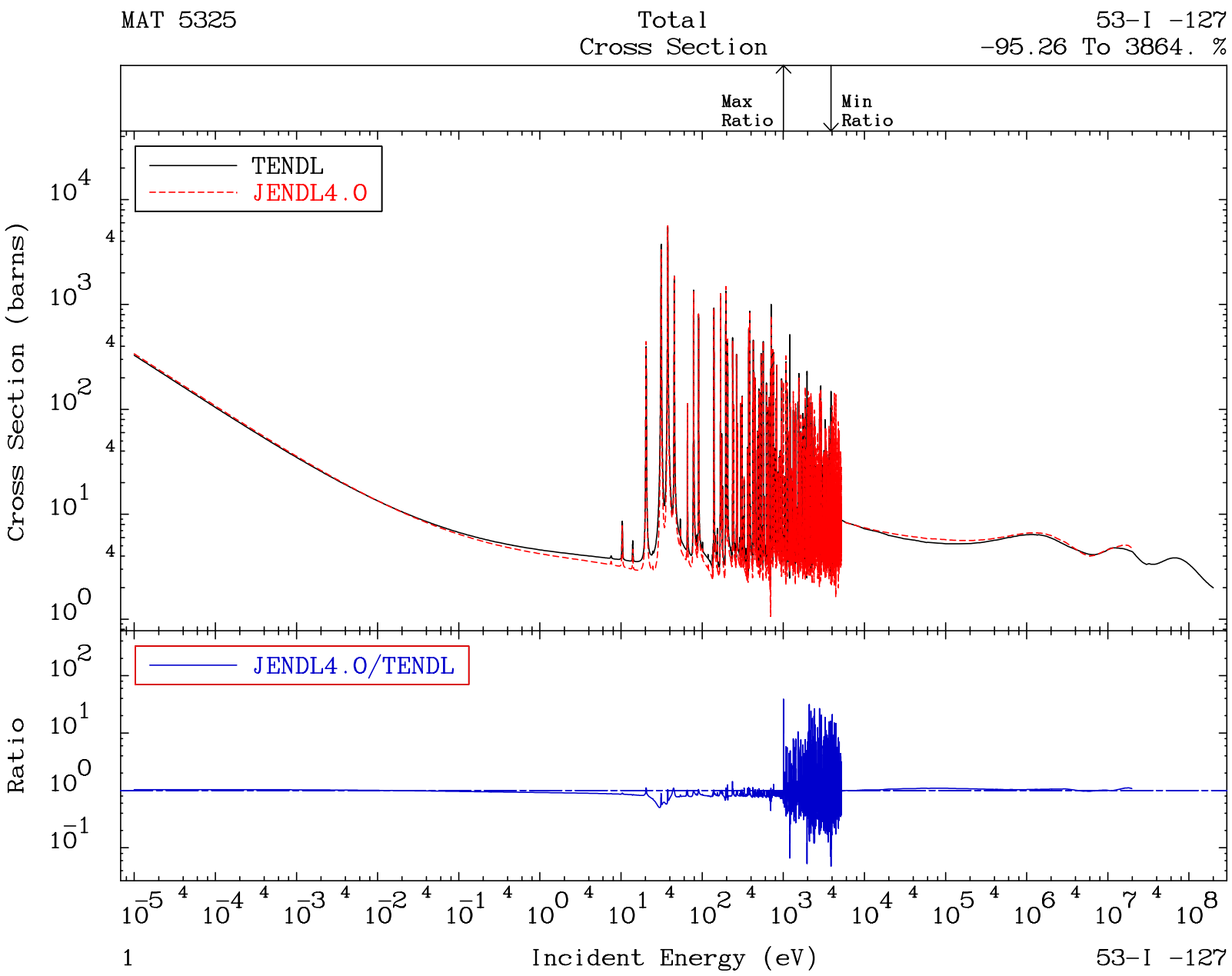
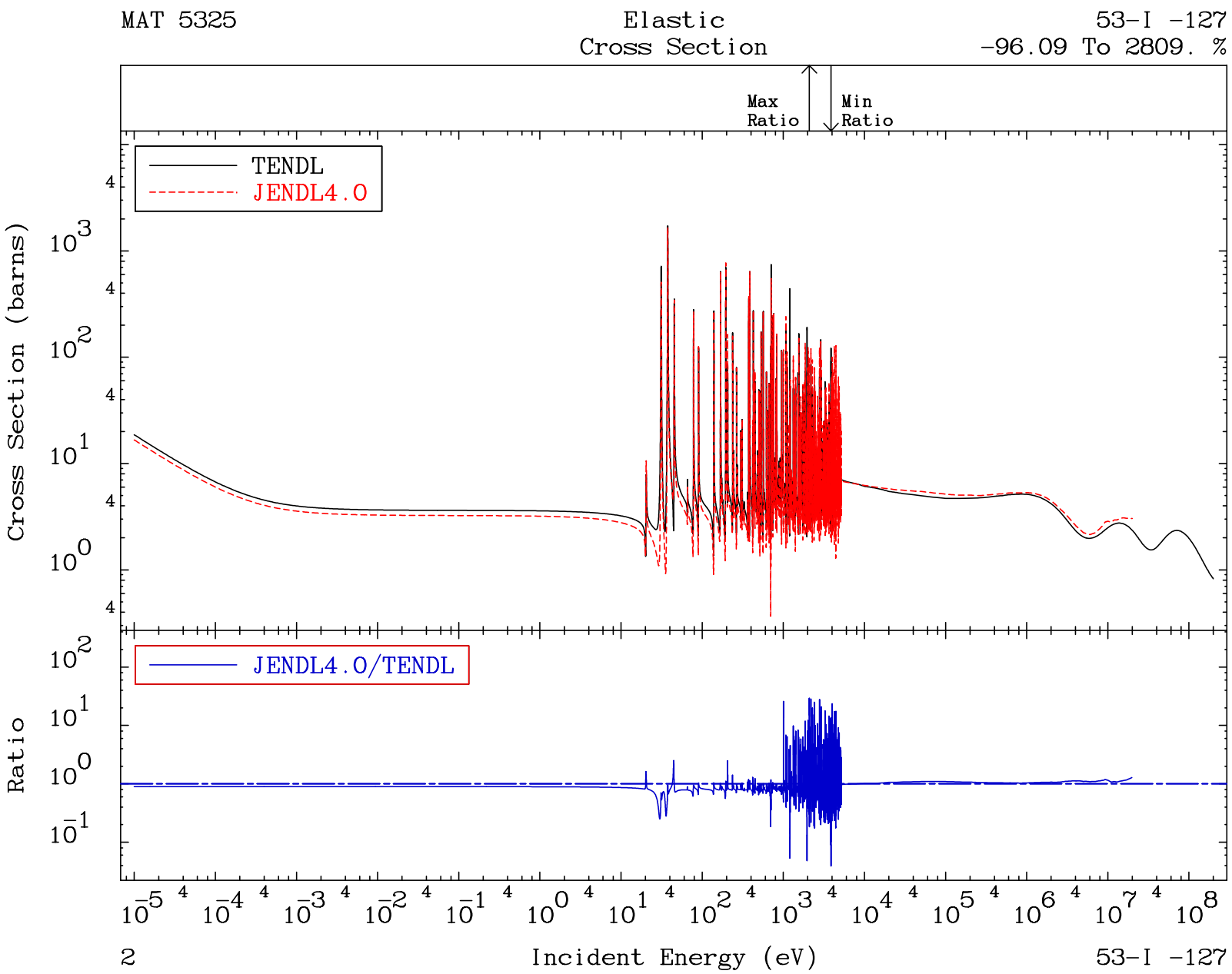
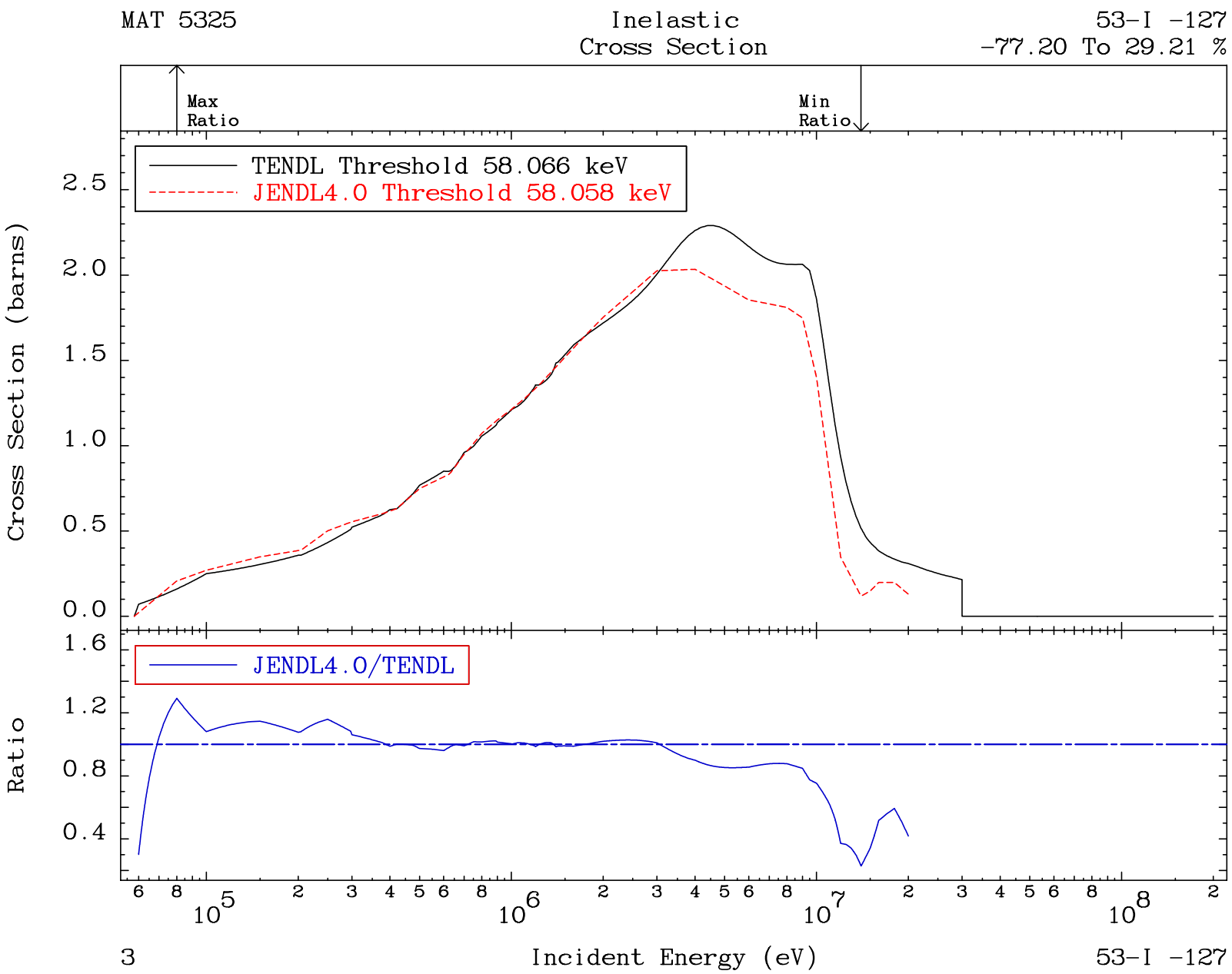
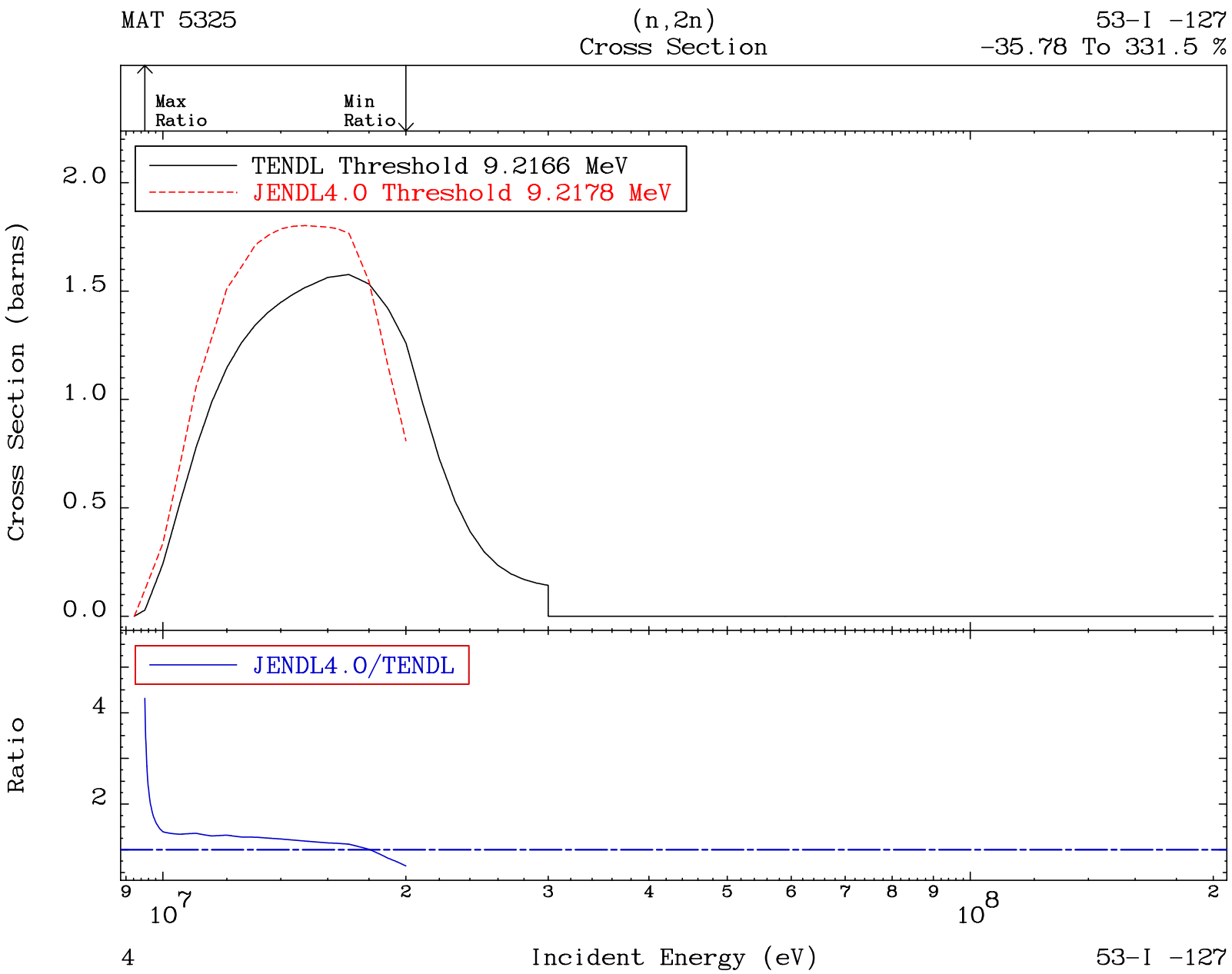
Program Complot
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

