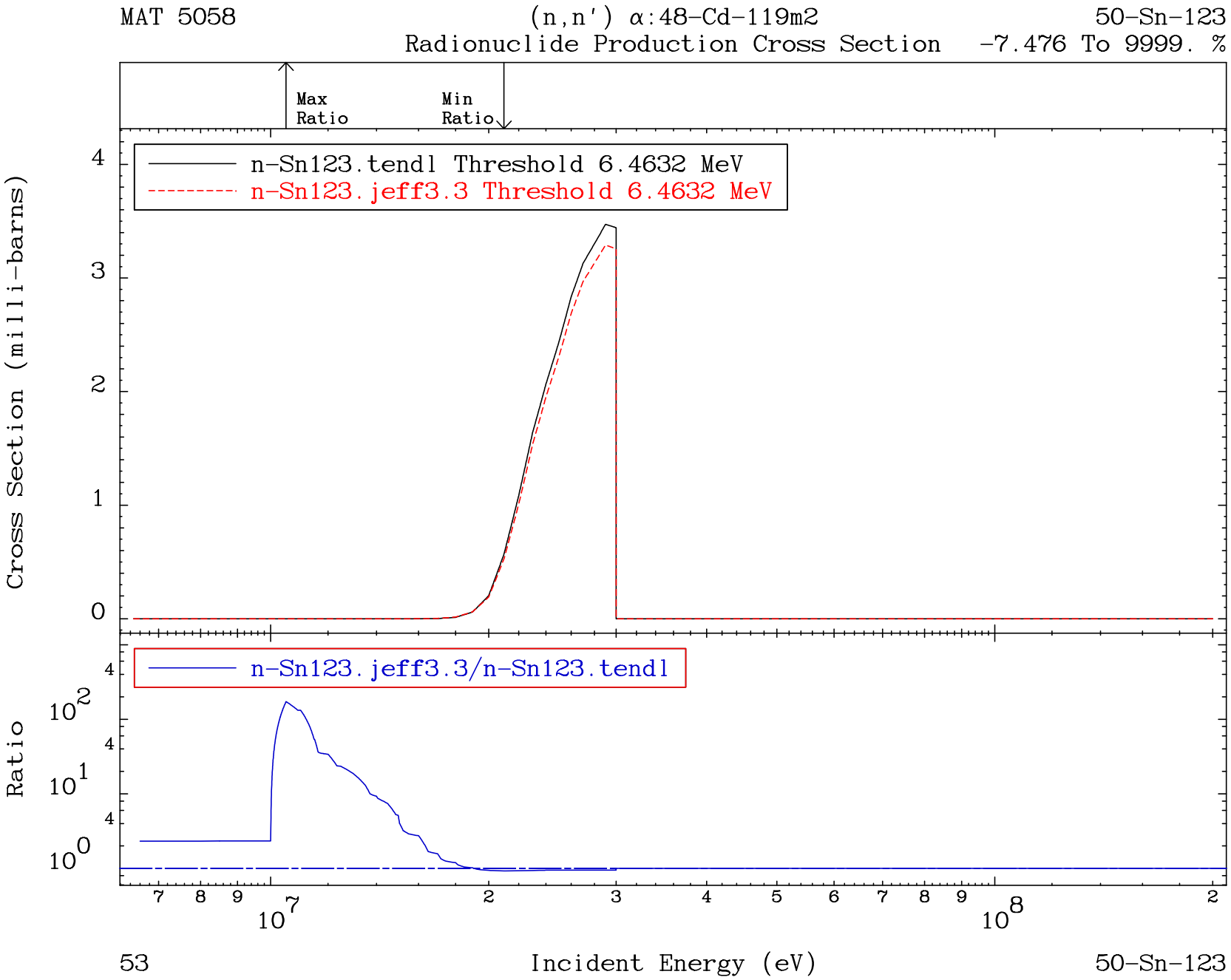

MAT 5058
(n,2n) d:49-In-120m1
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.020 %
Min Ratio
n-Sn123.tendl Threshold 23.557 MeV
n-Sn123.jeff3.3 Threshold 23.557 MeV
Cross Section (micro-barns)
14
12
10
8
6
4
2
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
48
Incident Energy (MeV)
50-Sn-123

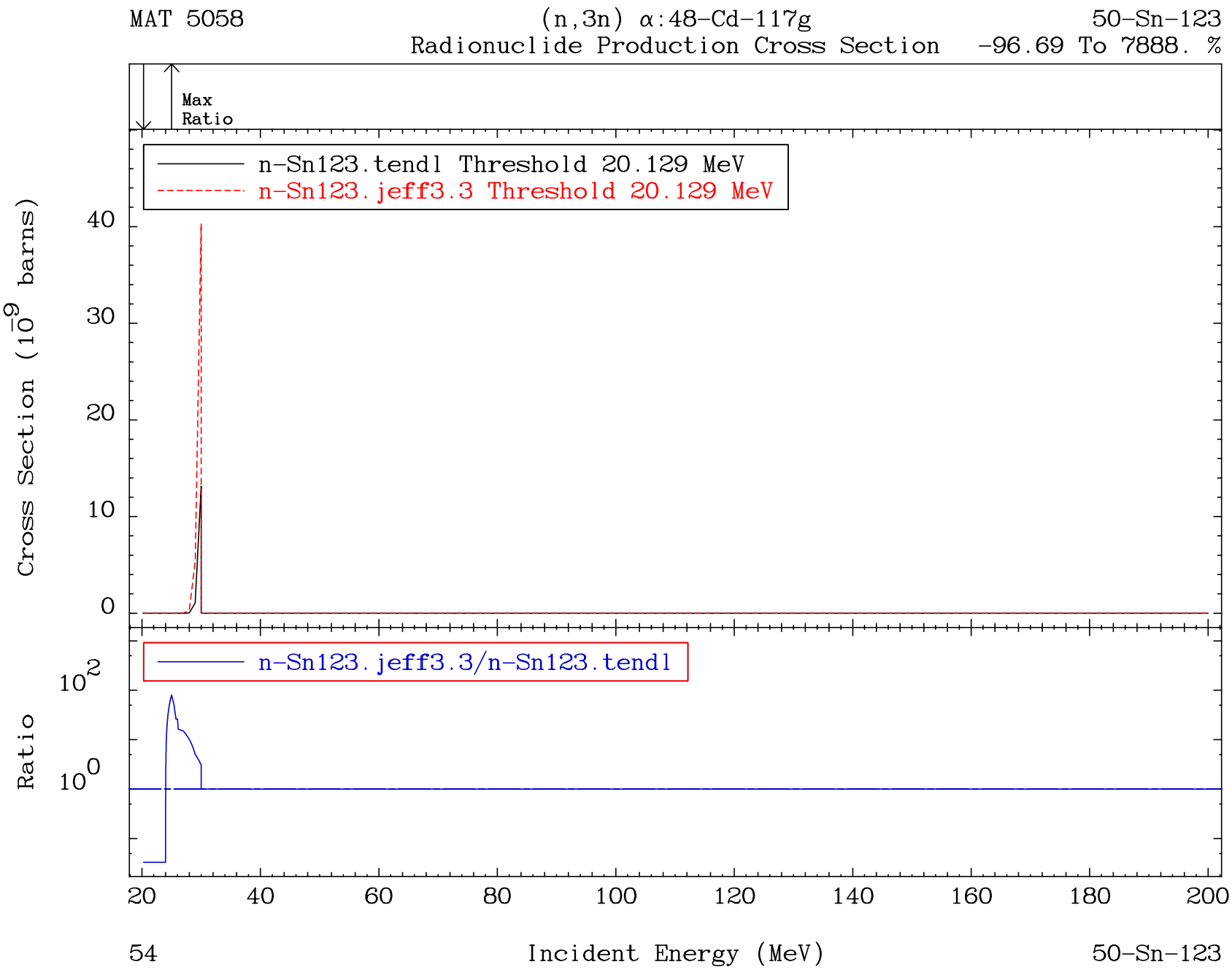

MAT 5058
(n,2n) d:49-In-120m2
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.057 %
Min Ratio
n-Sn123.tendl Threshold 23.889 MeV
n-Sn123.jeff3.3 Threshold 23.889 MeV
Cross Section (micro-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
49
Incident Energy (MeV)
50-Sn-123