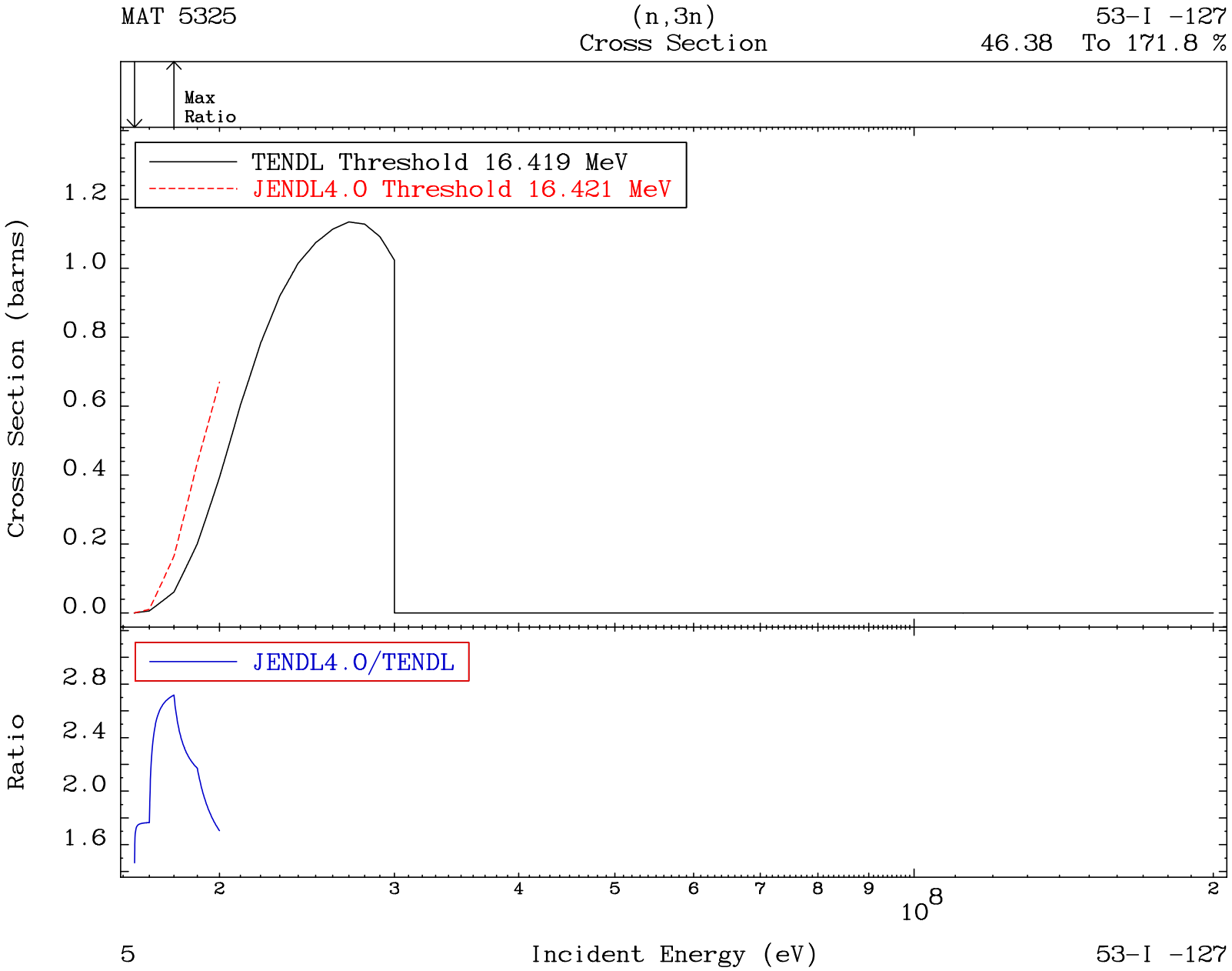
Press Mouse Button to Start

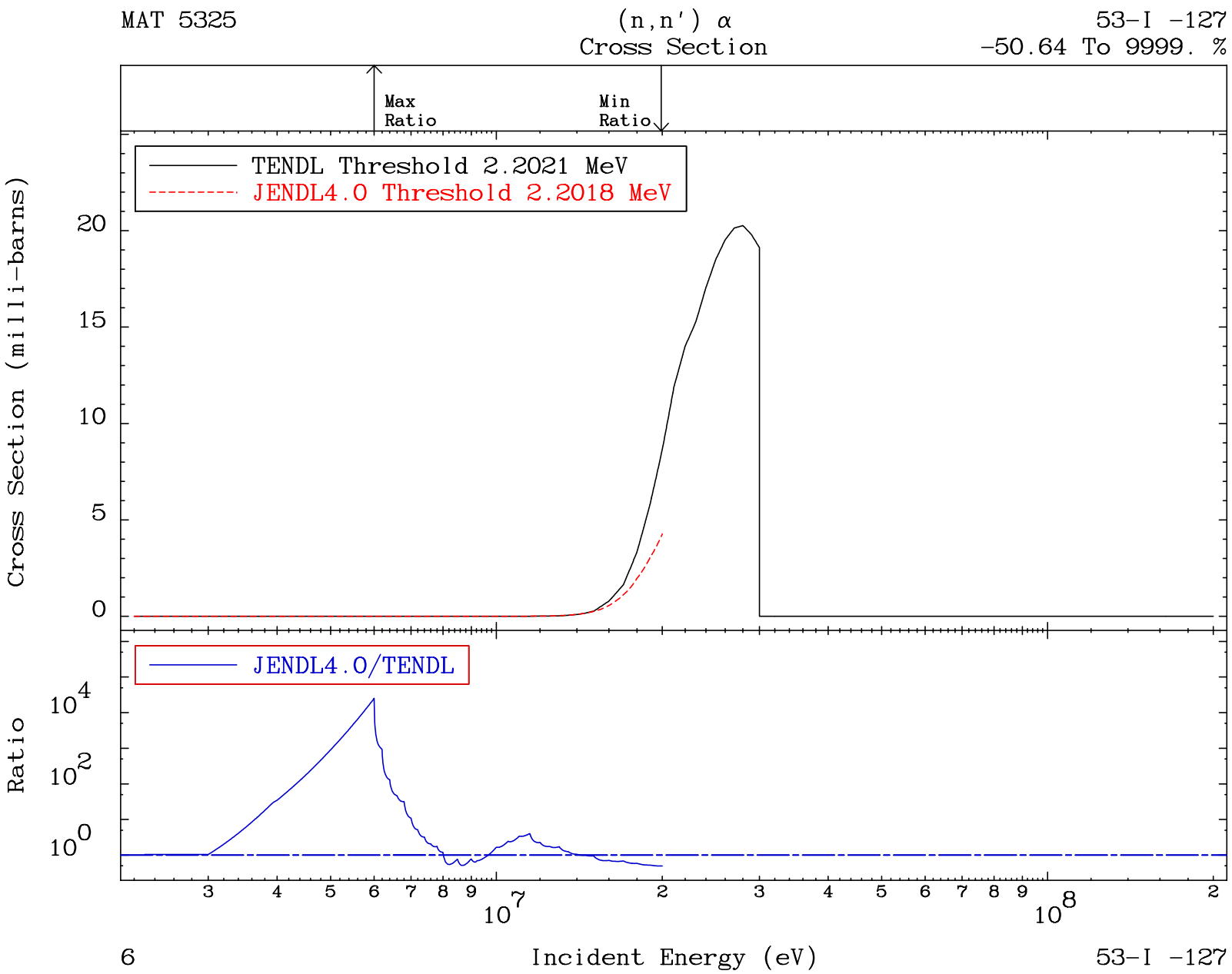

MAT 5325
Total
Cross Section
53-I -127
-95.26 To 3864. %
Max
Ratio
Min
Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
1
53-I -127

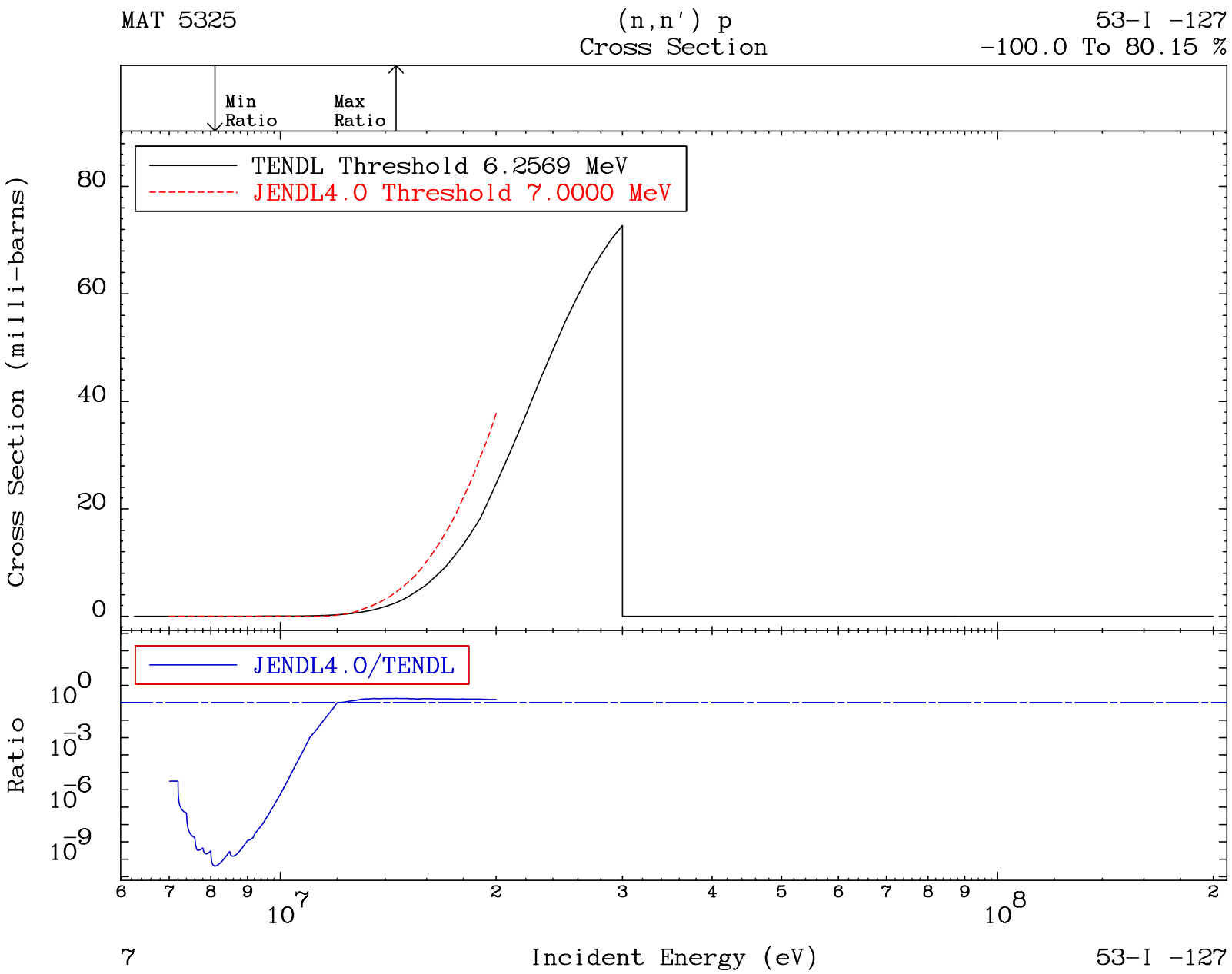

MAT 5325
Elastic
Cross Section
53-I -127
-96.09 To 2809. %
Max
Ratio
Min
Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
2
53-I -127

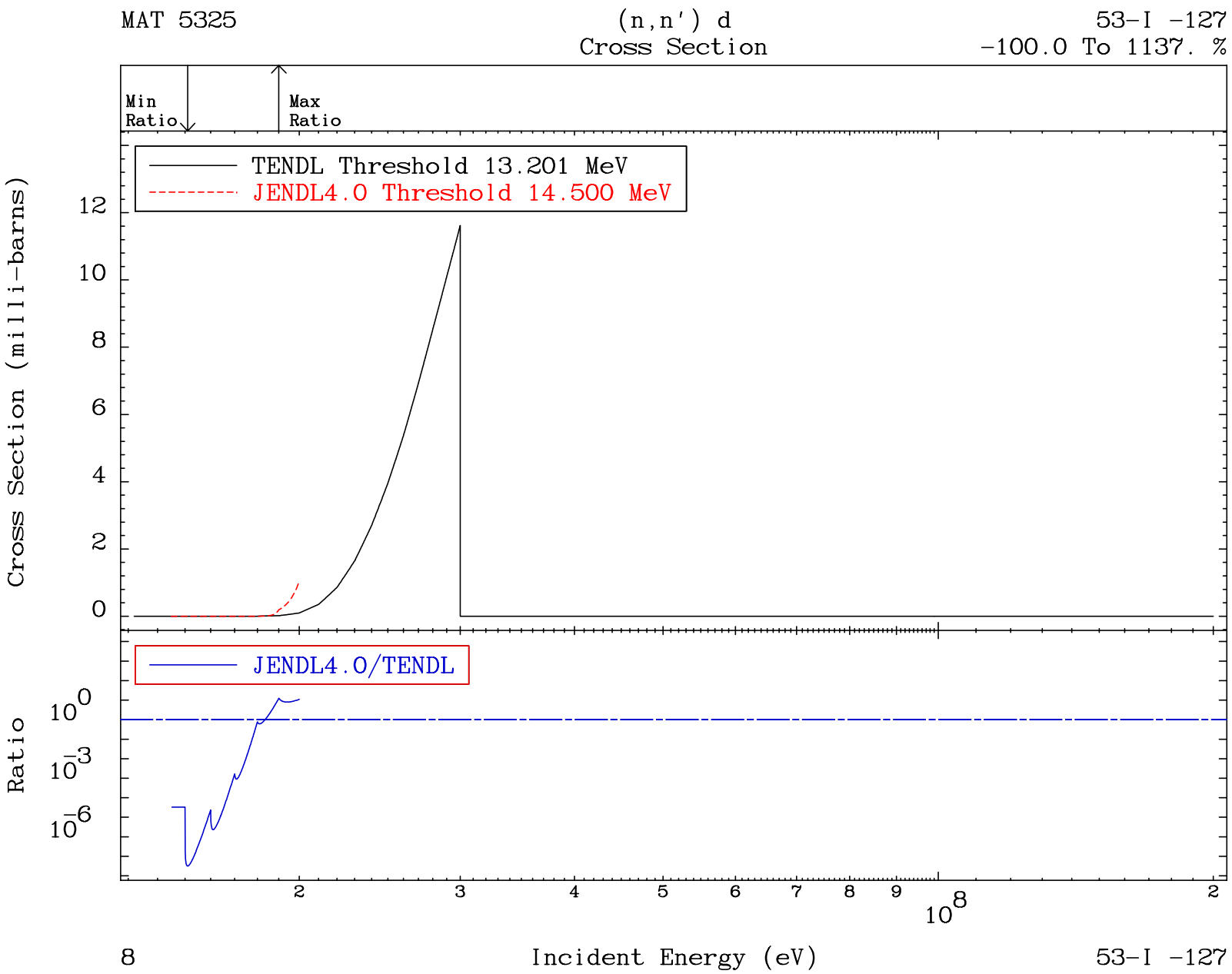

MAT 5325
Inelastic
Cross Section
53-I -127
-77.20 To 29.21 %
Max
Ratio
Min
Ratio
TENDL Threshold 58.066 keV
JENDL4.0 Threshold 58.058 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
1.6
1.2
0.8
0.4
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
53-I -127

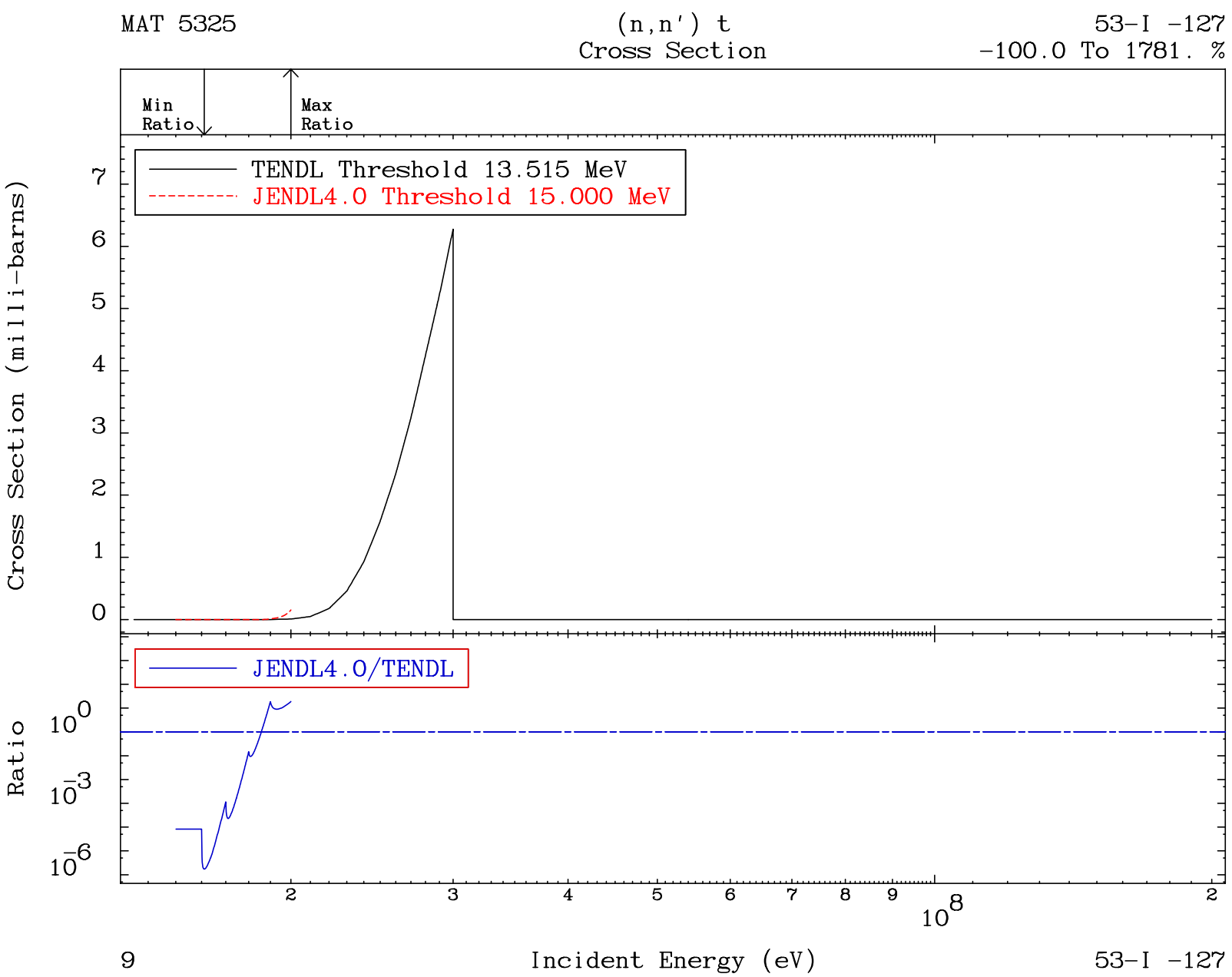

MAT 5325
(n,2n)
Cross Section
53-I -127
-35.78 To 331.5 %
Max Ratio
Min Ratio
TENDL Threshold 9.2166 MeV
JENDL4.0 Threshold 9.2178 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
4
2
9
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
53-I -127

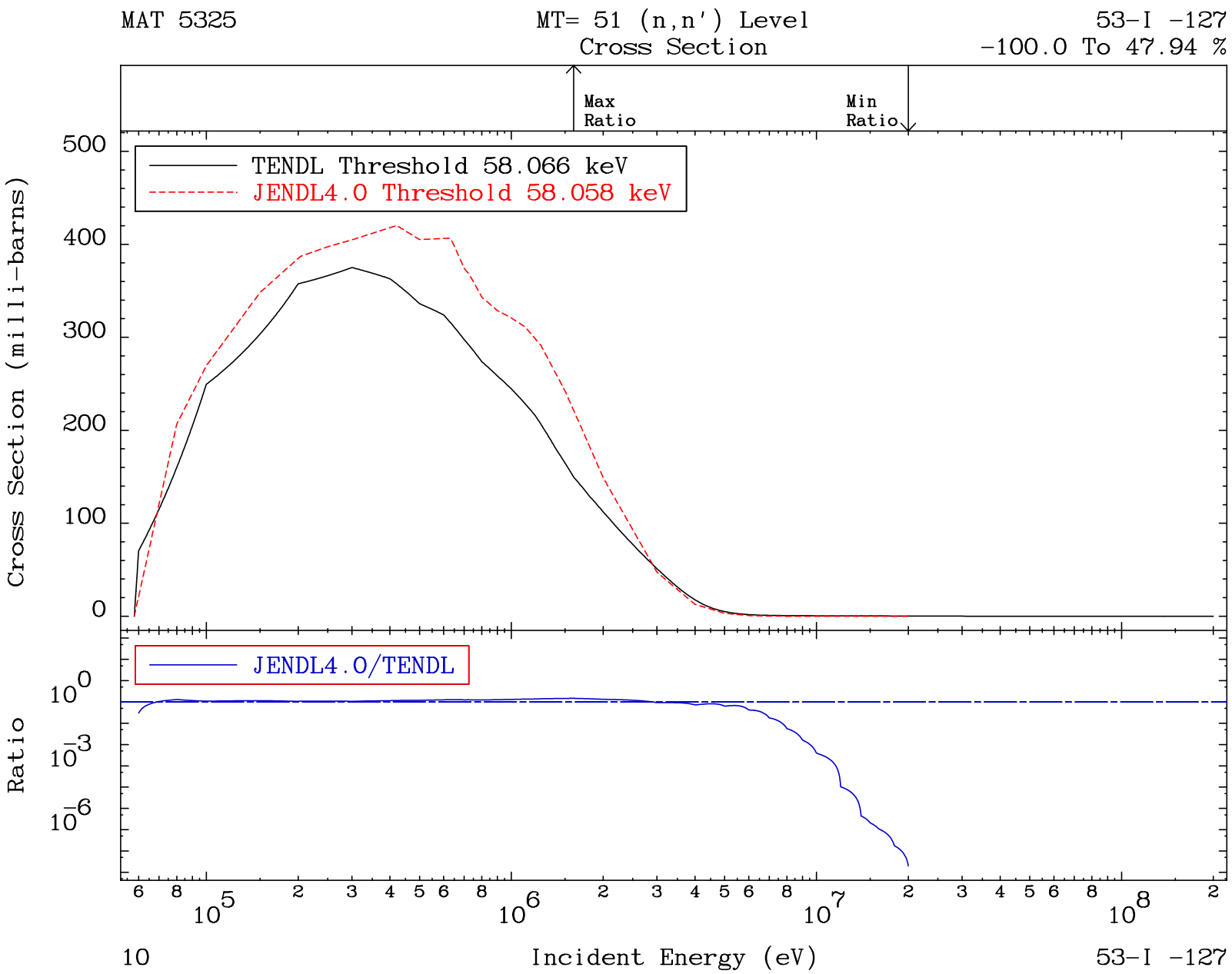

MAT 5325
(n,3n)
Cross Section
53-I -127
46.38 To 171.8 %
Max
Ratio
TENDL Threshold 16.419 MeV
JENDL4.0 Threshold 16.421 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
2.8
2.4
2.0
1.6
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
53-I -127

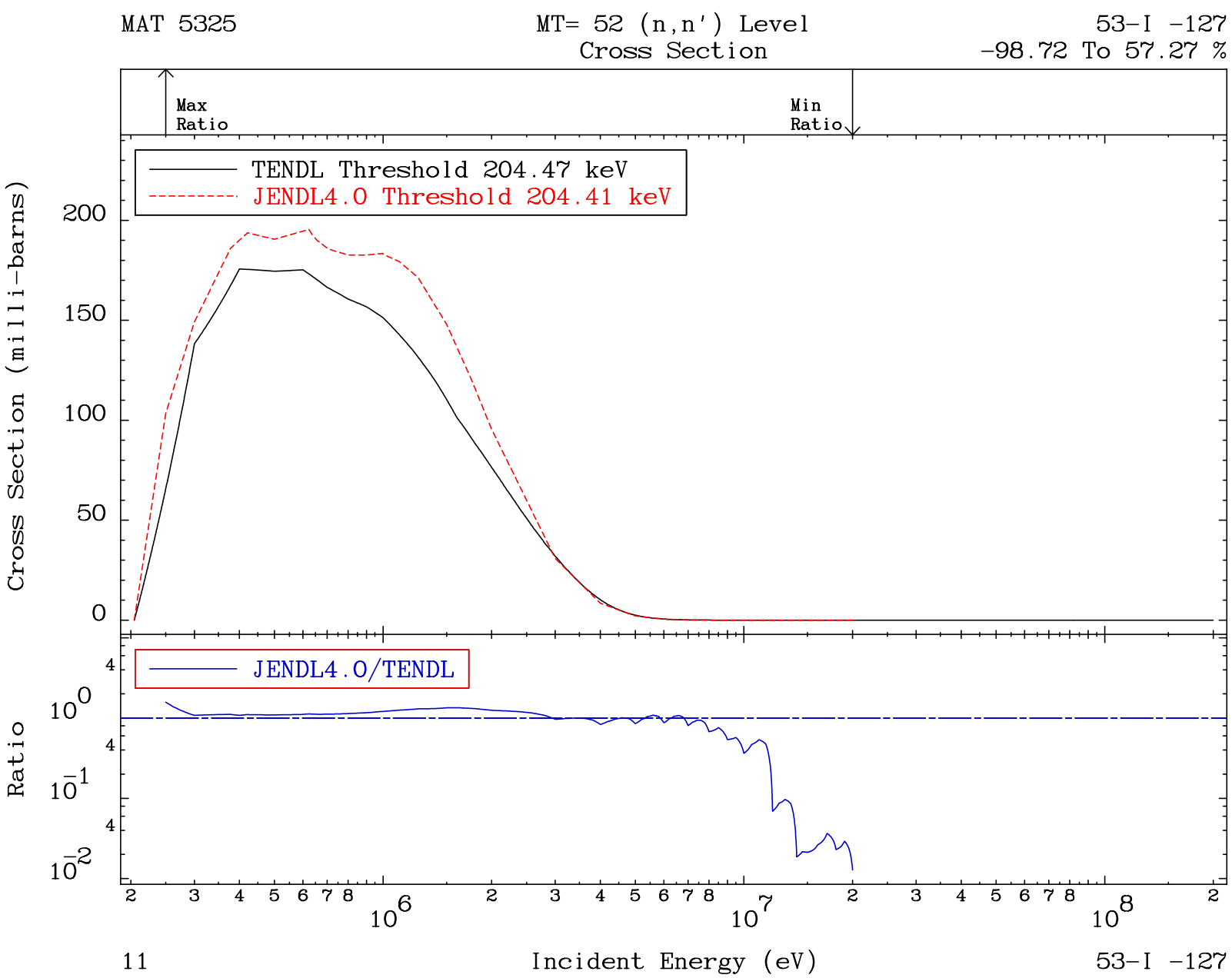

MAT 5325
(n,n') α
Cross Section
53-I -127
-50.64 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.2021 MeV
JENDL4.0 Threshold 2.2018 MeV
Cross Section (milli-barns)
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
53-I -127