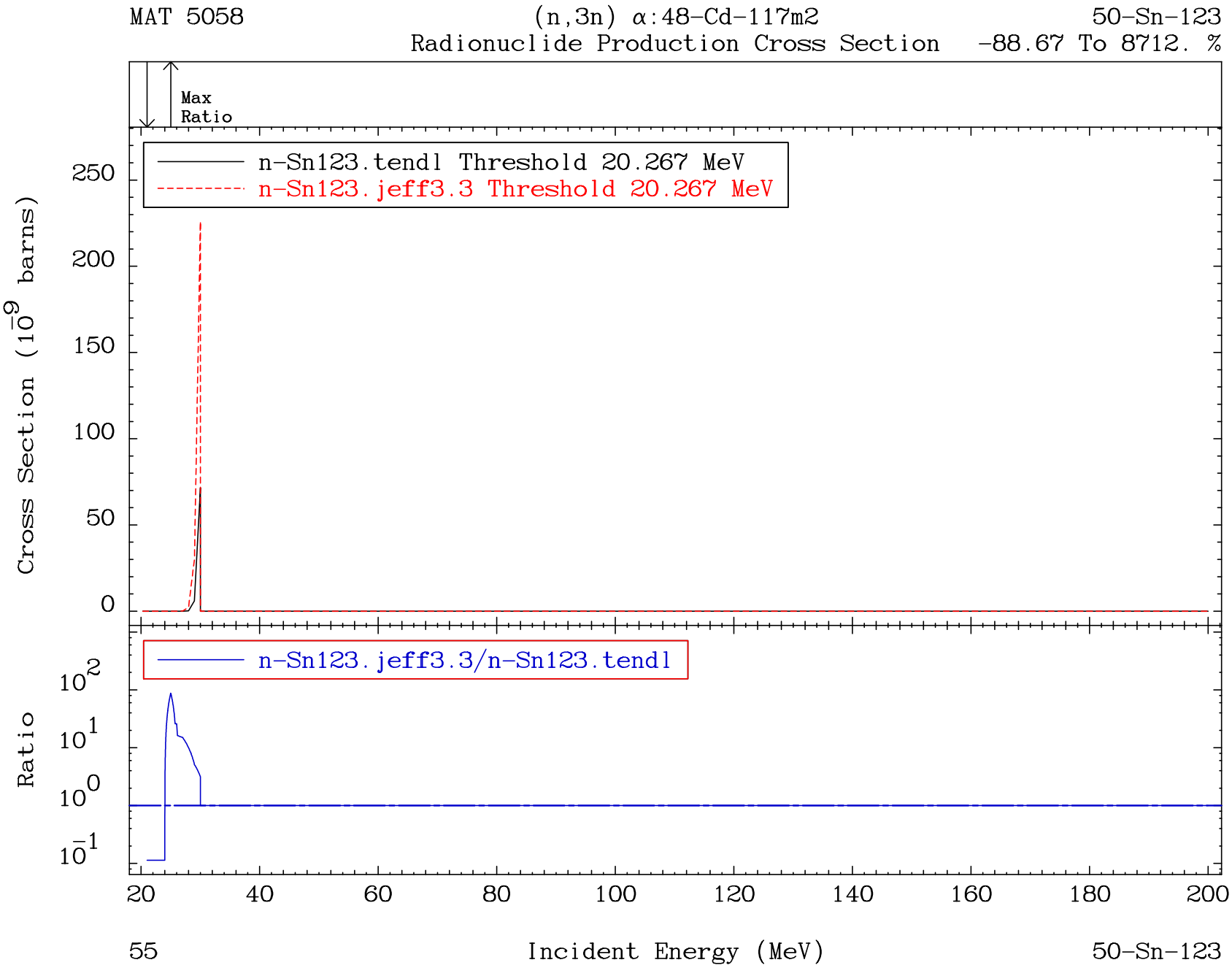

MAT 5058
(n,3n):50-Sn-121g
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.897 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 14.883 MeV
n-Sn123.jeff3.3 Threshold 14.883 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
50
Incident Energy (eV)
50-Sn-123

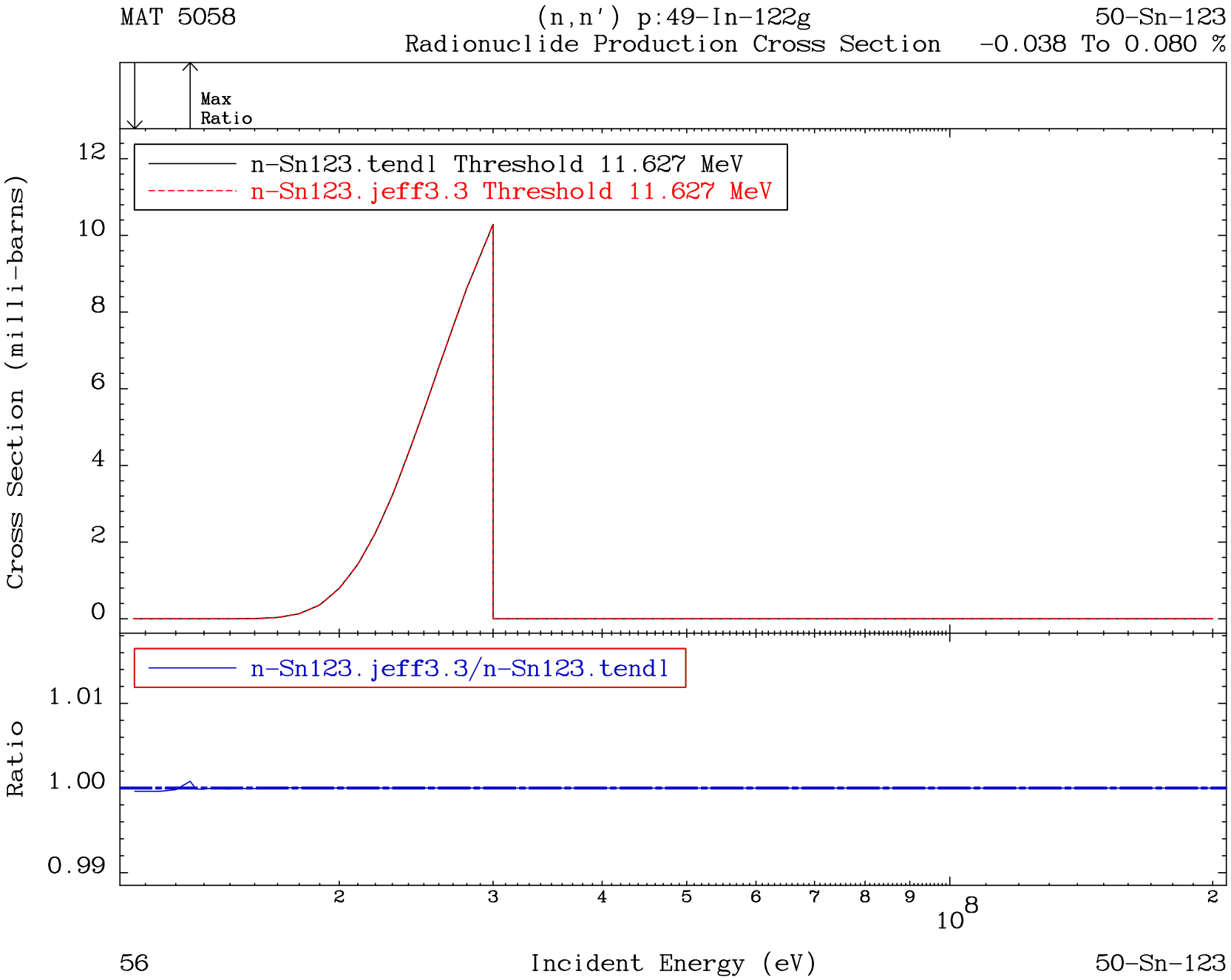

MAT 5058
(n,3n):50-Sn-121m1
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.036 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 14.889 MeV
n-Sn123.jeff3.3 Threshold 14.889 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
50-Sn-123

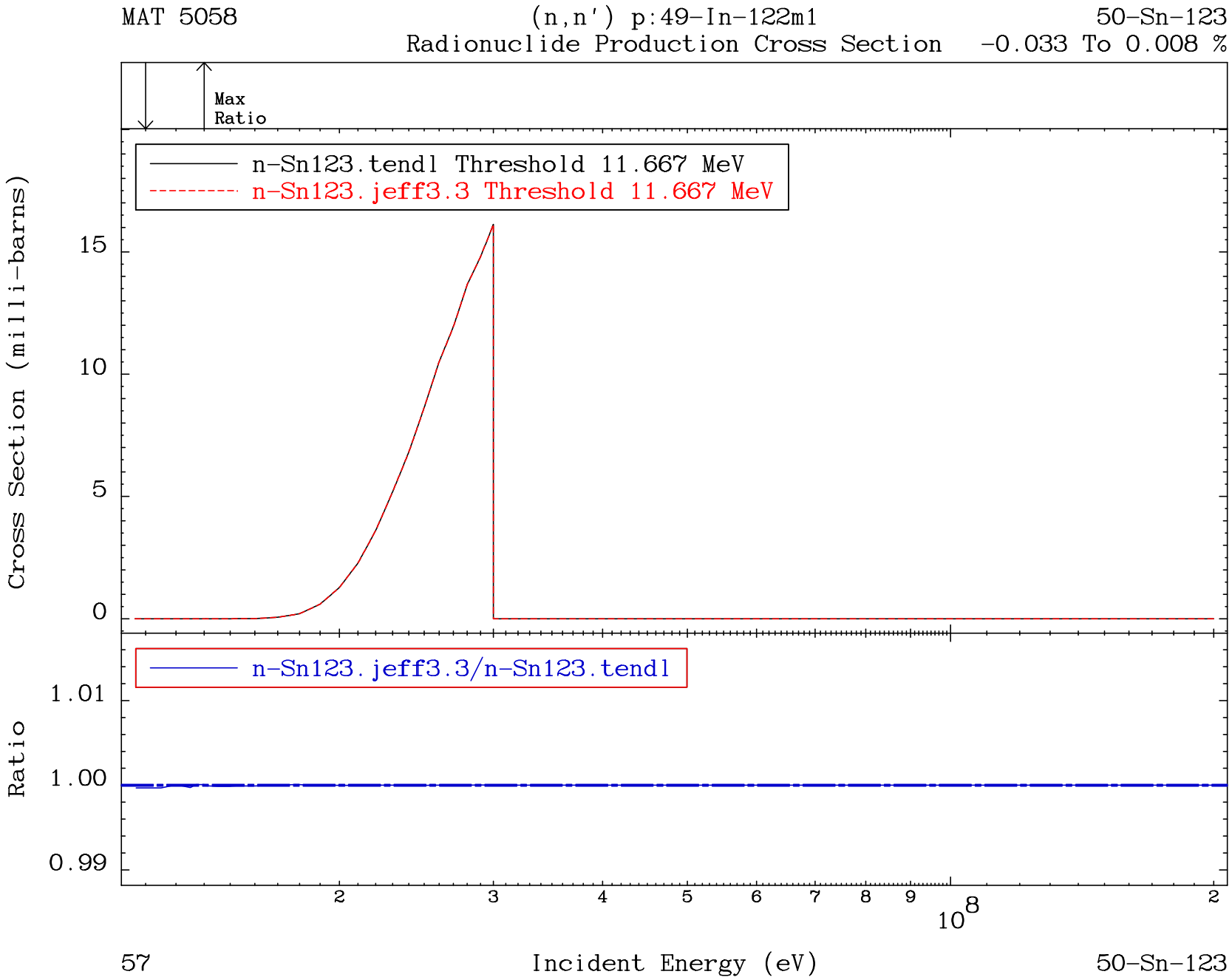

MAT 5058
(n,n') α:48-Cd-119g
50-Sn-123
Radionuclide Production Cross Section -59.13 To 9999. %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 6.3154 MeV
n-Sn123.jeff3.3 Threshold 6.3154 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
10^2
10^1
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
50-Sn-123