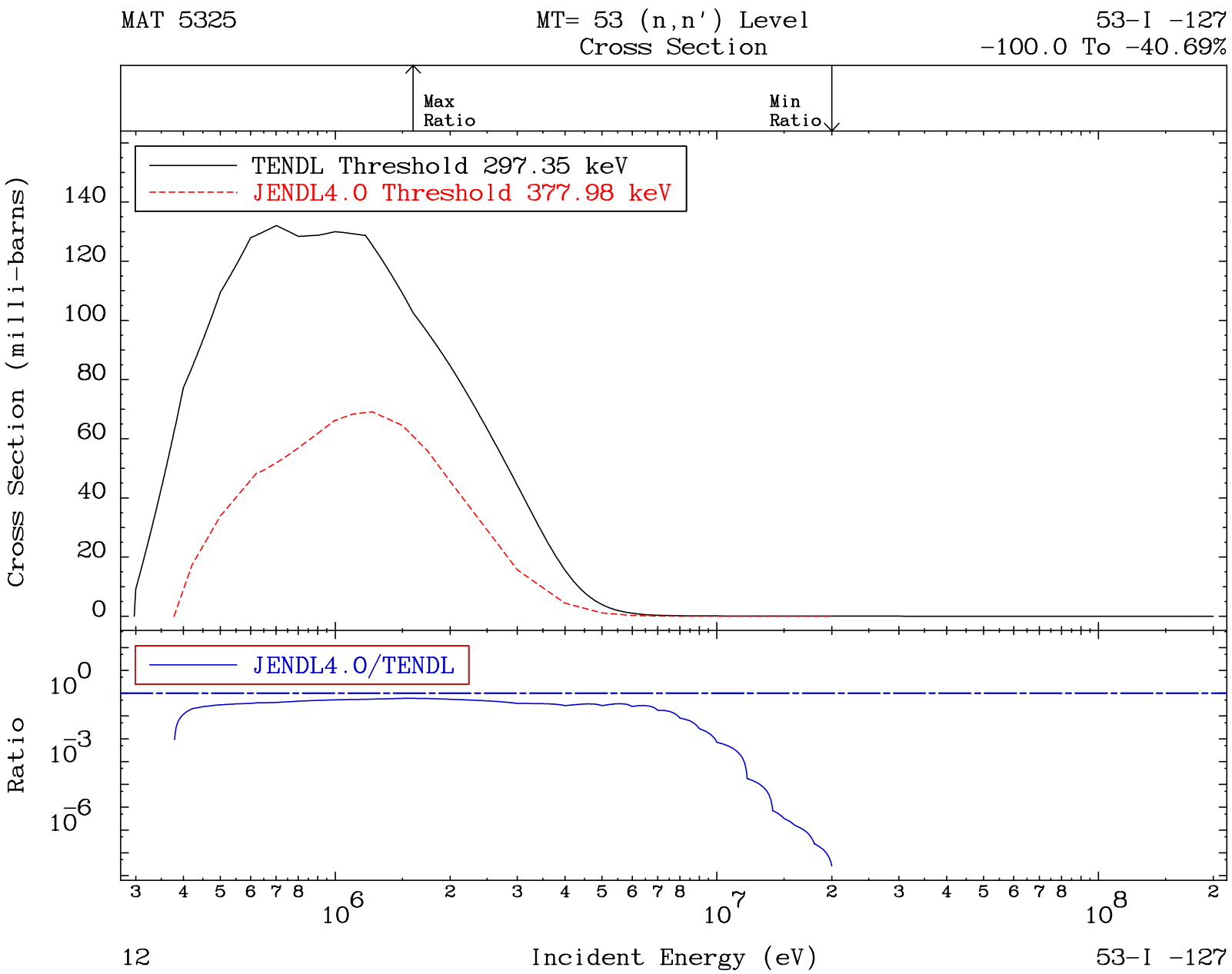

MAT 5325
(n,n') p
Cross Section
53-I -127
-100.0 To 80.15 %
Min Ratio
Max Ratio
TENDL Threshold 6.2569 MeV
JENDL4.0 Threshold 7.0000 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
53-I -127
7

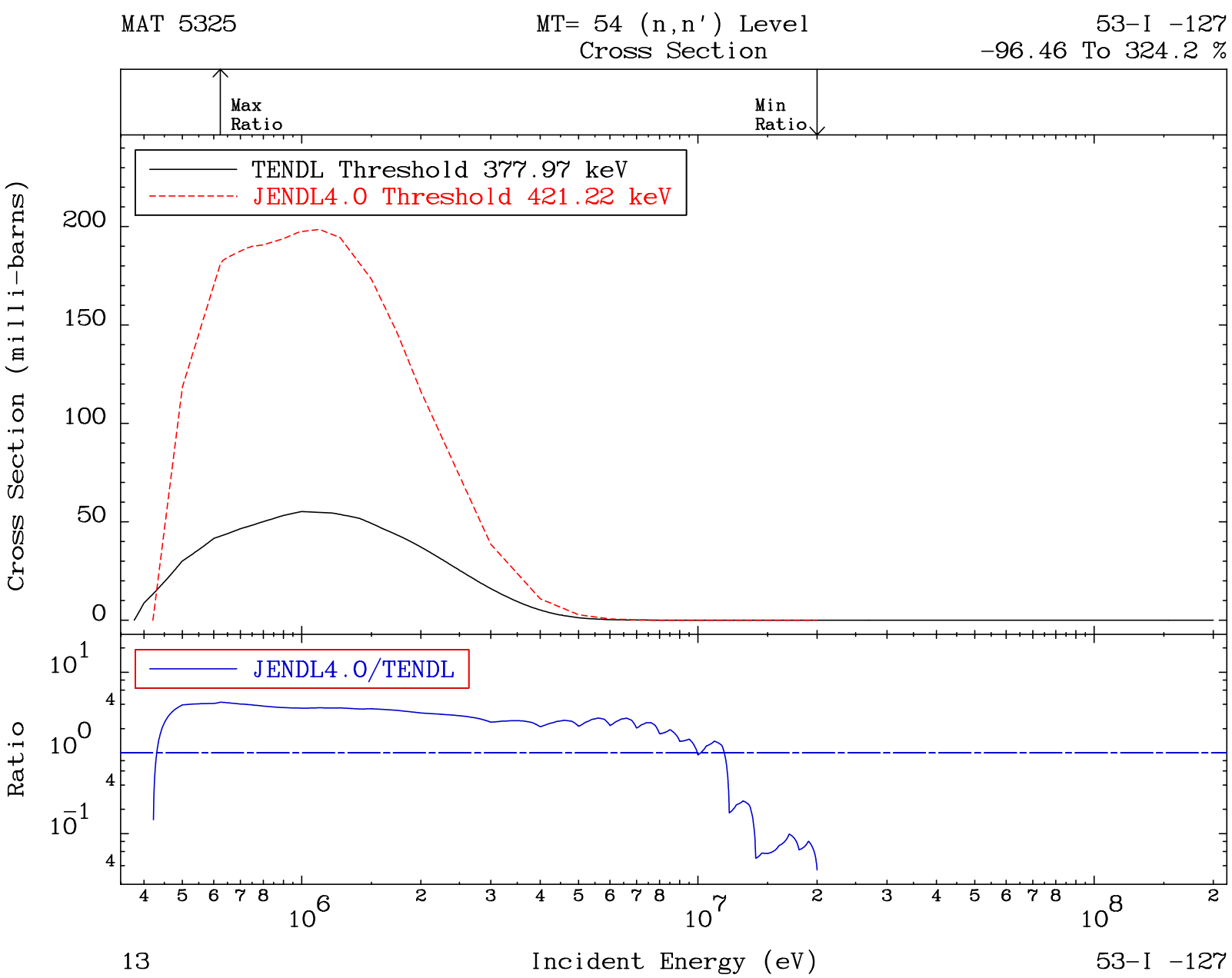

MAT 5325
(n,n') d
Cross Section
53-I -127
-100.0 To 1137. %
Min Ratio
Max Ratio
TENDL Threshold 13.201 MeV
JENDL4.0 Threshold 14.500 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
53-I -127

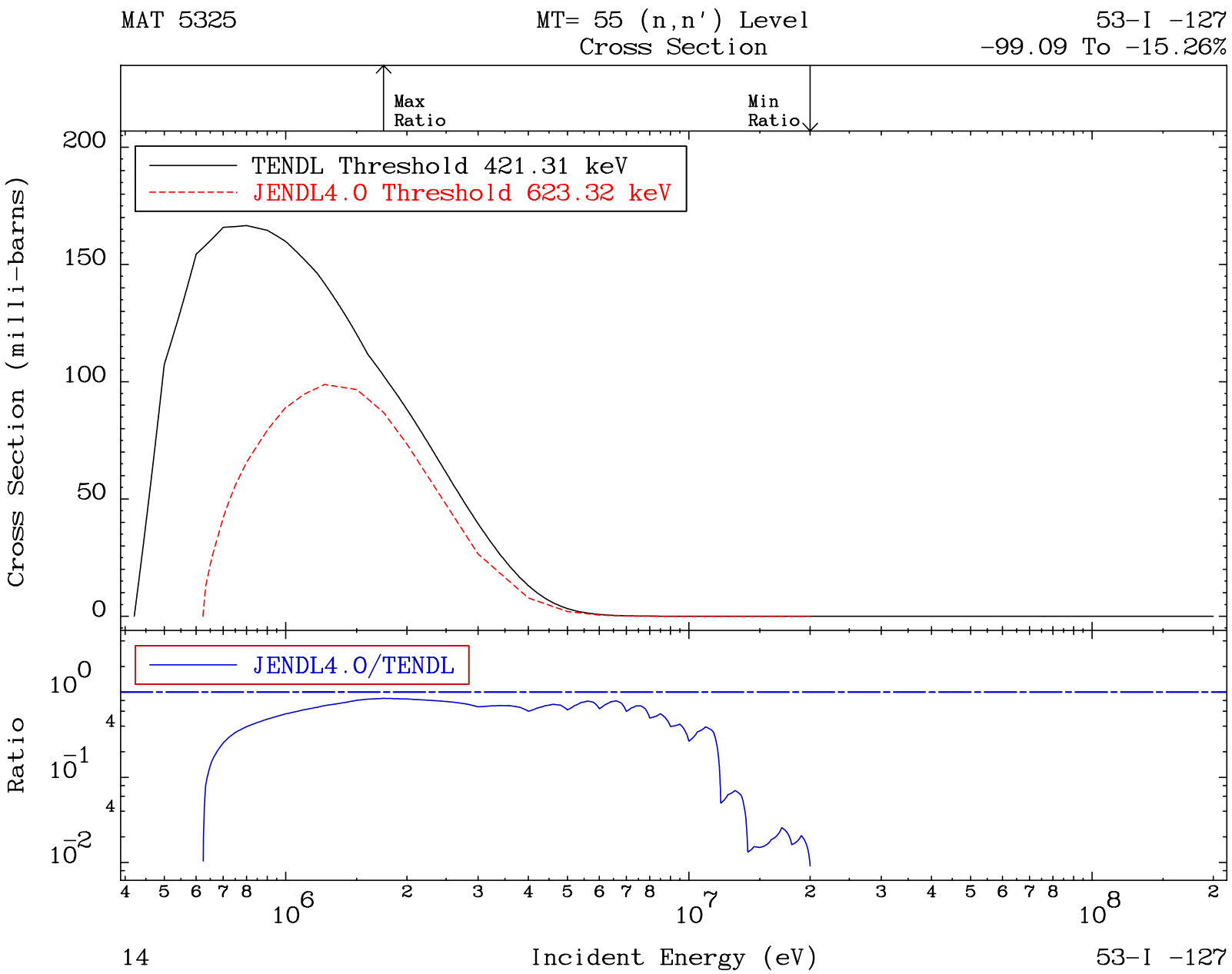

MAT 5325
(n,n') t
Cross Section
53-I -127
-100.0 To 1781. %
Min Ratio
Max Ratio
TENDL Threshold 13.515 MeV
JENDL4.0 Threshold 15.000 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
53-I -127

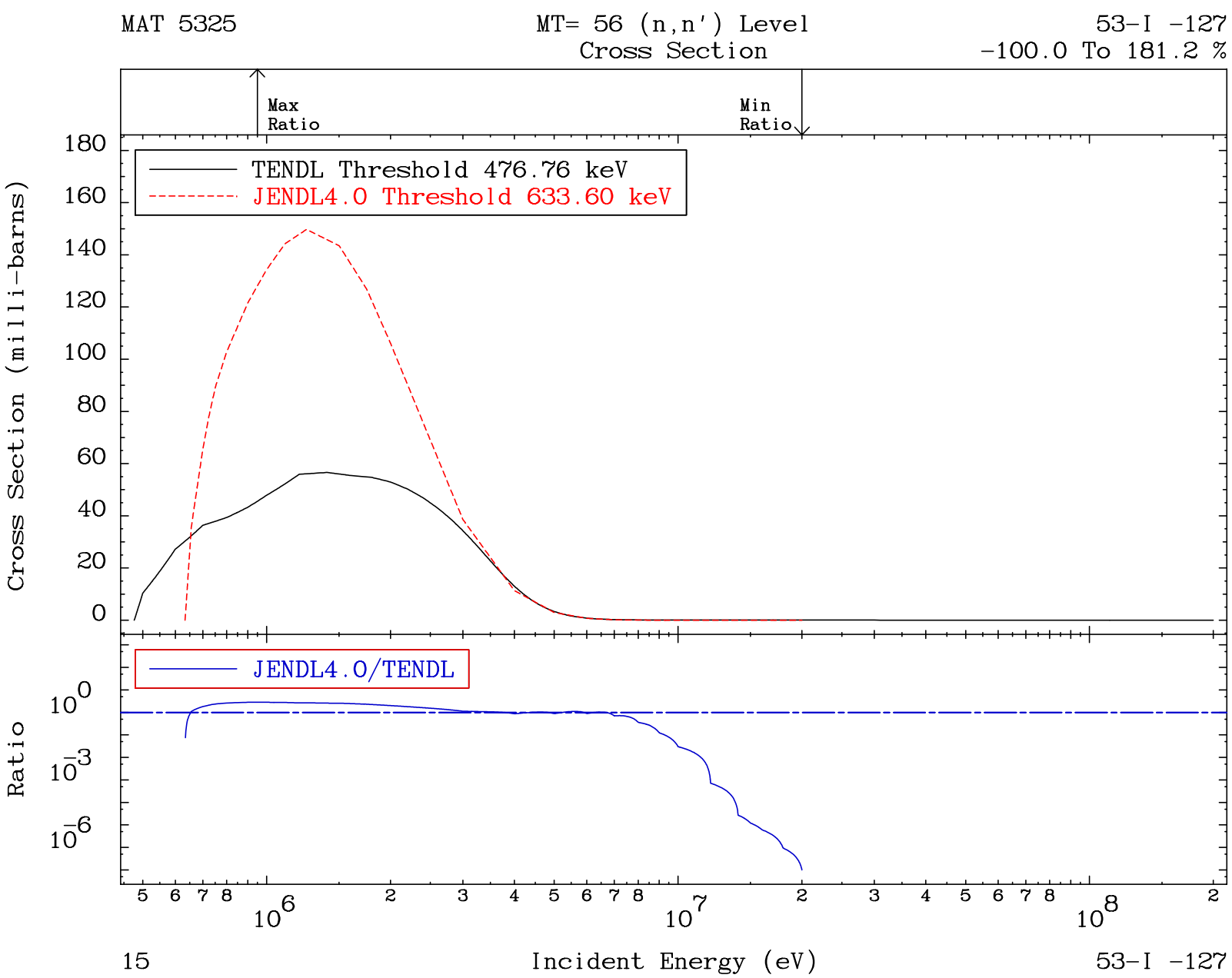

MAT 5325
MT= 51 (n,n') Level
Cross Section
53-I -127
-100.0 To 47.94 %
Max
Ratio
Min
Ratio
TENDL Threshold 58.066 keV
JENDL4.0 Threshold 58.058 keV
Cross Section (milli-barns)
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
10^5
10^6
10^7
10^8
Incident Energy (eV)
10
53-I -127

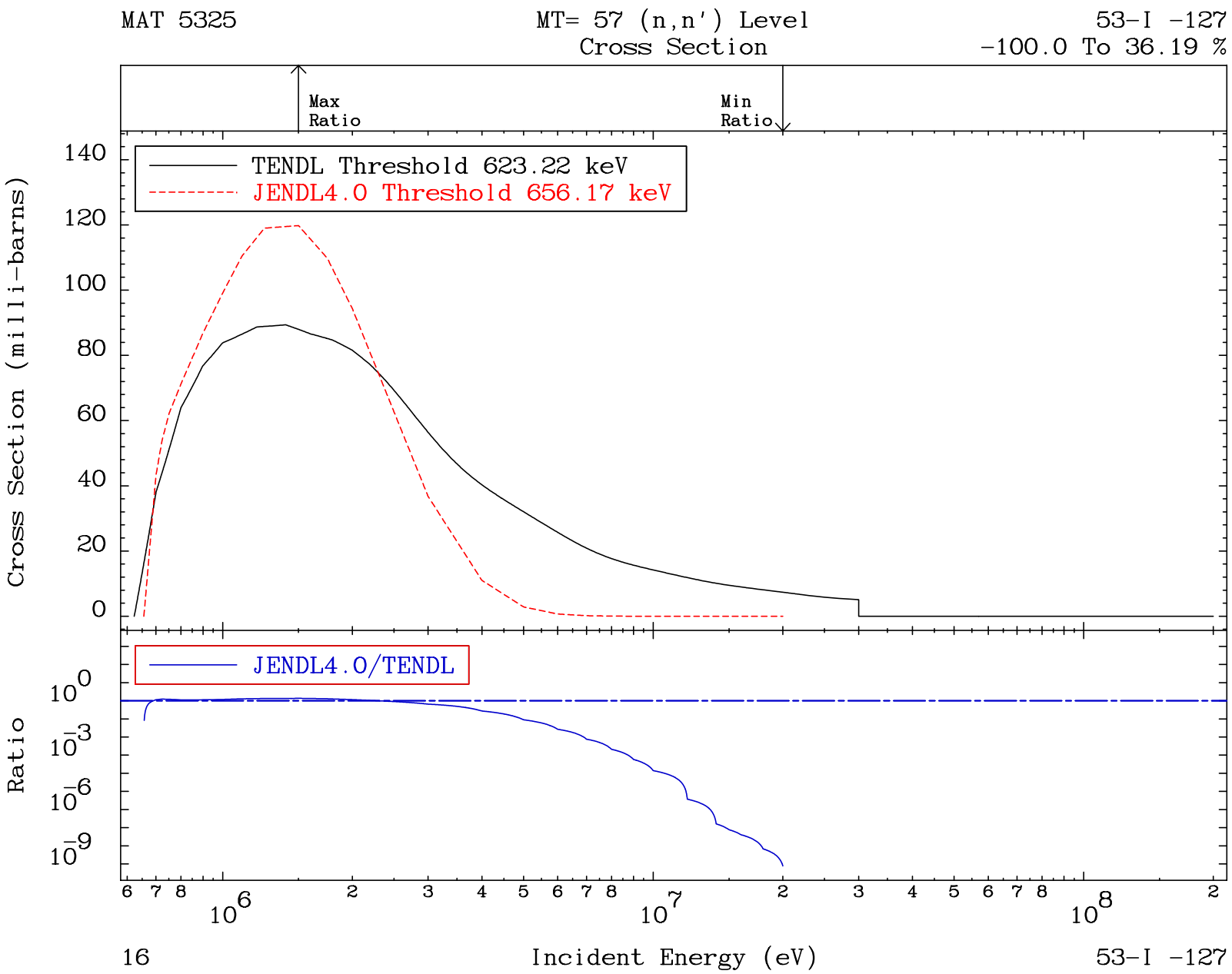

MAT 5325
MT= 52 (n,n') Level
Cross Section
53-I -127
-98.72 To 57.27 %
Max
Ratio
Min
Ratio
TENDL Threshold 204.47 keV
JENDL4.0 Threshold 204.41 keV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^0
10^-1
10^-2
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
53-I -127

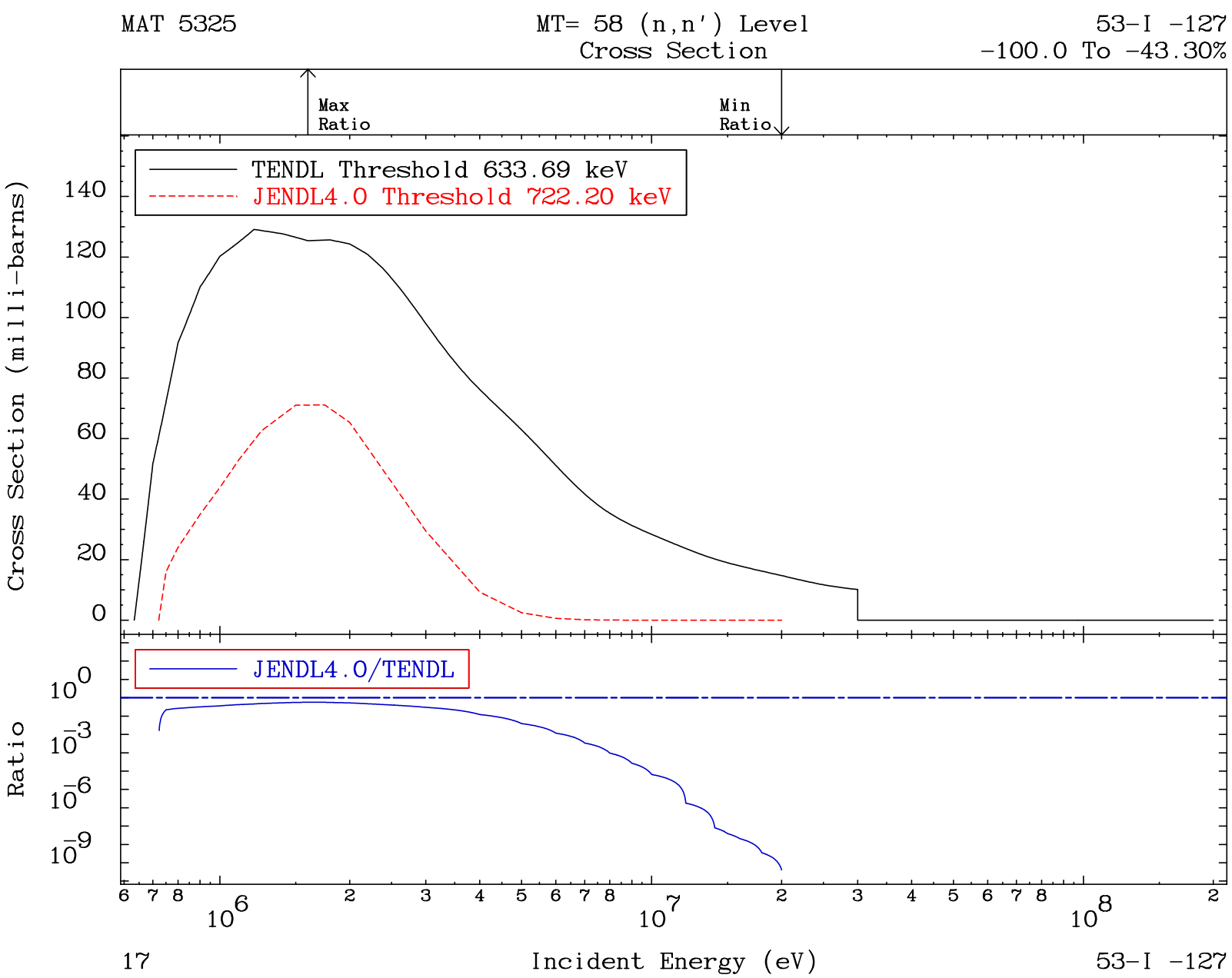

MAT 5325
MT= 53 (n,n') Level
Cross Section
53-I -127
-100.0 To -40.69%
Max
Ratio
Min
Ratio
TENDL Threshold 297.35 keV
JENDL4.0 Threshold 377.98 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
53-I -127

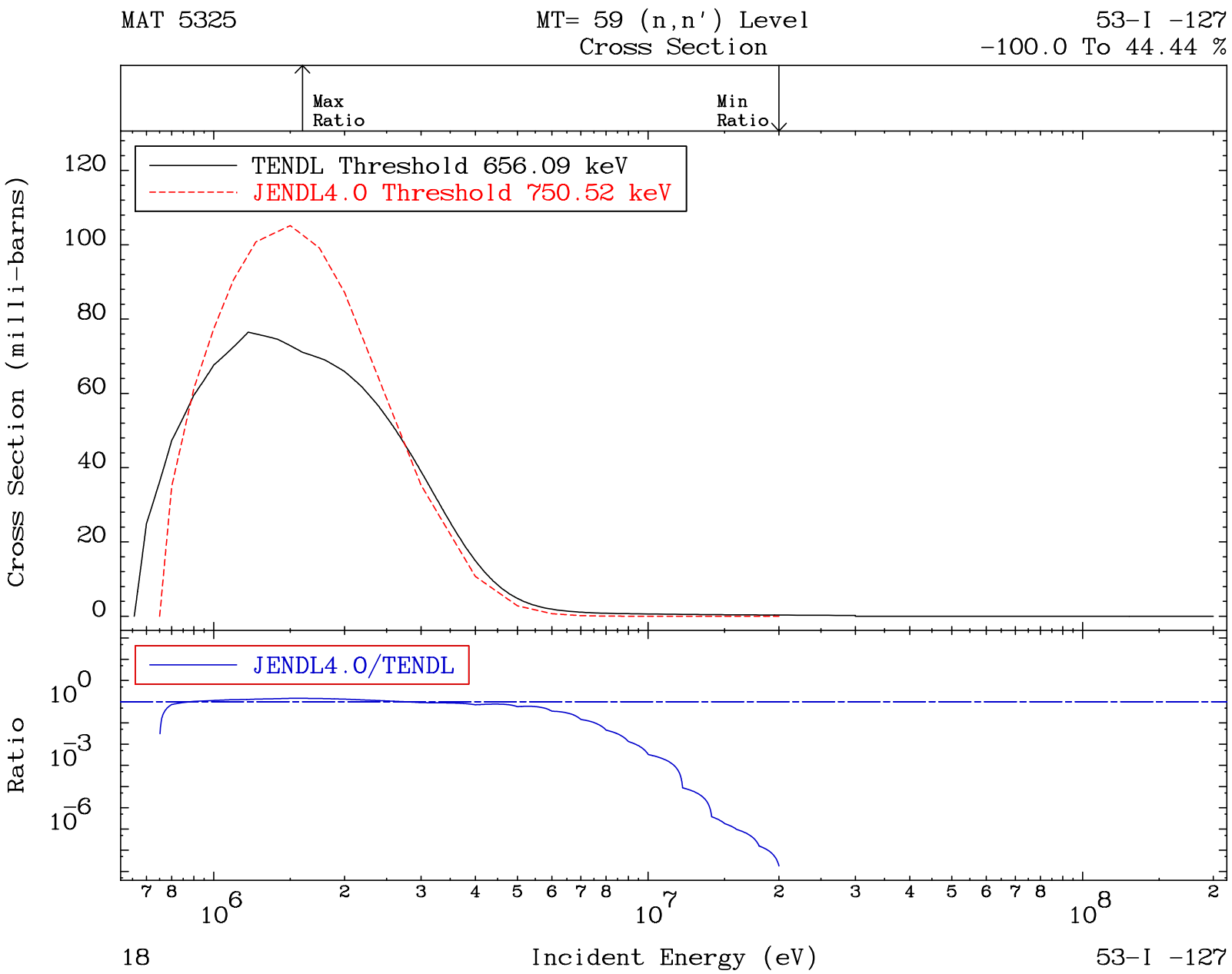

MAT 5325
MT= 54 (n,n') Level
Cross Section
53-I -127
-96.46 To 324.2 %
Max
Ratio
Min
Ratio
TENDL Threshold 377.97 keV
JENDL4.0 Threshold 421.22 keV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
4
10^6
10^7
10^8
Incident Energy (eV)
13
53-I -127

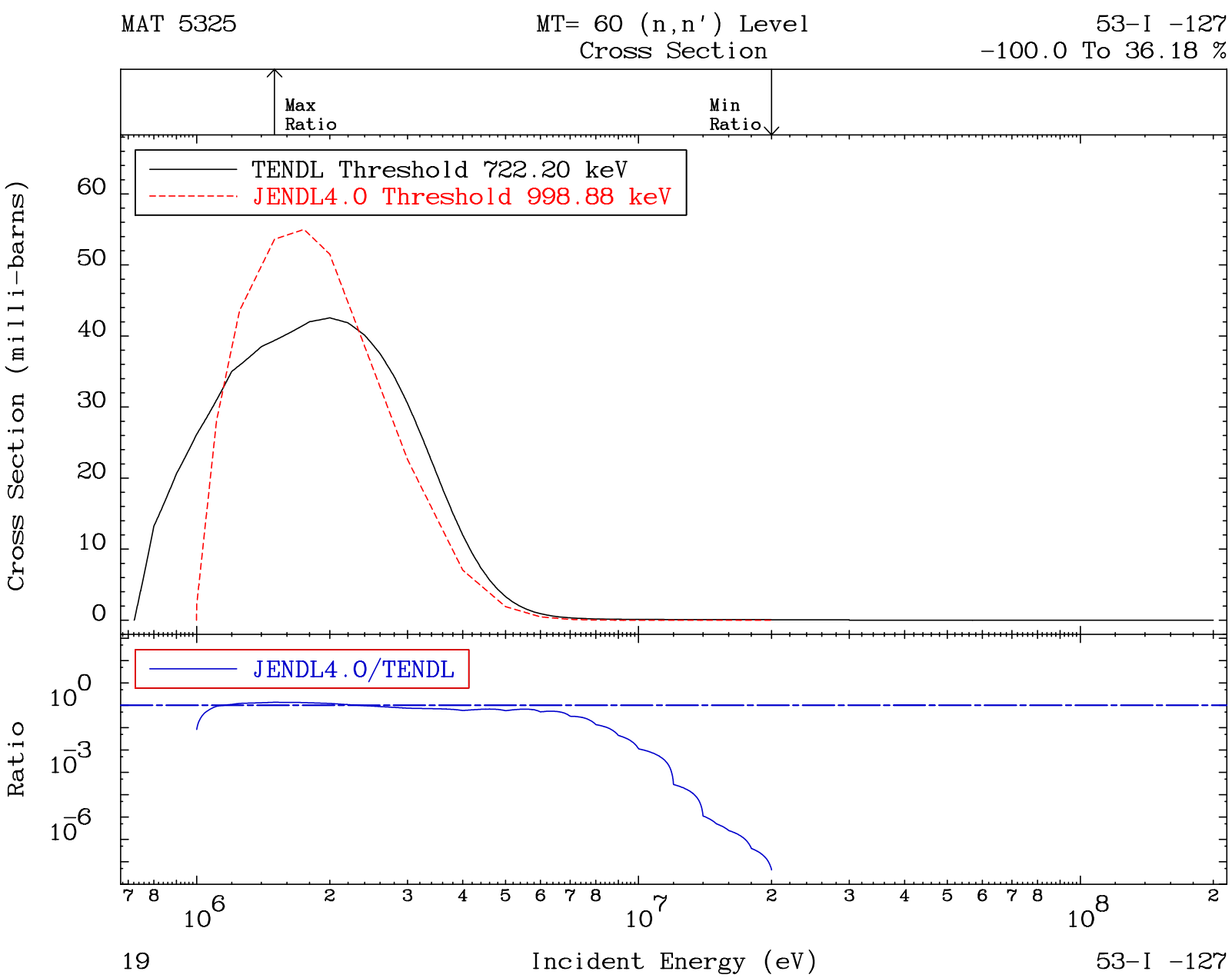

MAT 5325
MT= 55 (n,n') Level
Cross Section
53-I -127
-99.09 To -15.26%
Max
Ratio
Min
Ratio
TENDL Threshold 421.31 keV
JENDL4.0 Threshold 623.32 keV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^0
10^-1
10^-2
4
4
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
53-I -127