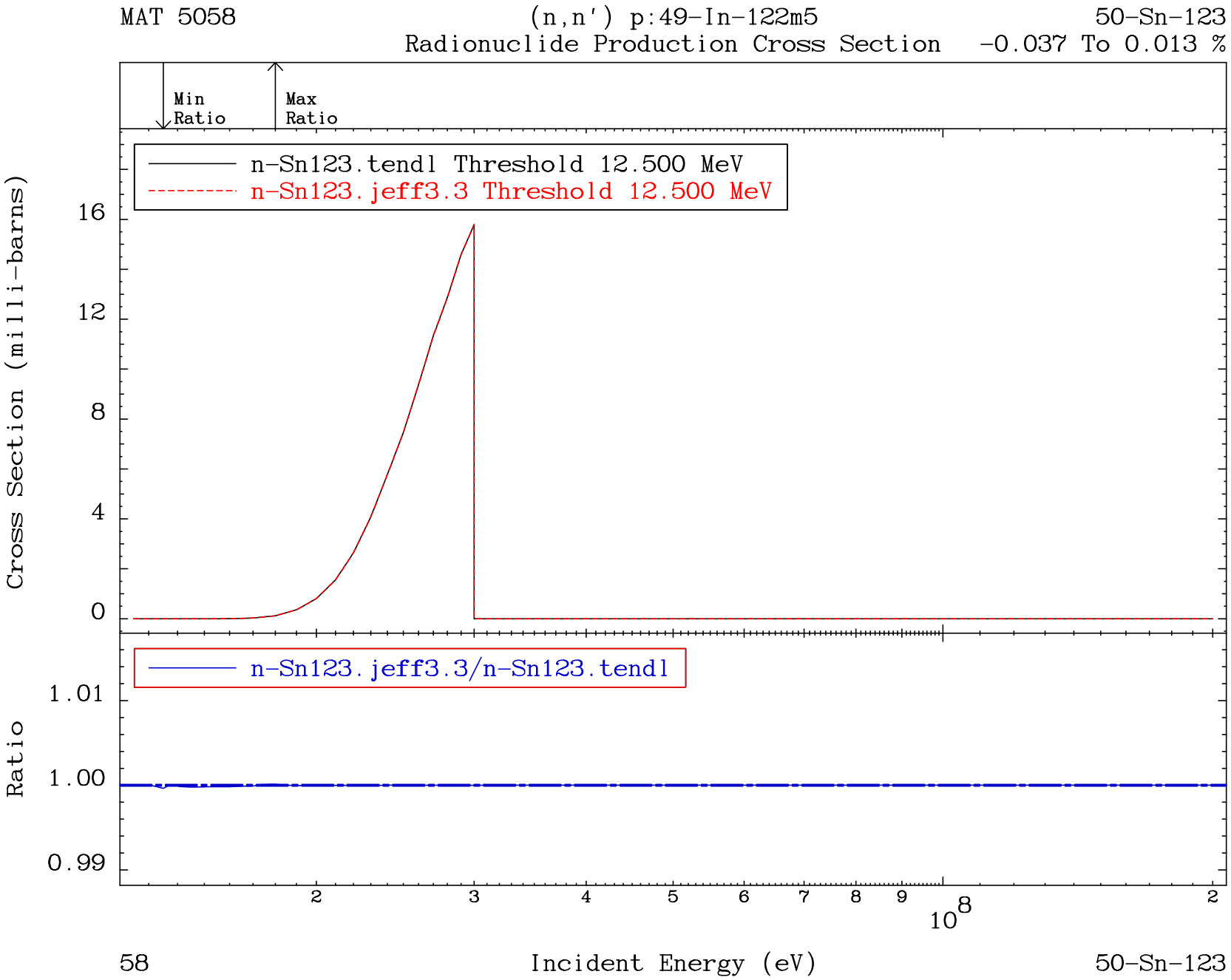

MAT 5058
(n,n') α:48-Cd-119m2
50-Sn-123
Radionuclide Production Cross Section -7.476 To 9999. %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 6.4632 MeV
n-Sn123.jeff3.3 Threshold 6.4632 MeV
Cross Section (milli-barns)
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
Incident Energy (eV)
53
50-Sn-123

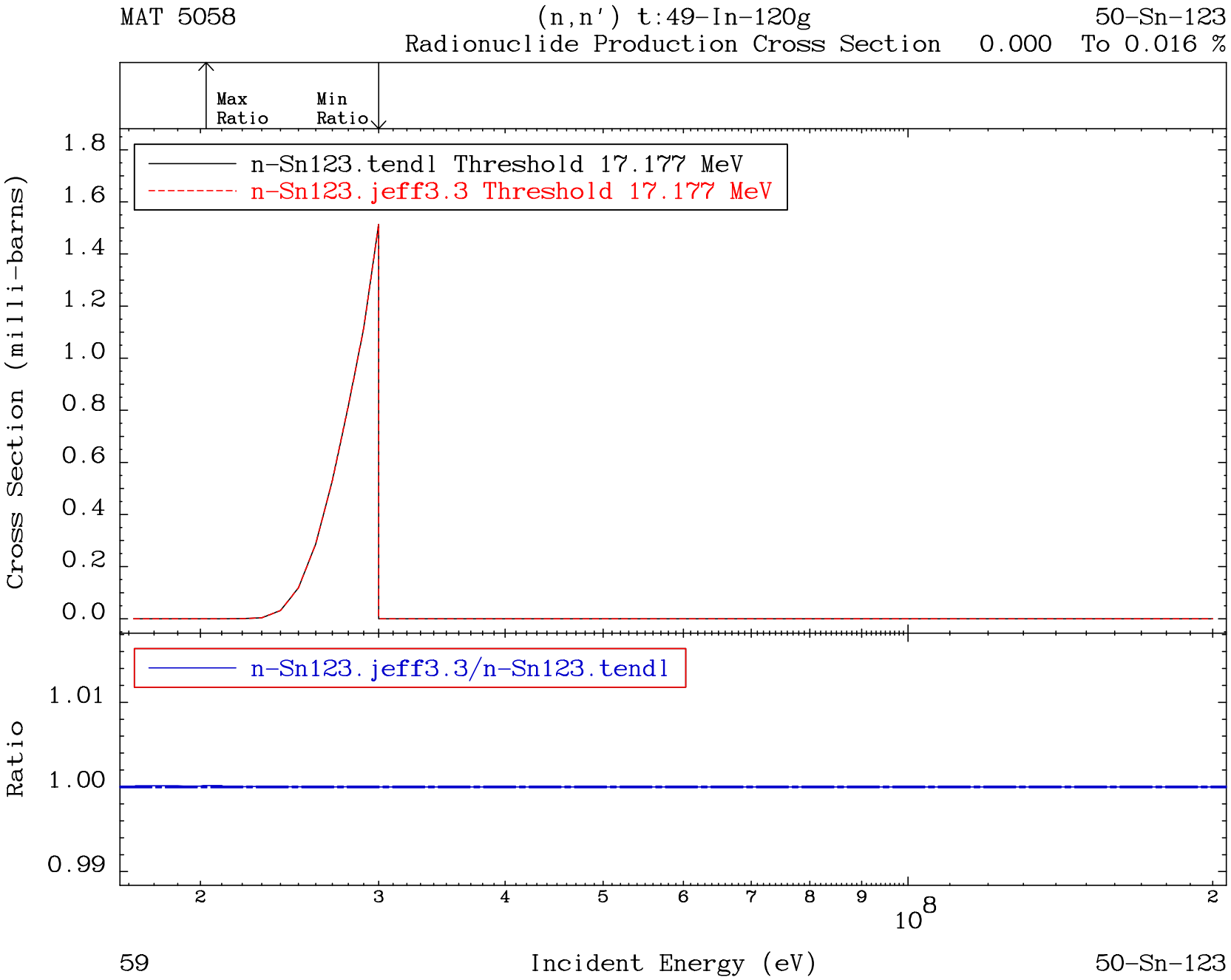

MAT 5058
(n,3n) α:48-Cd-117g
50-Sn-123
Radionuclide Production Cross Section -96.69 To 7888. %
Max
Ratio
n-Sn123.tendl Threshold 20.129 MeV
n-Sn123.jeff3.3 Threshold 20.129 MeV
Cross Section (10^{-9} barns)
40
30
20
10
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
10^{2}
10^{0}
20
40
60
80
100
120
140
160
180
200
54
Incident Energy (MeV)
50-Sn-123