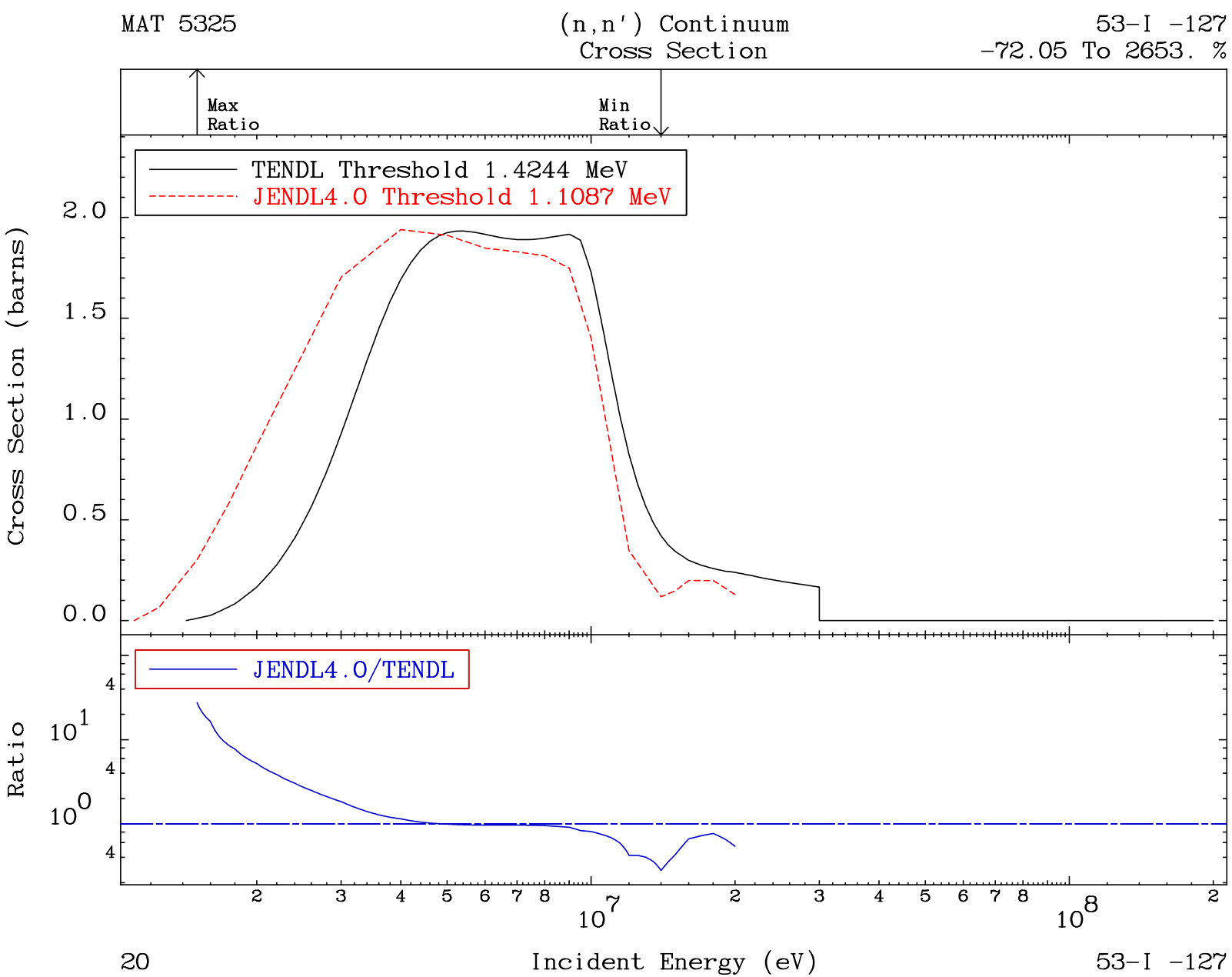

MAT 5325
MT= 56 (n,n') Level
Cross Section
53-I -127
-100.0 To 181.2 %
Max
Ratio
Min
Ratio
TENDL Threshold 476.76 keV
JENDL4.0 Threshold 633.60 keV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
53-I -127

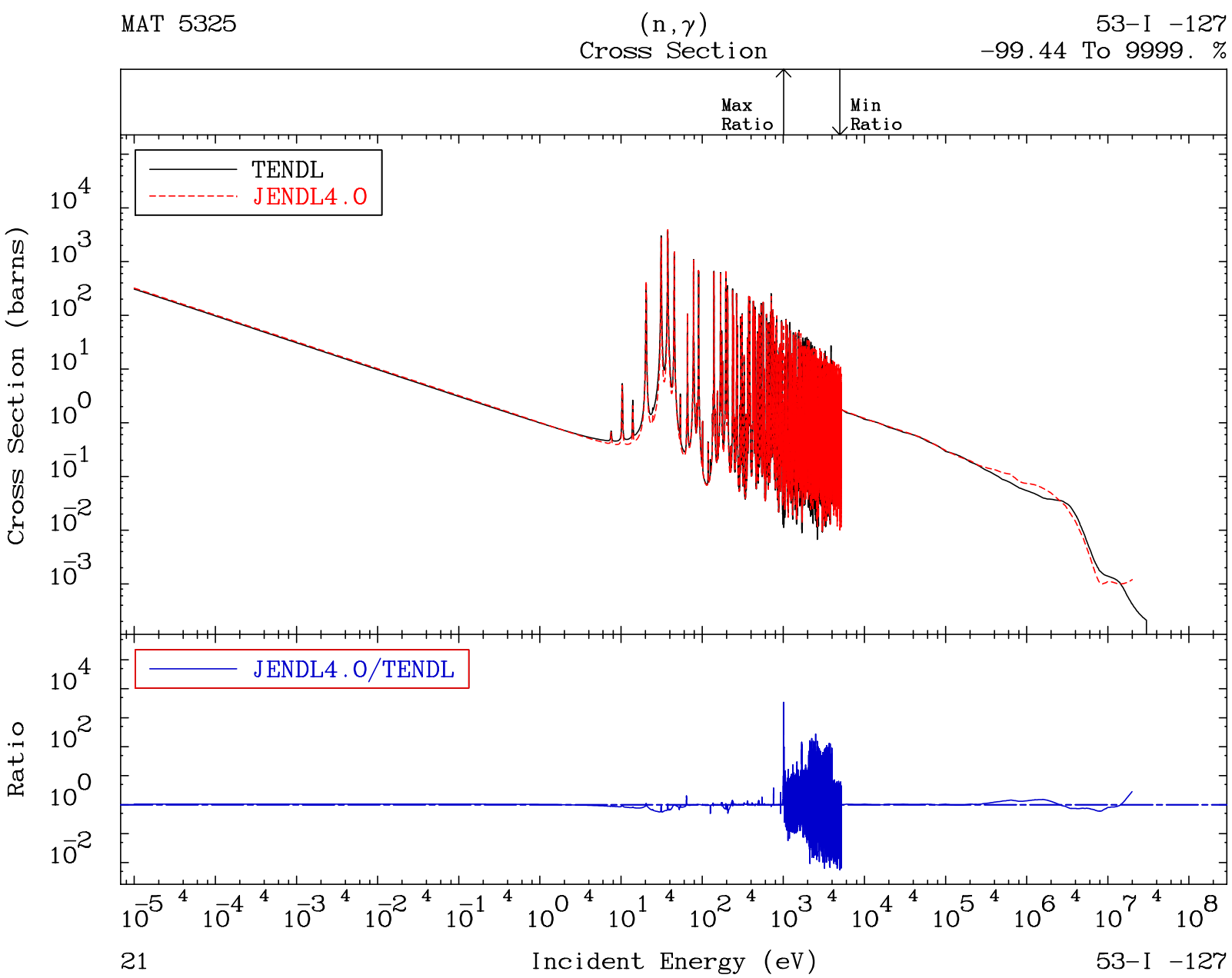

MAT 5325
MT= 57 (n,n') Level
Cross Section
53-I -127
-100.0 To 36.19 %
Max
Ratio
Min
Ratio
TENDL Threshold 623.22 keV
JENDL4.0 Threshold 656.17 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
53-I -127

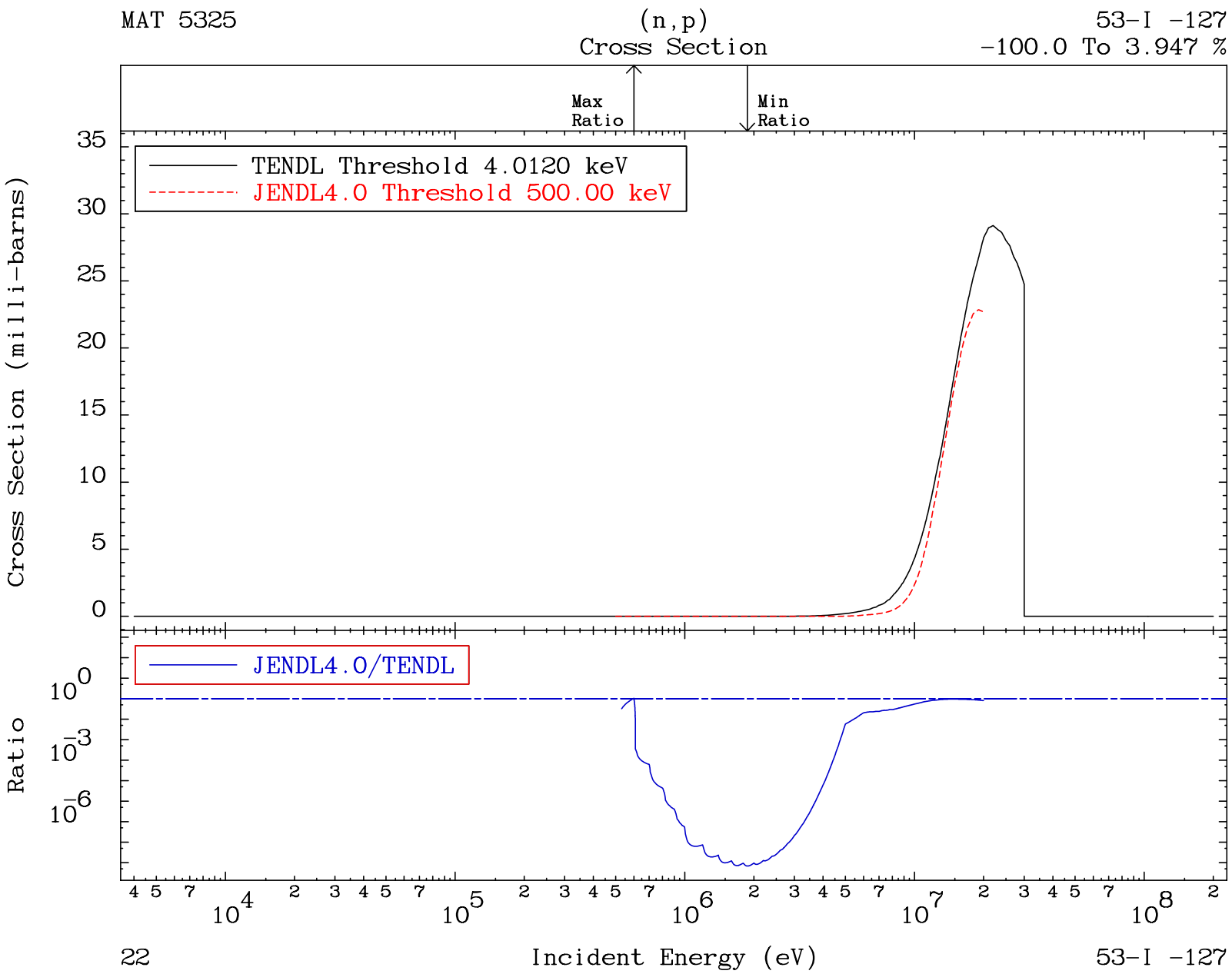

MAT 5325
MT= 58 (n,n') Level
Cross Section
53-I -127
-100.0 To -43.30%
Max
Ratio
Min
Ratio
TENDL Threshold 633.69 keV
JENDL4.0 Threshold 722.20 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
53-I -127

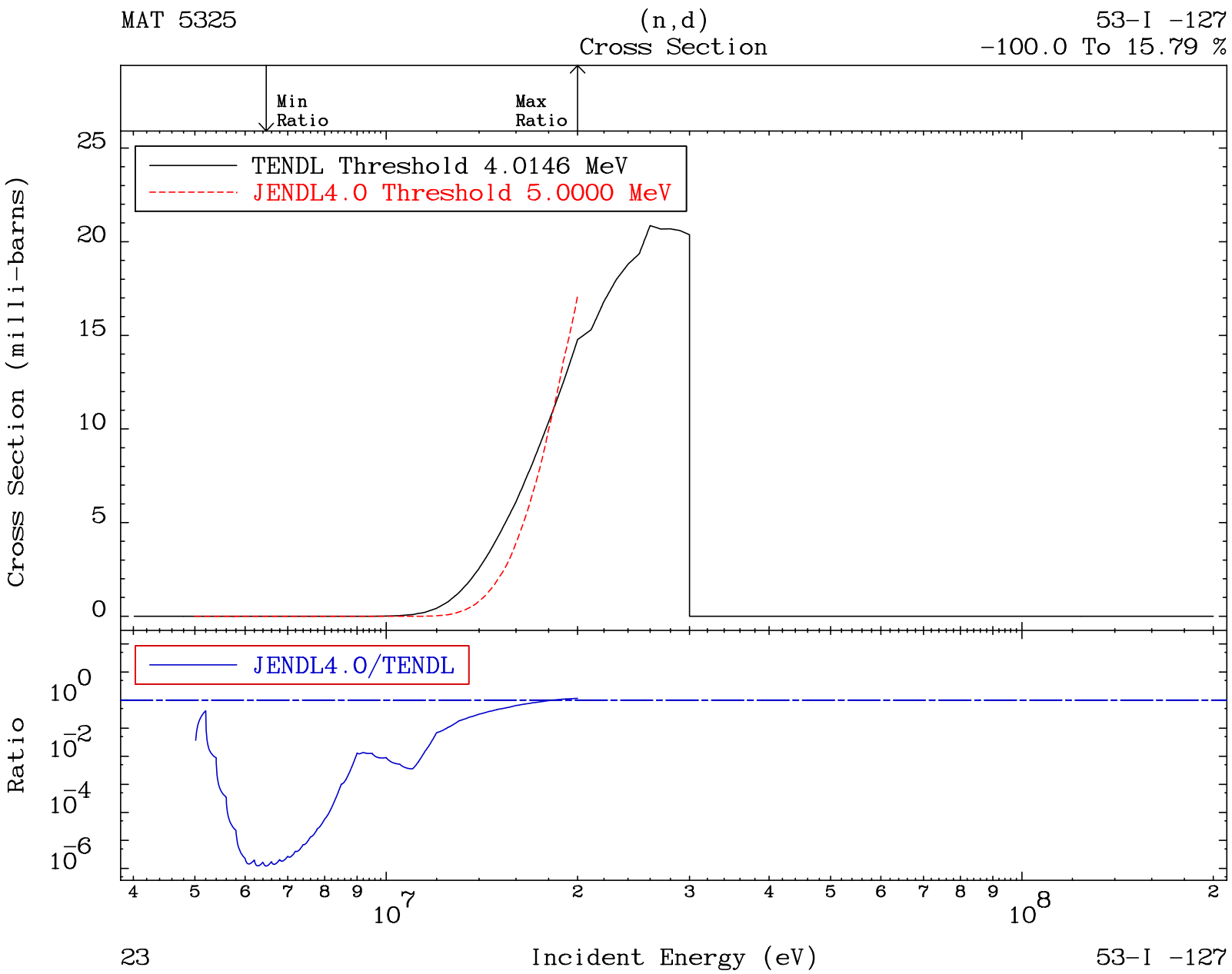

MAT 5325
MT= 59 (n,n') Level
Cross Section
53-I -127
-100.0 To 44.44 %
Max
Ratio
Min
Ratio
TENDL Threshold 656.09 keV
JENDL4.0 Threshold 750.52 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
18
Incident Energy (eV)
53-I -127

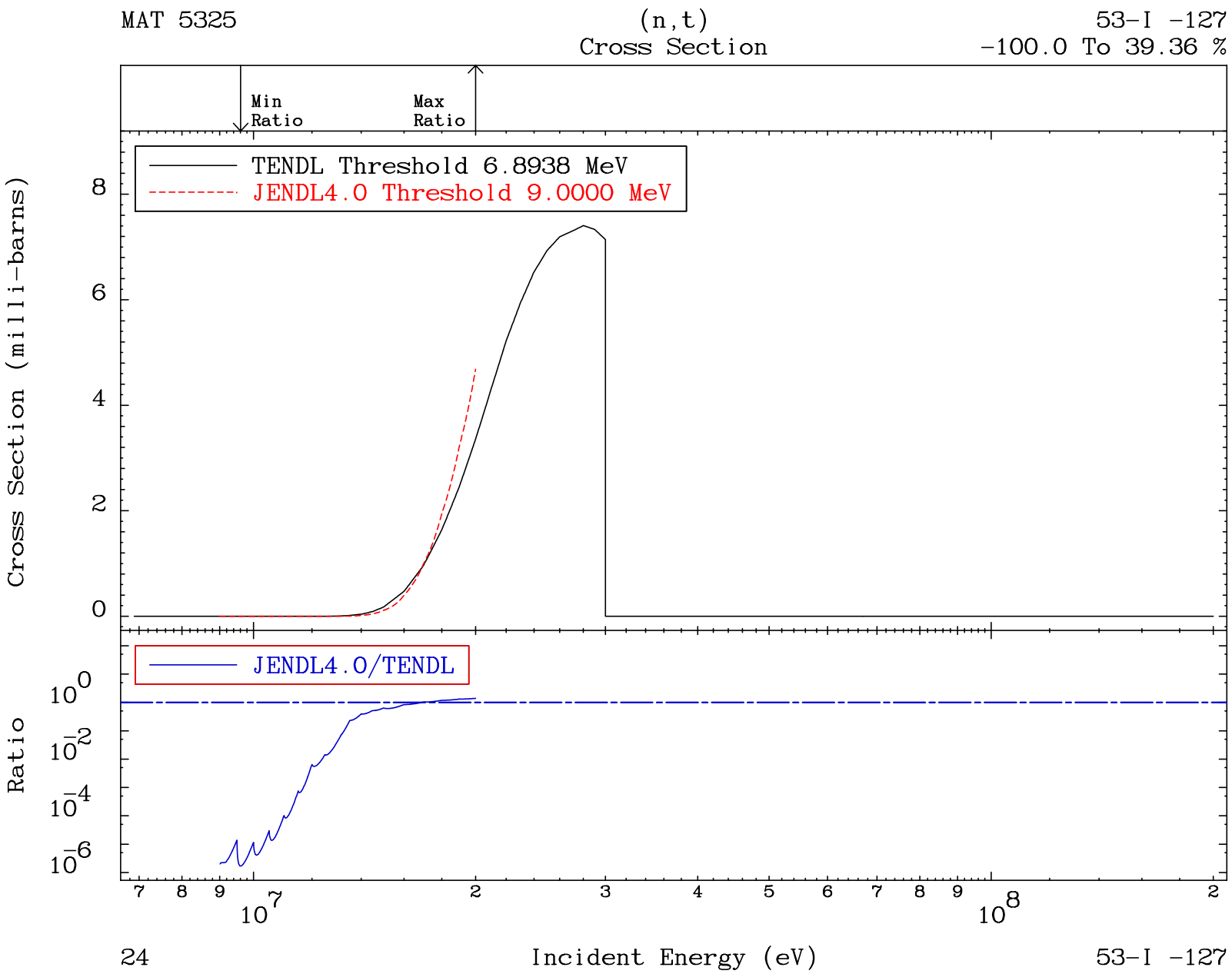

MAT 5325
MT= 60 (n,n') Level
Cross Section
53-I -127
-100.0 To 36.18 %
Max
Ratio
Min
Ratio
TENDL Threshold 722.20 keV
JENDL4.0 Threshold 998.88 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
7 8
10^6
2
3
4
5
6
7 8
10^7
2
3
4
5
6
7 8
10^8
2
19
Incident Energy (eV)
53-I -127

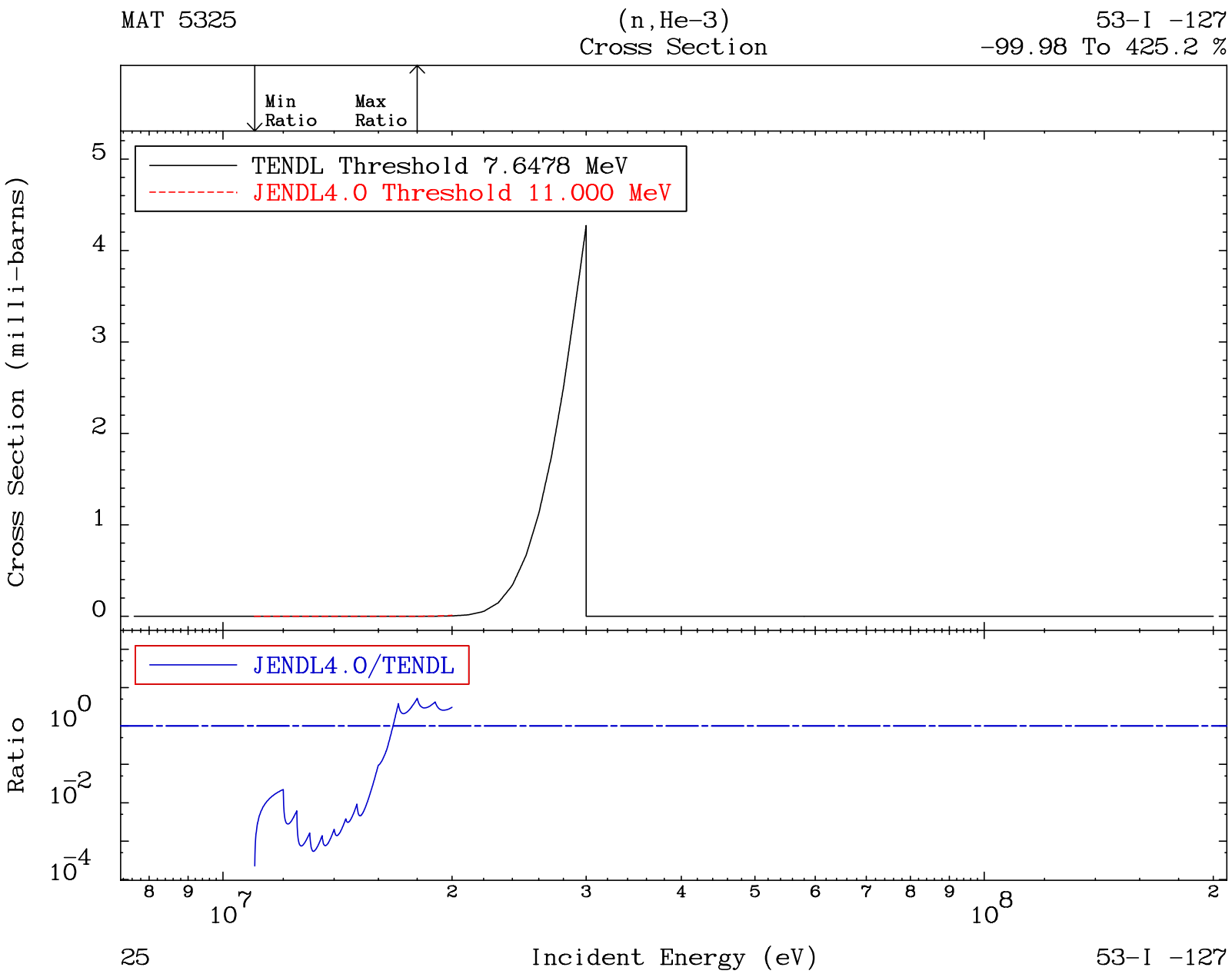

MAT 5325
(n,n') Continuum
Cross Section
53-I -127
-72.05 To 2653. %
Max
Ratio
Min
Ratio
TENDL Threshold 1.4244 MeV
JENDL4.0 Threshold 1.1087 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^1
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
53-I -127

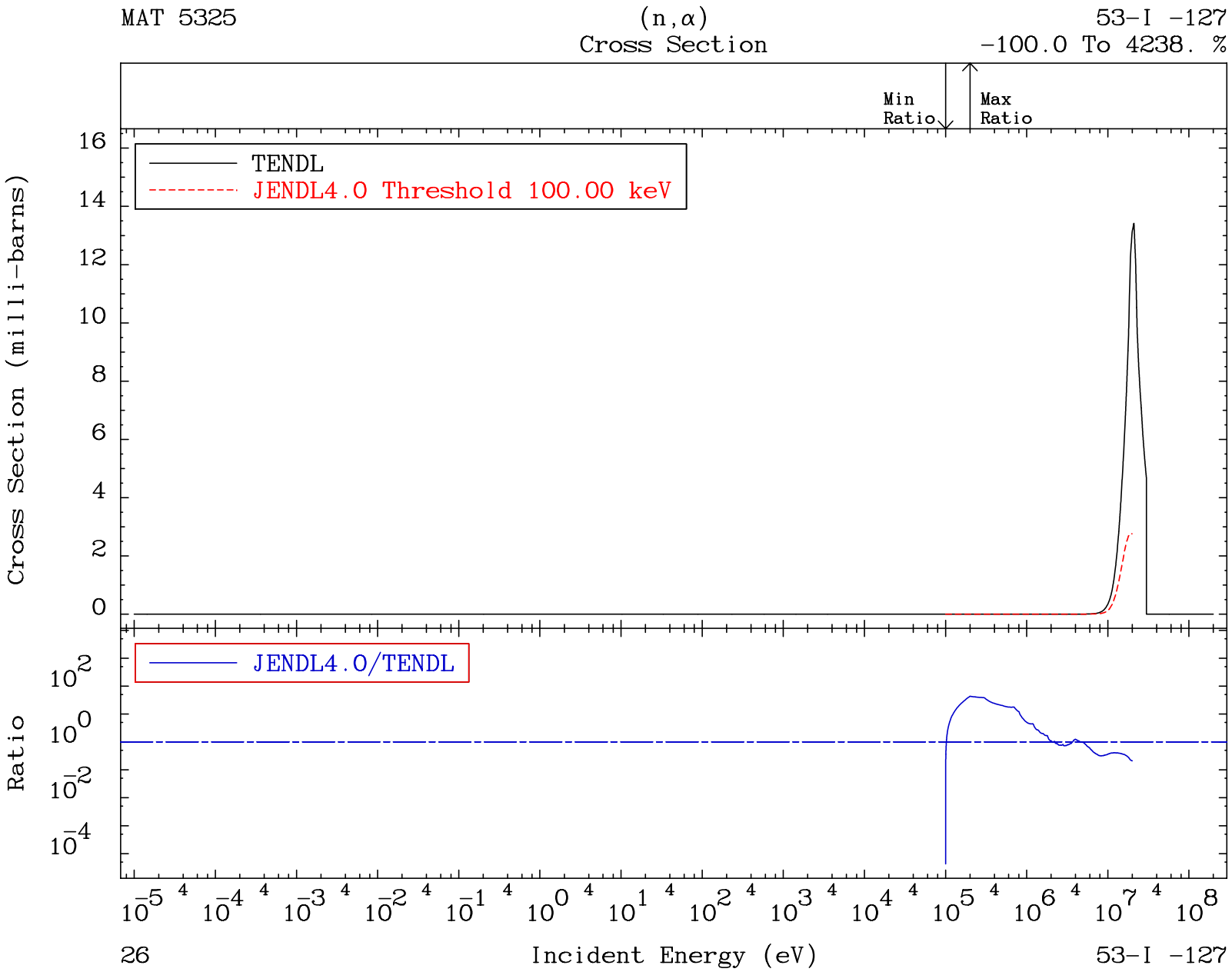

MAT 5325
(n,γ)
Cross Section
53-I -127
-99.44 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
21
53-I -127