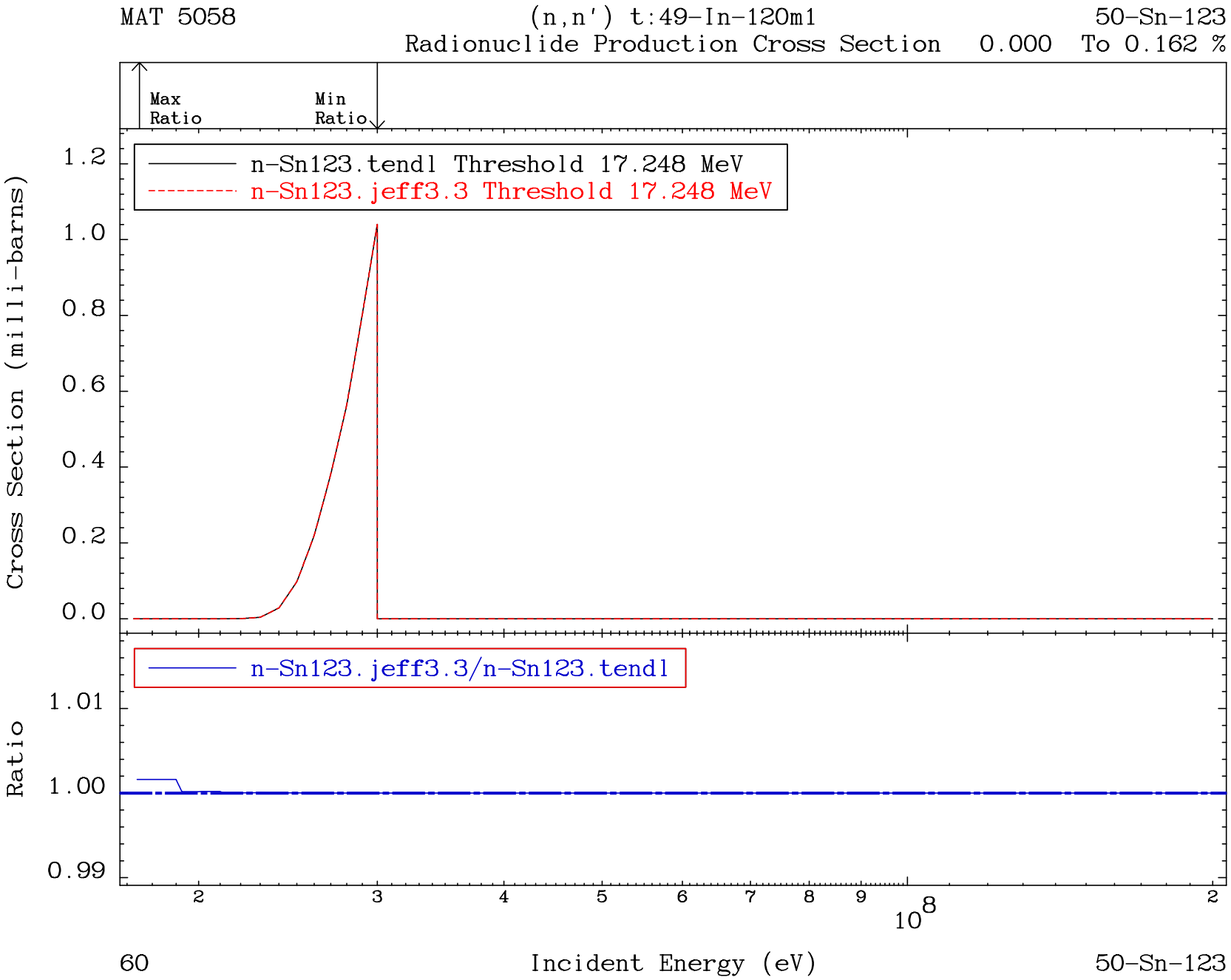

MAT 5058
(n,3n) α:48-Cd-117m2
50-Sn-123
Radionuclide Production Cross Section -88.67 To 8712. %
Max
Ratio
n-Sn123.tendl Threshold 20.267 MeV
n-Sn123.jeff3.3 Threshold 20.267 MeV
Cross Section (10^{-9} barns)
250
200
150
100
50
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
10^{2}
10^{1}
10^{0}
10^{-1}
20
40
60
80
100
120
140
160
180
200
55
Incident Energy (MeV)
50-Sn-123

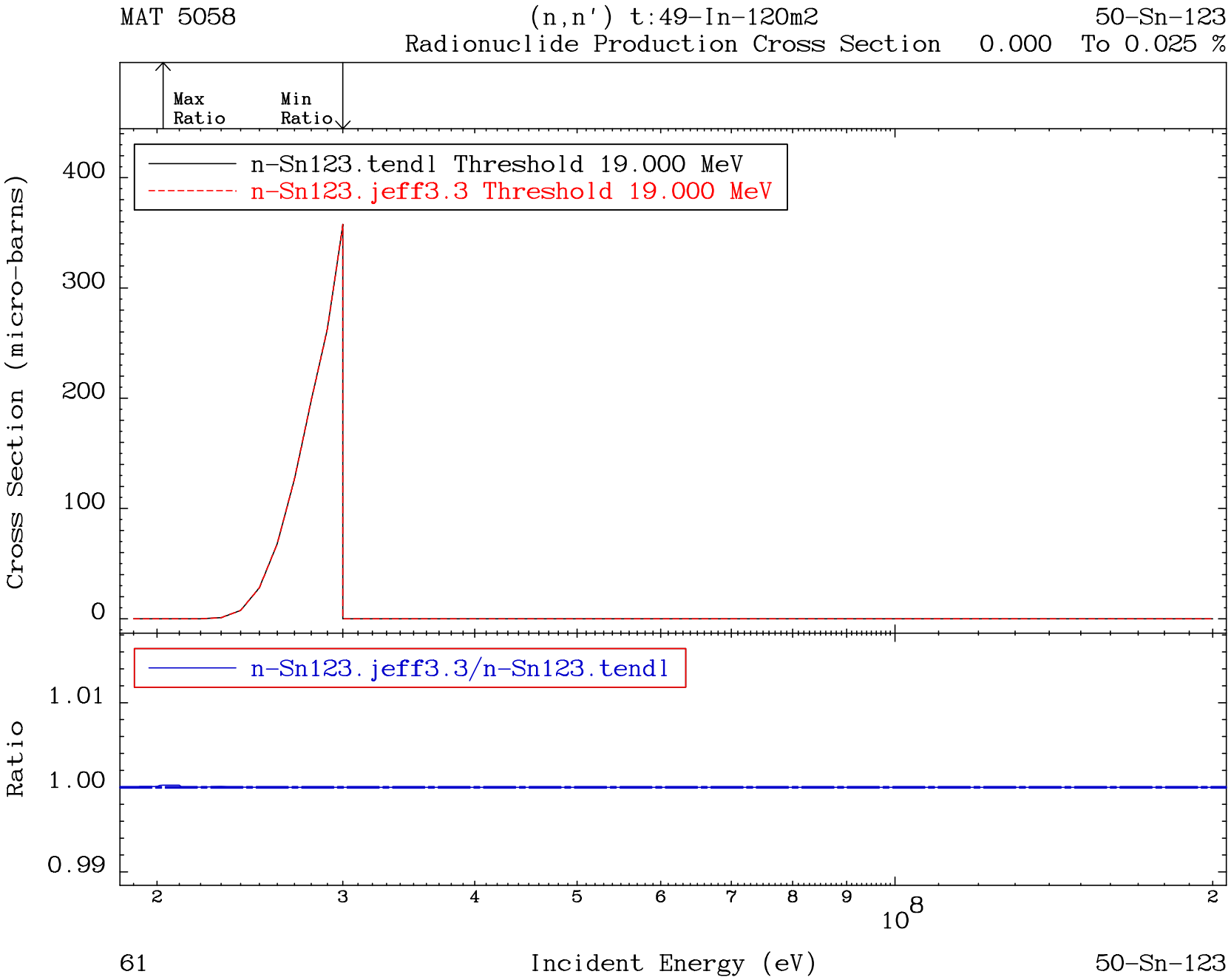

MAT 5058
(n,n') p:49-In-122g
50-Sn-123
Radionuclide Production Cross Section
-0.038 To 0.080 %
Max
Ratio
n-Sn123.tendl Threshold 11.627 MeV
n-Sn123.jeff3.3 Threshold 11.627 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
56
Incident Energy (eV)
50-Sn-123

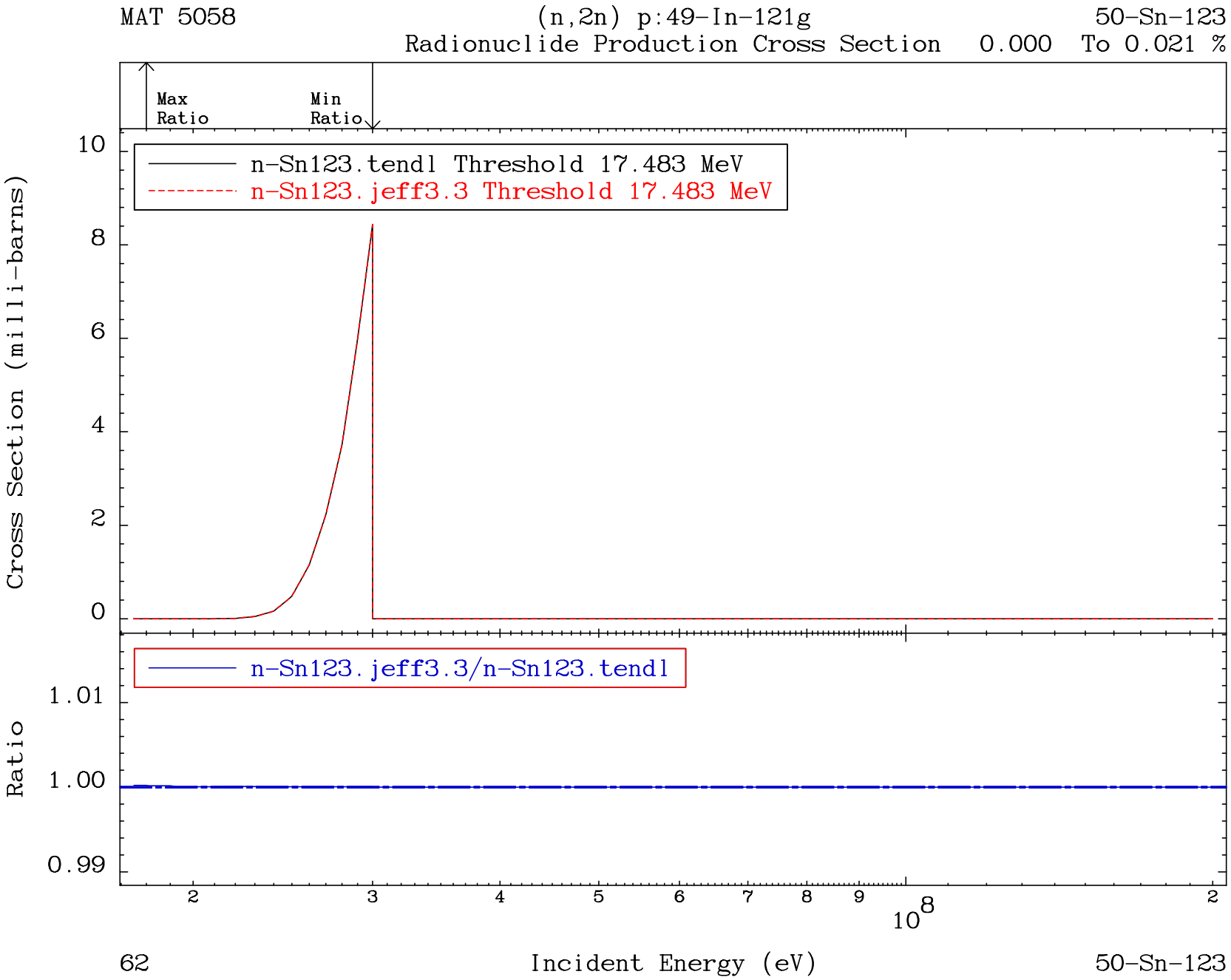

MAT 5058
(n,n') p:49-In-122m1
50-Sn-123
Radionuclide Production Cross Section
-0.033 To 0.008 %
Max
Ratio
n-Sn123.tendl Threshold 11.667 MeV
n-Sn123.jeff3.3 Threshold 11.667 MeV
Cross Section (milli-barns)
15
10
5
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
50-Sn-123

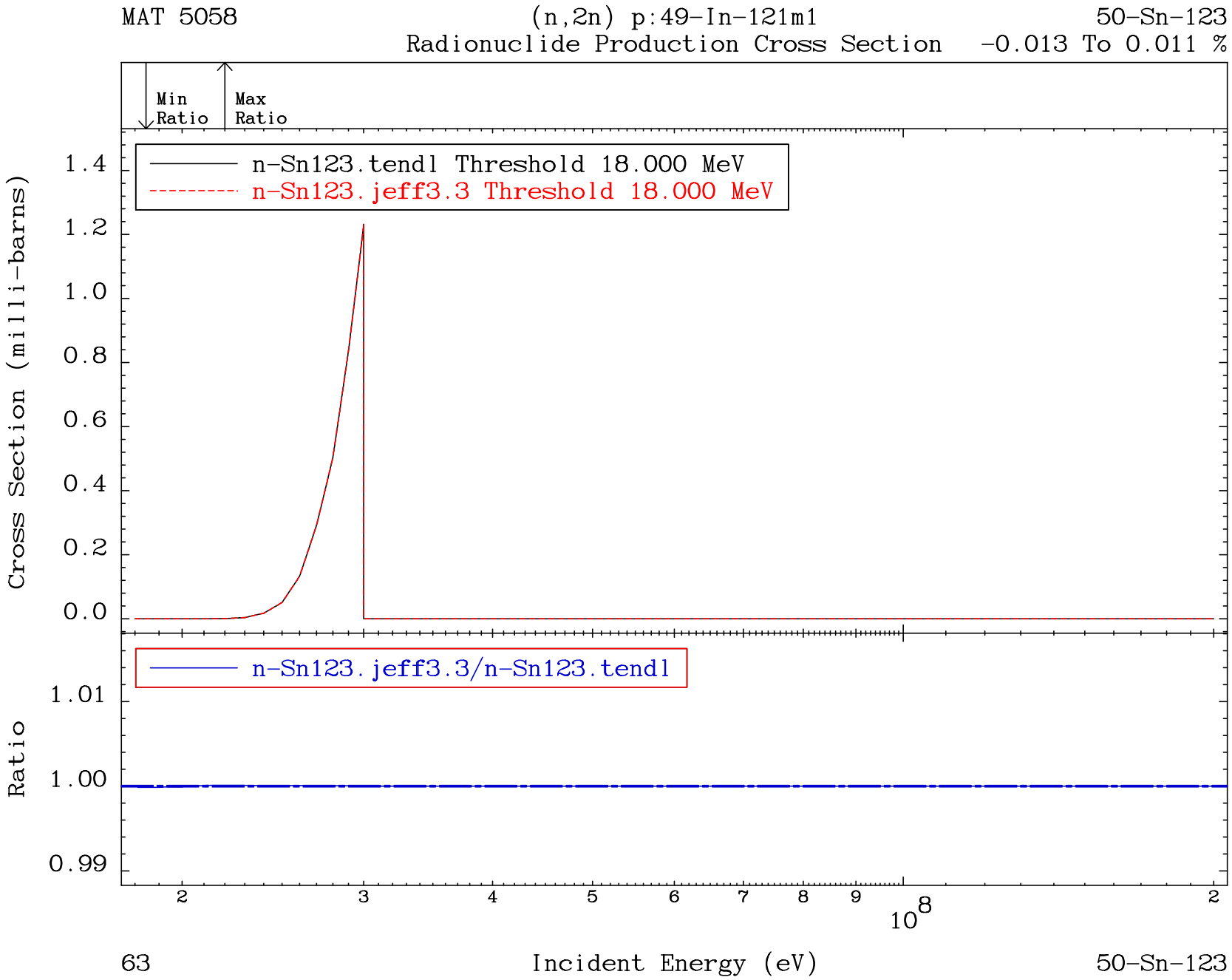

MAT 5058
(n,n') p:49-In-122m5
50-Sn-123
Radionuclide Production Cross Section
-0.037 To 0.013 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 12.500 MeV
n-Sn123.jeff3.3 Threshold 12.500 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
50-Sn-123

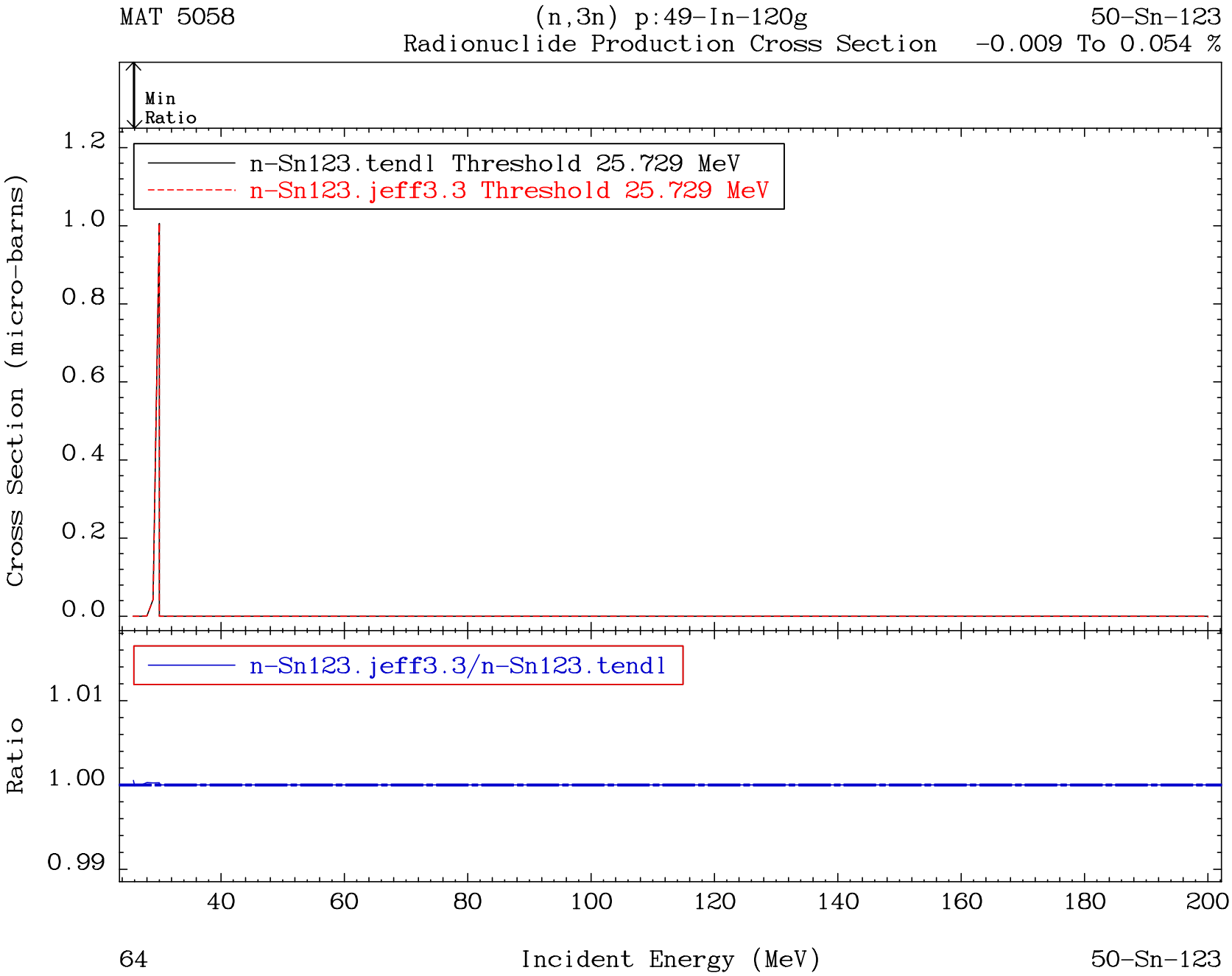

MAT 5058
(n,n') t:49-In-120g
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.016 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 17.177 MeV
n-Sn123.jeff3.3 Threshold 17.177 MeV
Cross Section (milli-barns)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
50-Sn-123

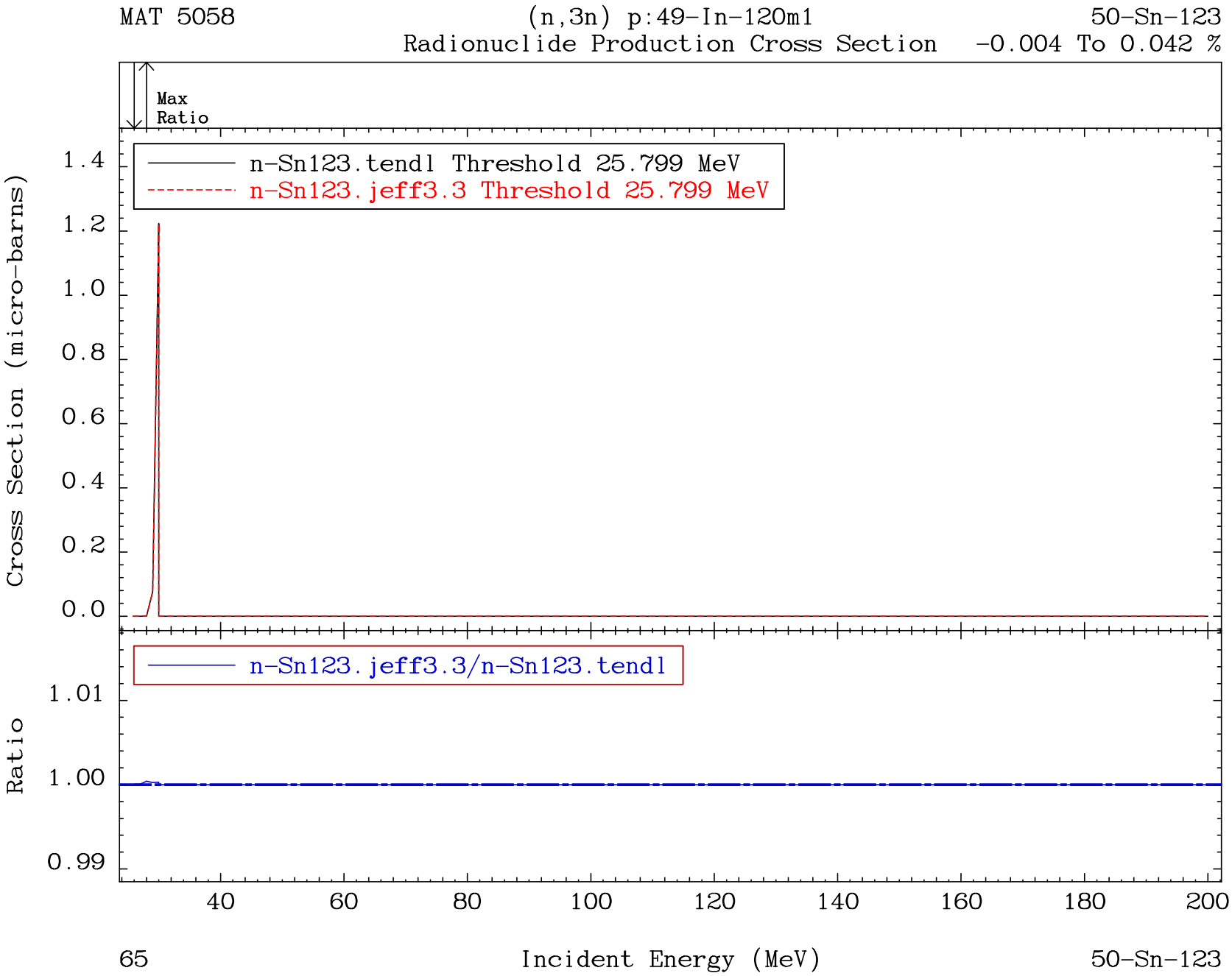

MAT 5058
(n,n') t:49-In-120m1
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.162 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 17.248 MeV
n-Sn123.jeff3.3 Threshold 17.248 MeV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
2
10^8
60
Incident Energy (eV)
50-Sn-123

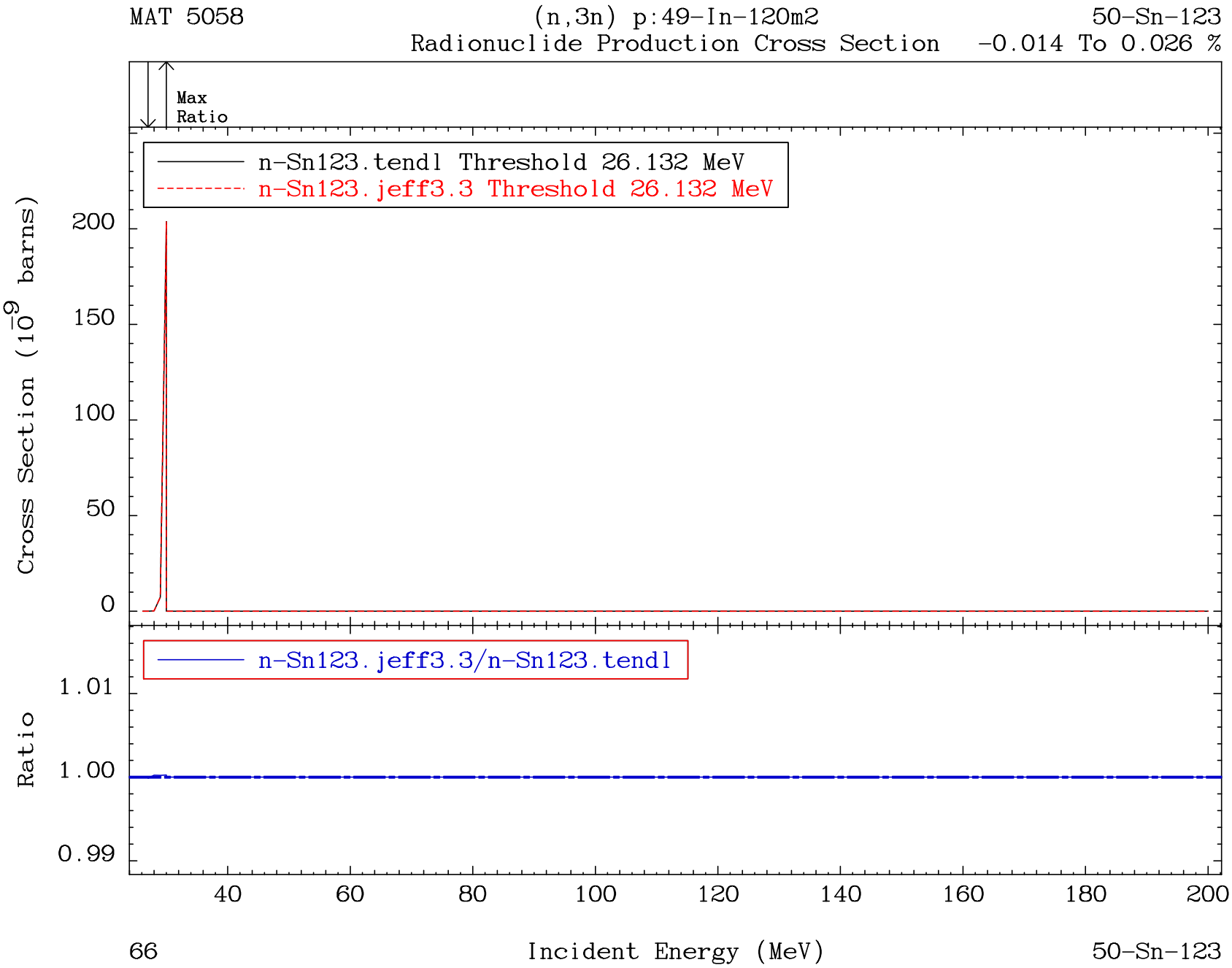

MAT 5058
(n,n') t:49-In-120m2
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.025 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 19.000 MeV
n-Sn123.jeff3.3 Threshold 19.000 MeV
Cross Section (micro-barns)
400
300
200
100
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
50-Sn-123

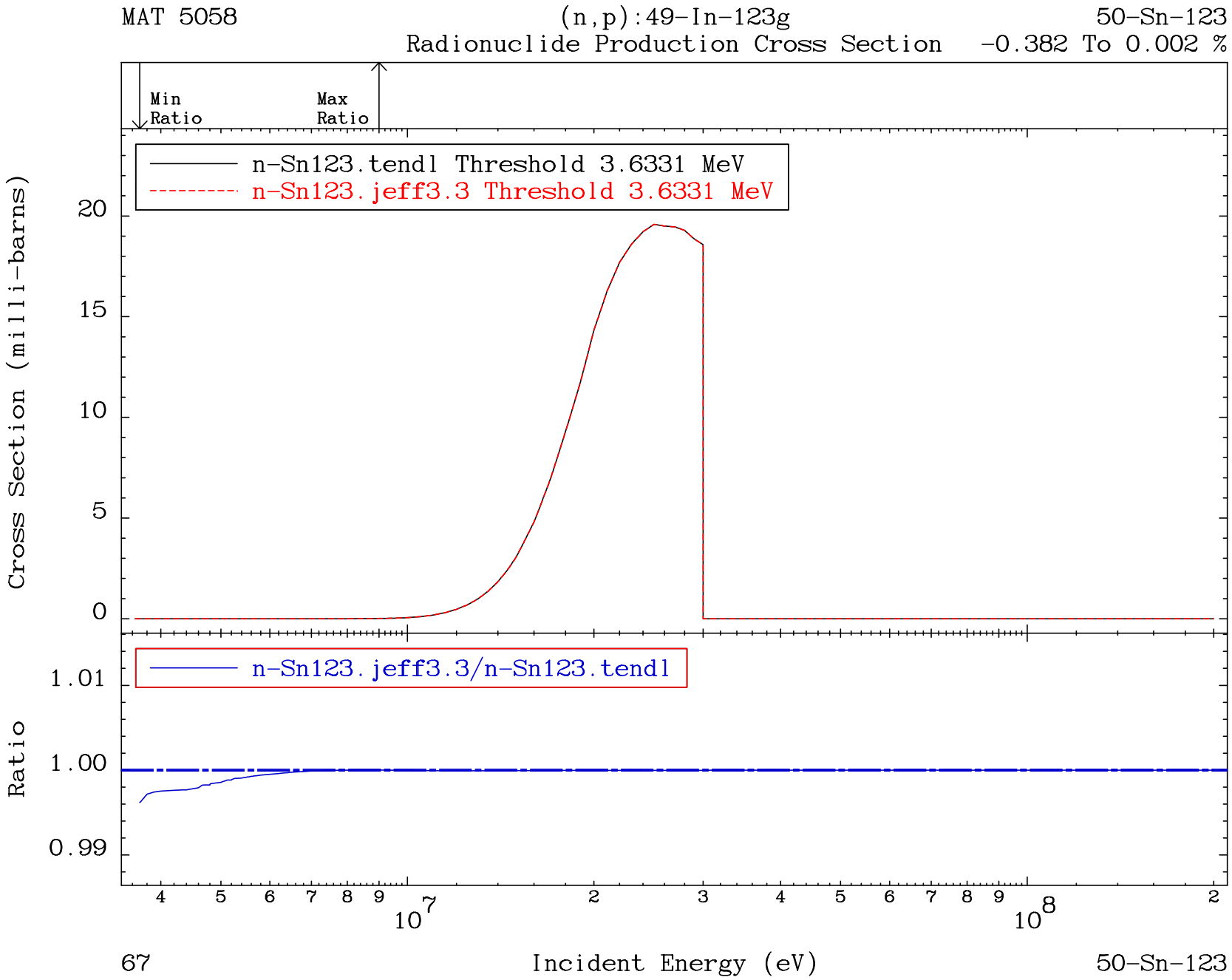

MAT 5058
(n,2n) p:49-In-121g
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.021 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 17.483 MeV
n-Sn123.jeff3.3 Threshold 17.483 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
50-Sn-123

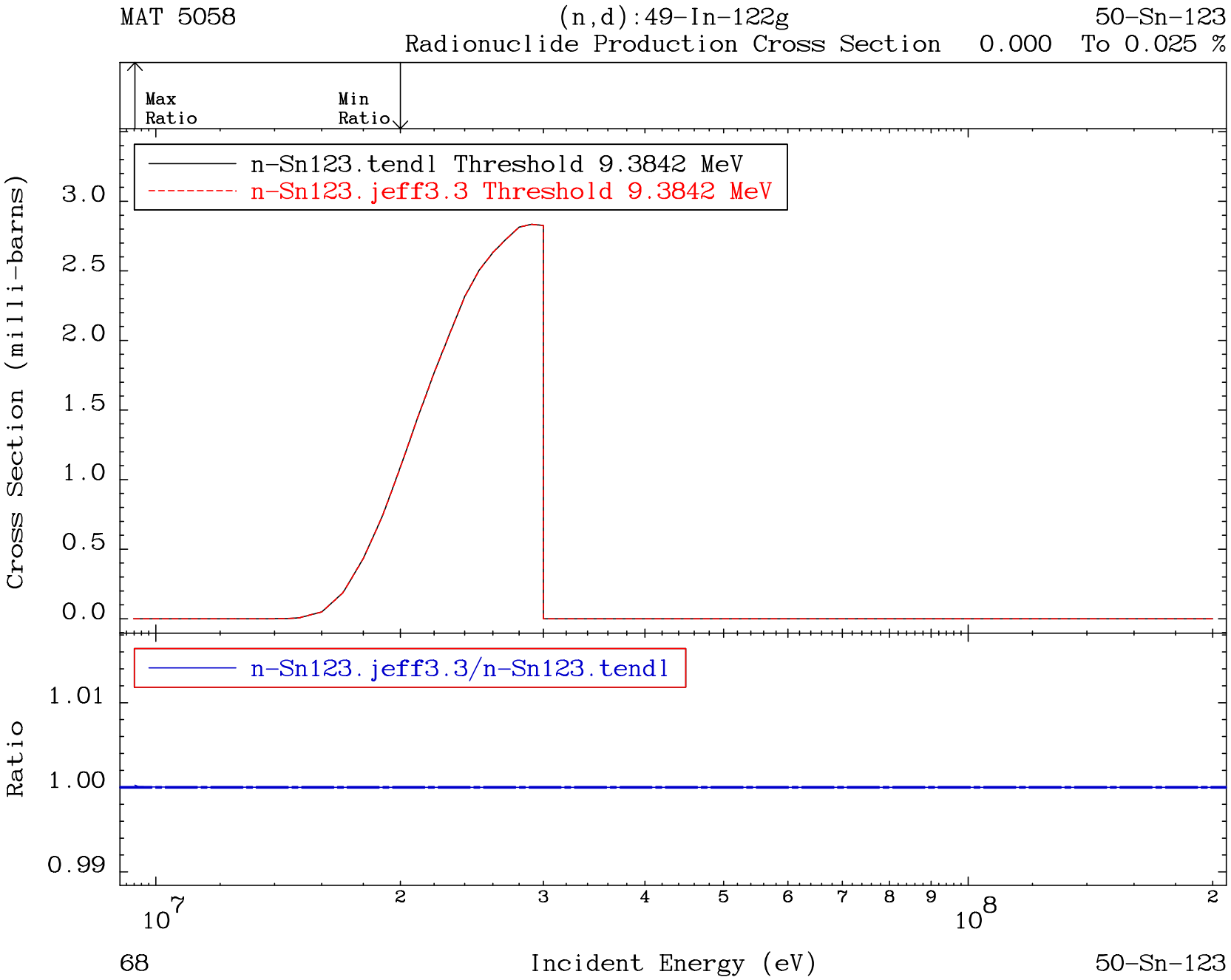

MAT 5058
(n,2n) p:49-In-121m1
50-Sn-123
Radionuclide Production Cross Section
-0.013 To 0.011 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 18.000 MeV
n-Sn123.jeff3.3 Threshold 18.000 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
50-Sn-123

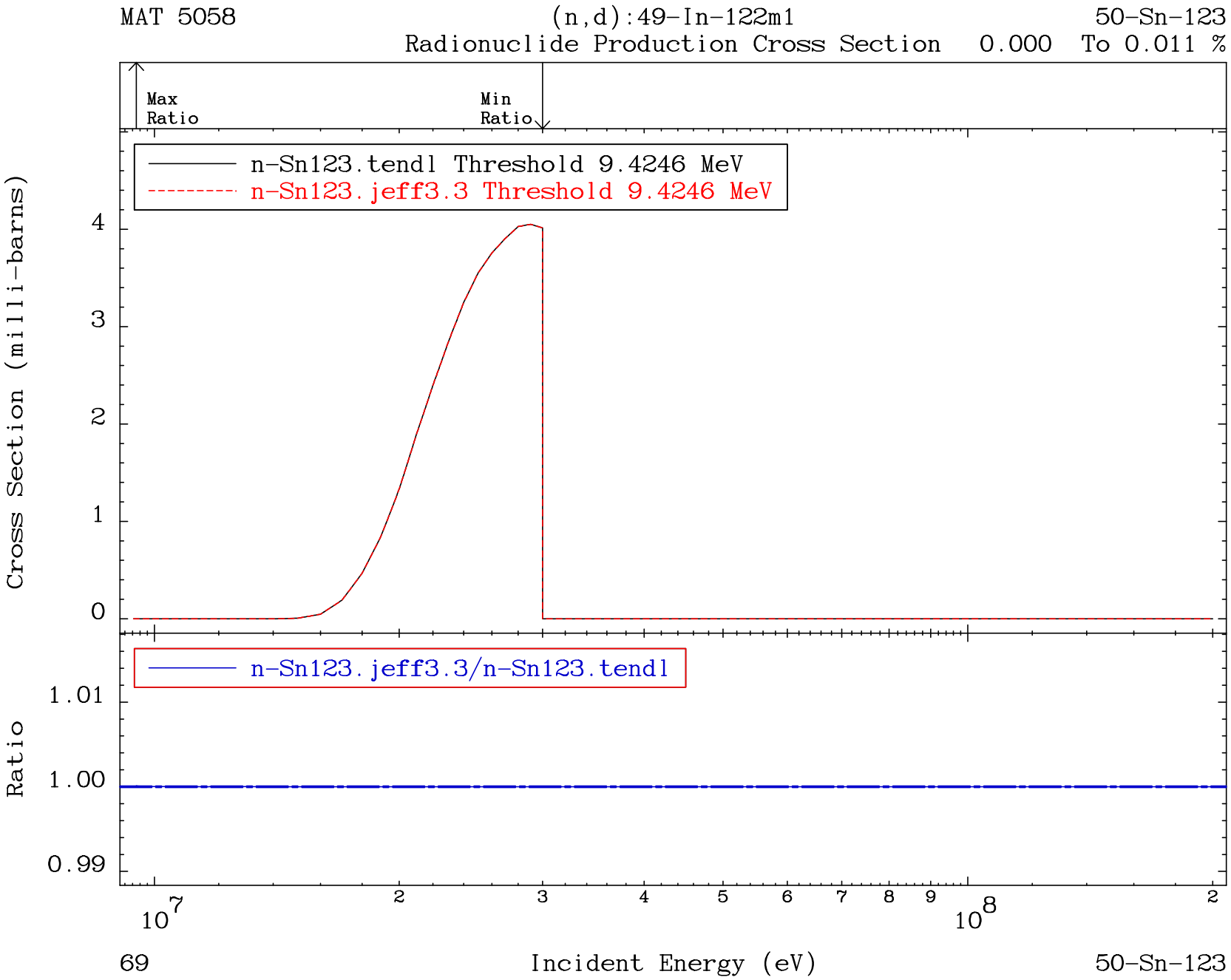

MAT 5058
(n,3n) p:49-In-120g
50-Sn-123
Radionuclide Production Cross Section
-0.009 To 0.054 %
Min
Ratio
n-Sn123.tendl Threshold 25.729 MeV
n-Sn123.jeff3.3 Threshold 25.729 MeV
Cross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
64
Incident Energy (MeV)
50-Sn-123

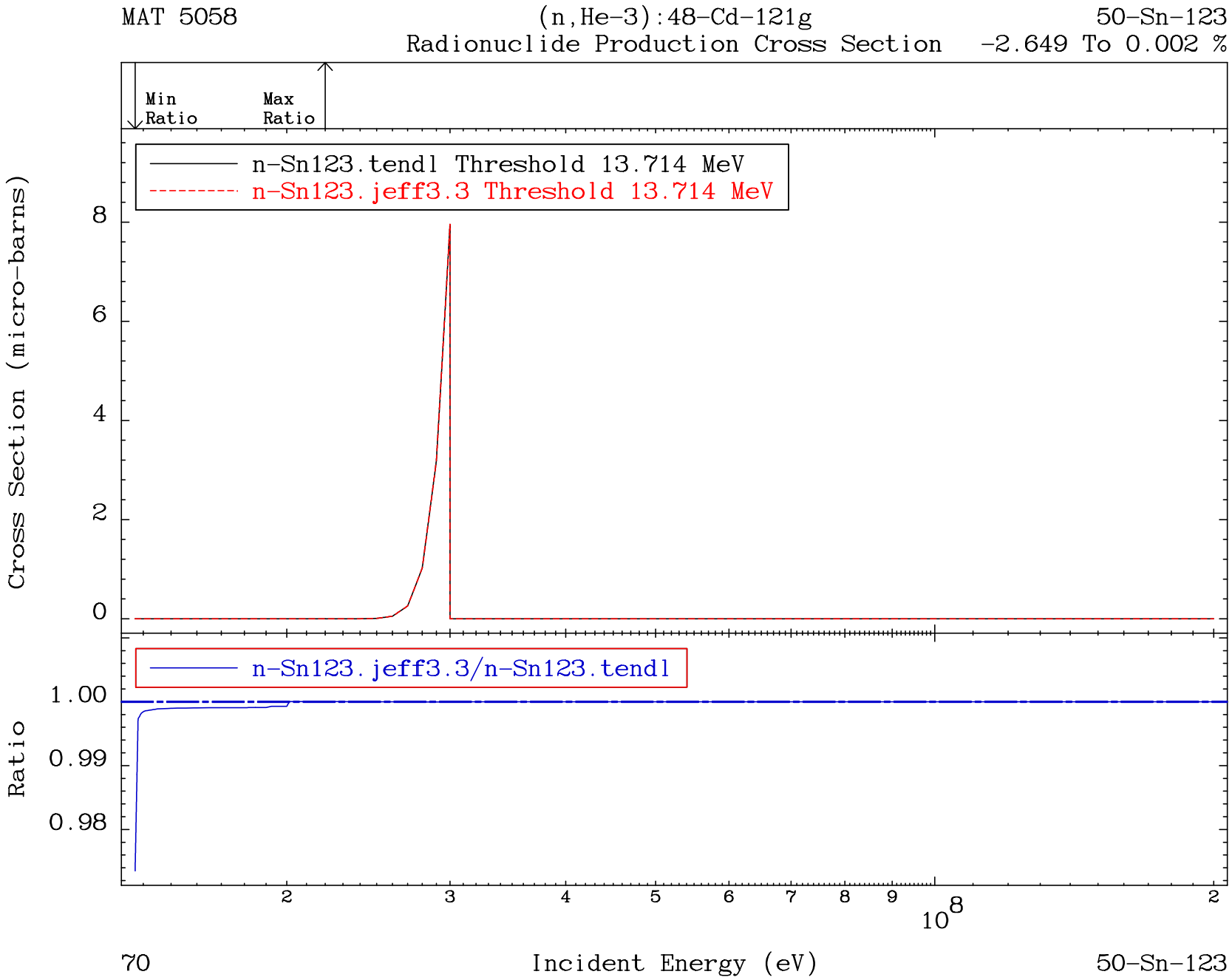

MAT 5058
(n,3n) p:49-In-120m1
50-Sn-123
Radionuclide Production Cross Section
-0.004 To 0.042 %
Max
Ratio
n-Sn123.tendl Threshold 25.799 MeV
n-Sn123.jeff3.3 Threshold 25.799 MeV
Cross Section (micro-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
65
Incident Energy (MeV)
50-Sn-123

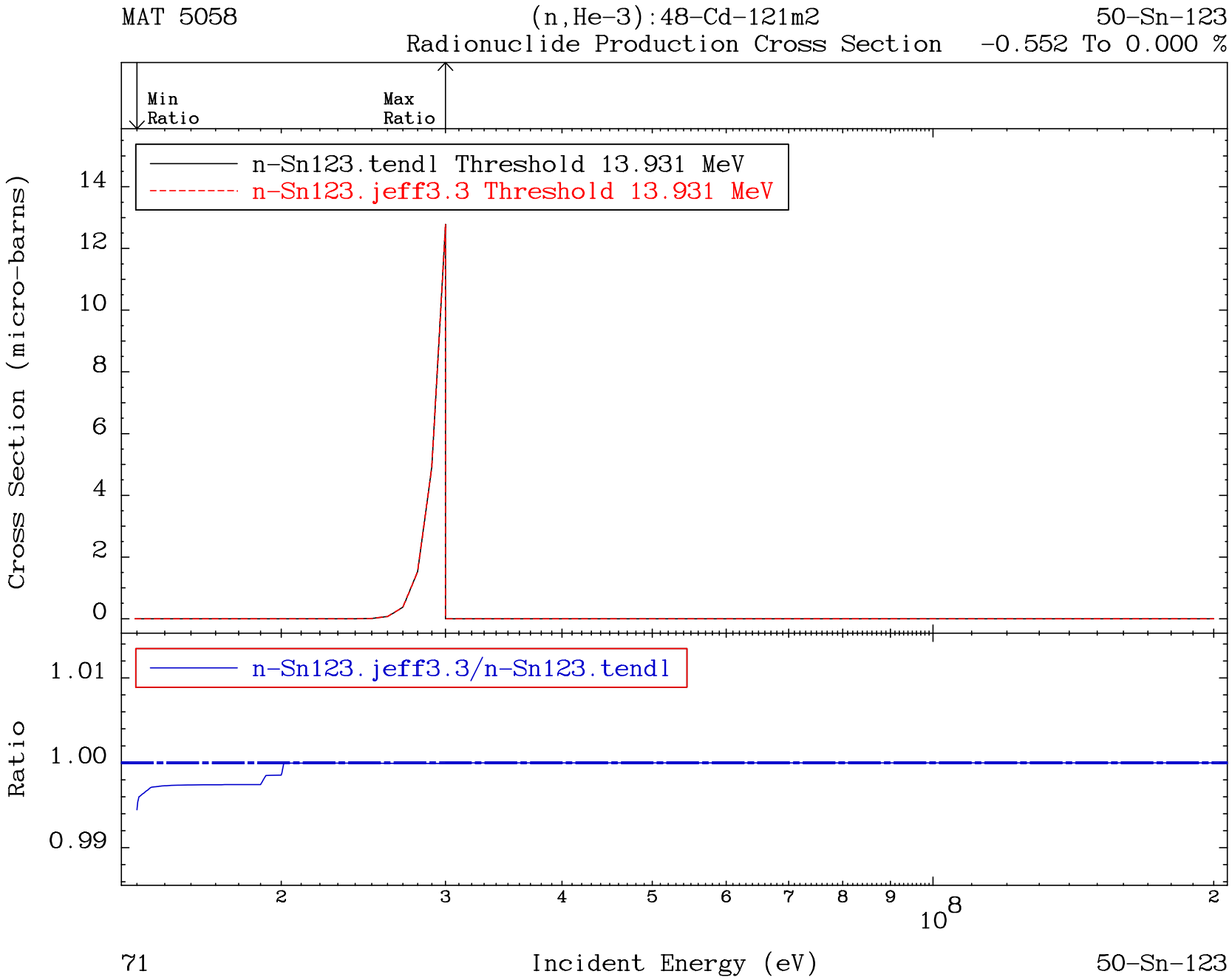

MAT 5058
(n,3n) p:49-In-120m2
50-Sn-123
Radionuclide Production Cross Section -0.014 To 0.026 %
Max
Ratio
n-Sn123.tendl Threshold 26.132 MeV
n-Sn123.jeff3.3 Threshold 26.132 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
66
Incident Energy (MeV)
50-Sn-123


MAT 5058
(n,p):49-In-123g
50-Sn-123
Radionuclide Production Cross Section
-0.382 To 0.002 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 3.6331 MeV
n-Sn123.jeff3.3 Threshold 3.6331 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
67
Incident Energy (eV)
50-Sn-123


MAT 5058
(n,d):49-In-122g
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.025 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 9.3842 MeV
n-Sn123.jeff3.3 Threshold 9.3842 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
10^7
2
3
4
5
6
7
8
9
10^8
2
68
Incident Energy (eV)
50-Sn-123


MAT 5058
(n,d):49-In-122m1
50-Sn-123
Radionuclide Production Cross Section 0.000 To 0.011 %
Max Ratio
Min Ratio
n-Sn123.tendl Threshold 9.4246 MeV
n-Sn123.jeff3.3 Threshold 9.4246 MeV
Cross Section (milli-barns)
0
1
2
3
4
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
0.99
1.00
1.01
10^7
2
3
4
5
6
7
8
9
10^8
2
69
Incident Energy (eV)
50-Sn-123


MAT 5058
(n,He-3):48-Cd-121g
50-Sn-123
Radionuclide Production Cross Section -2.649 To 0.002 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 13.714 MeV
n-Sn123.jeff3.3 Threshold 13.714 MeV
Cross Section (micro-barns)
0
2
4
6
8
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
0.98
0.99
1.00
2
3
4
5
6
7
8
9
10^8
2
70
Incident Energy (eV)
50-Sn-123


MAT 5058
(n,He-3):48-Cd-121m2
50-Sn-123
Radionuclide Production Cross Section -0.552 To 0.000 %
Min Ratio
Max Ratio
n-Sn123.tendl Threshold 13.931 MeV
n-Sn123.jeff3.3 Threshold 13.931 MeV
Cross Section (micro-barns)
14
12
10
8
6
4
2
0
n-Sn123.jeff3.3/n-Sn123.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
71
Incident Energy (eV)
50-Sn-123