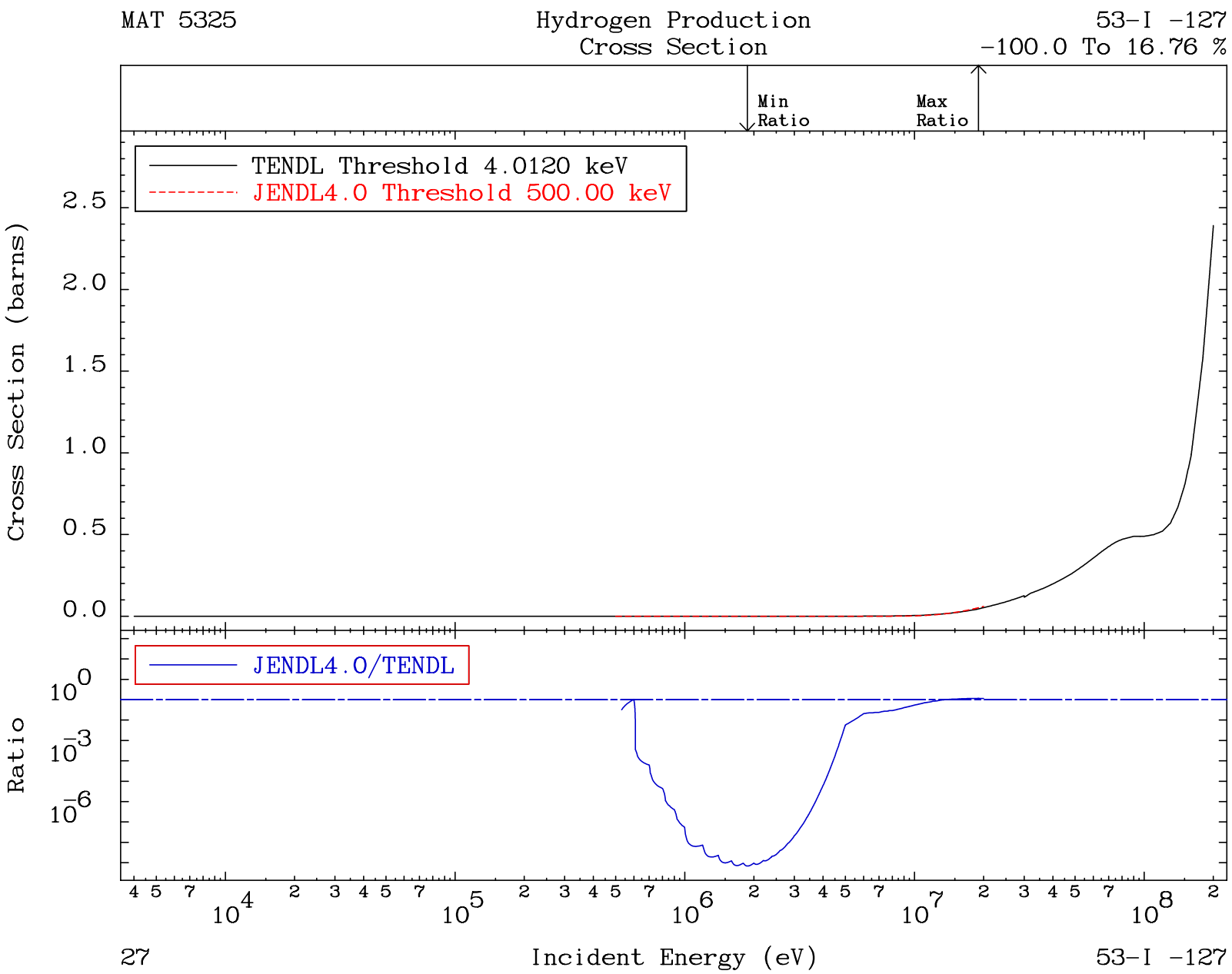

MAT 5325
(n,p)
Cross Section
53-I -127
-100.0 To 3.947 %
Max Ratio
Min Ratio
TENDL Threshold 4.0120 keV
JENDL4.0 Threshold 500.00 keV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
22
53-I -127

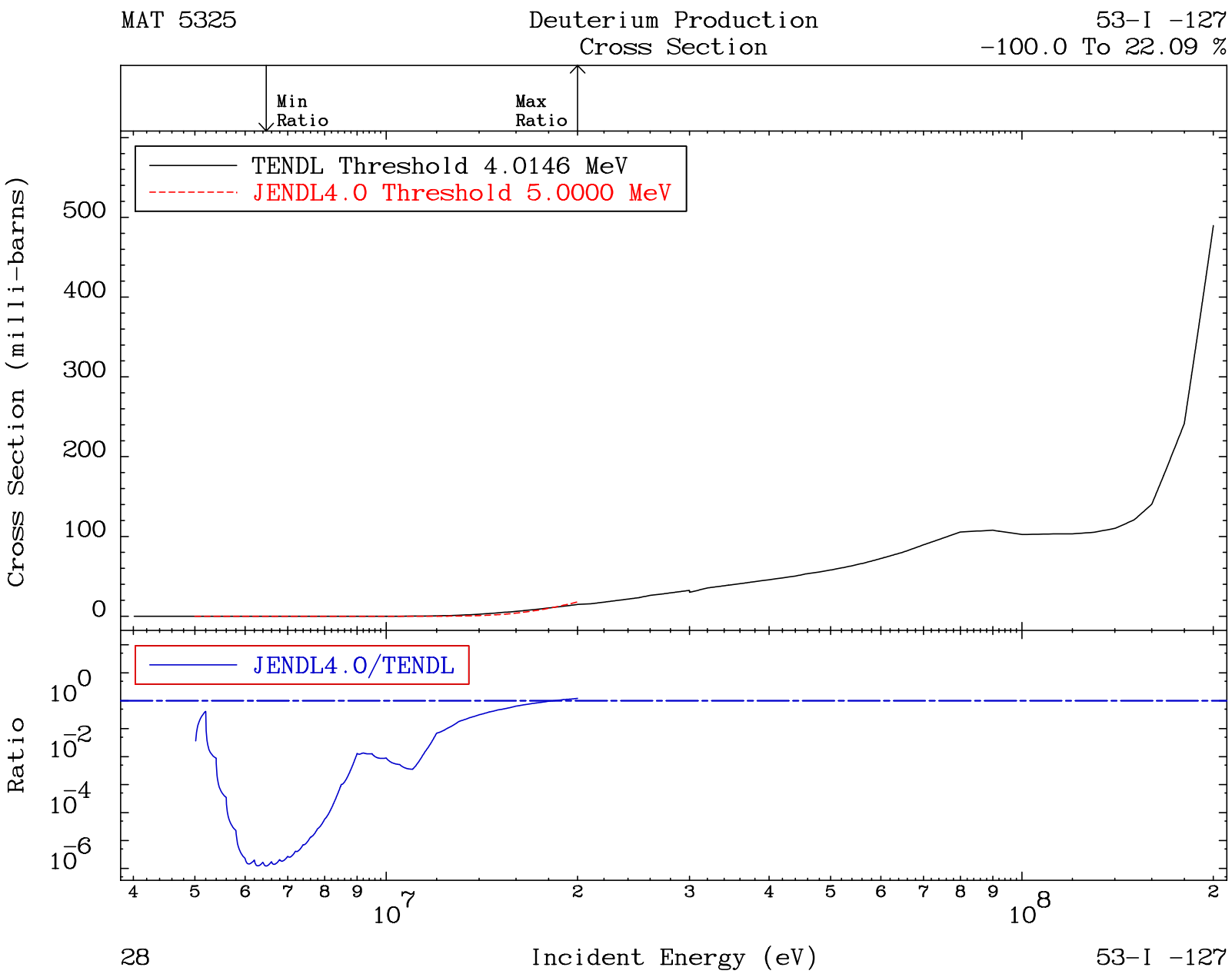

MAT 5325
(n,d)
Cross Section
53-I -127
-100.0 To 15.79 %
Min Ratio
Max Ratio
TENDL Threshold 4.0146 MeV
JENDL4.0 Threshold 5.0000 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^0
10^-2
10^-4
10^-6
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
53-I -127

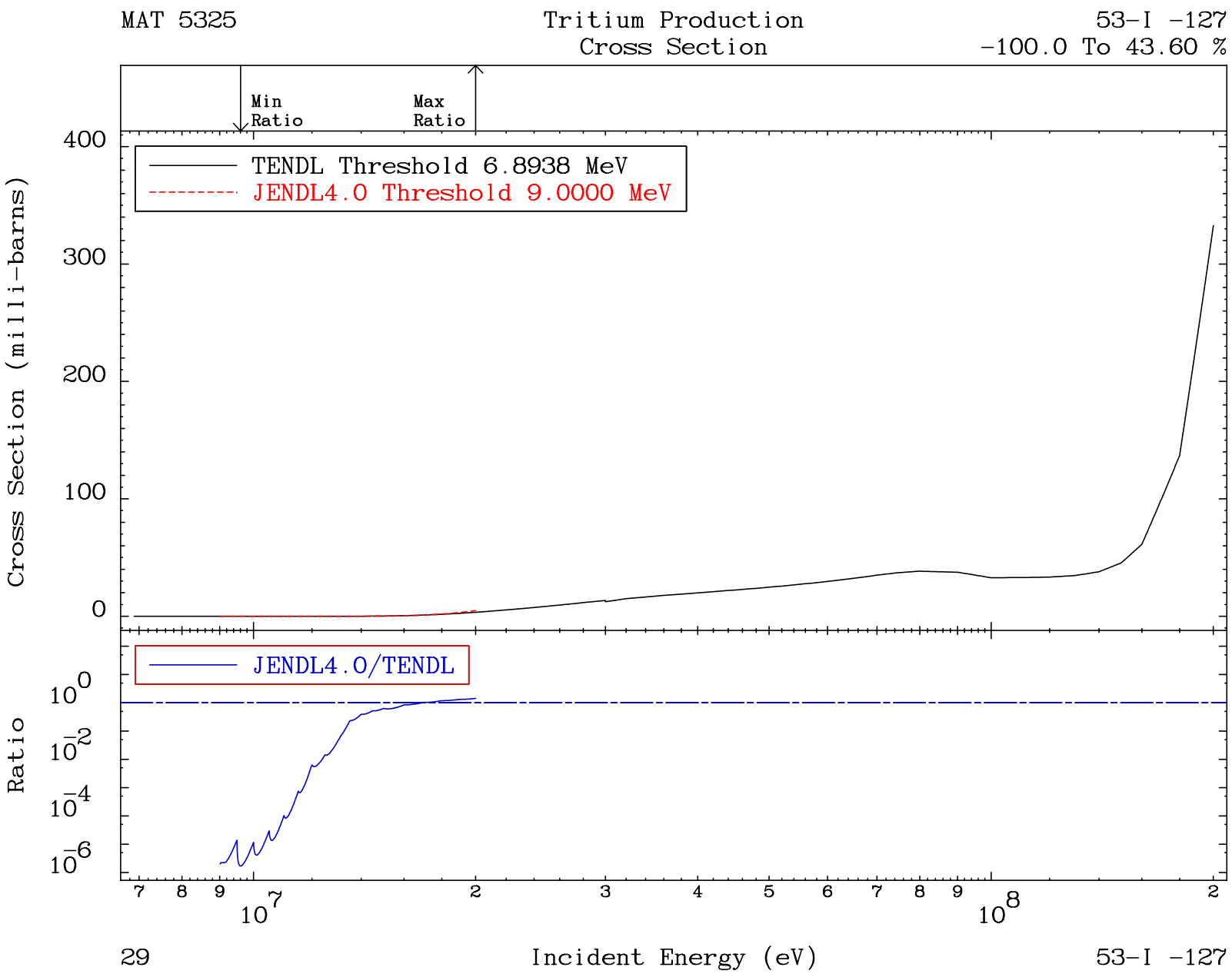

MAT 5325
(n,t)
Cross Section
53-I -127
-100.0 To 39.36 %
Min Ratio
Max Ratio
TENDL Threshold 6.8938 MeV
JENDL4.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
24
53-I -127

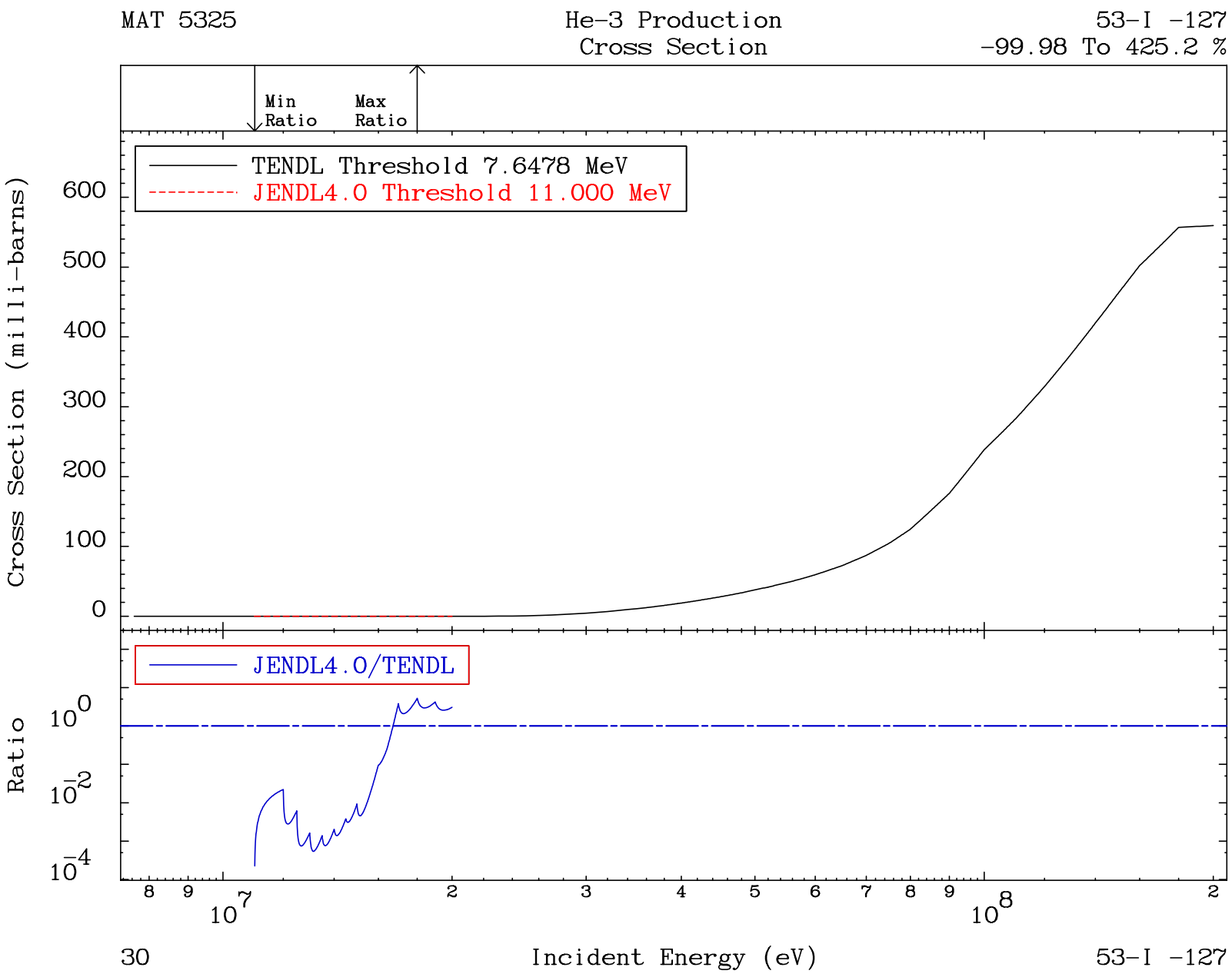

MAT 5325
(n,He-3)
Cross Section
53-I -127
-99.98 To 425.2 %
Min Ratio
Max Ratio
TENDL Threshold 7.6478 MeV
JENDL4.0 Threshold 11.000 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
25
53-I -127

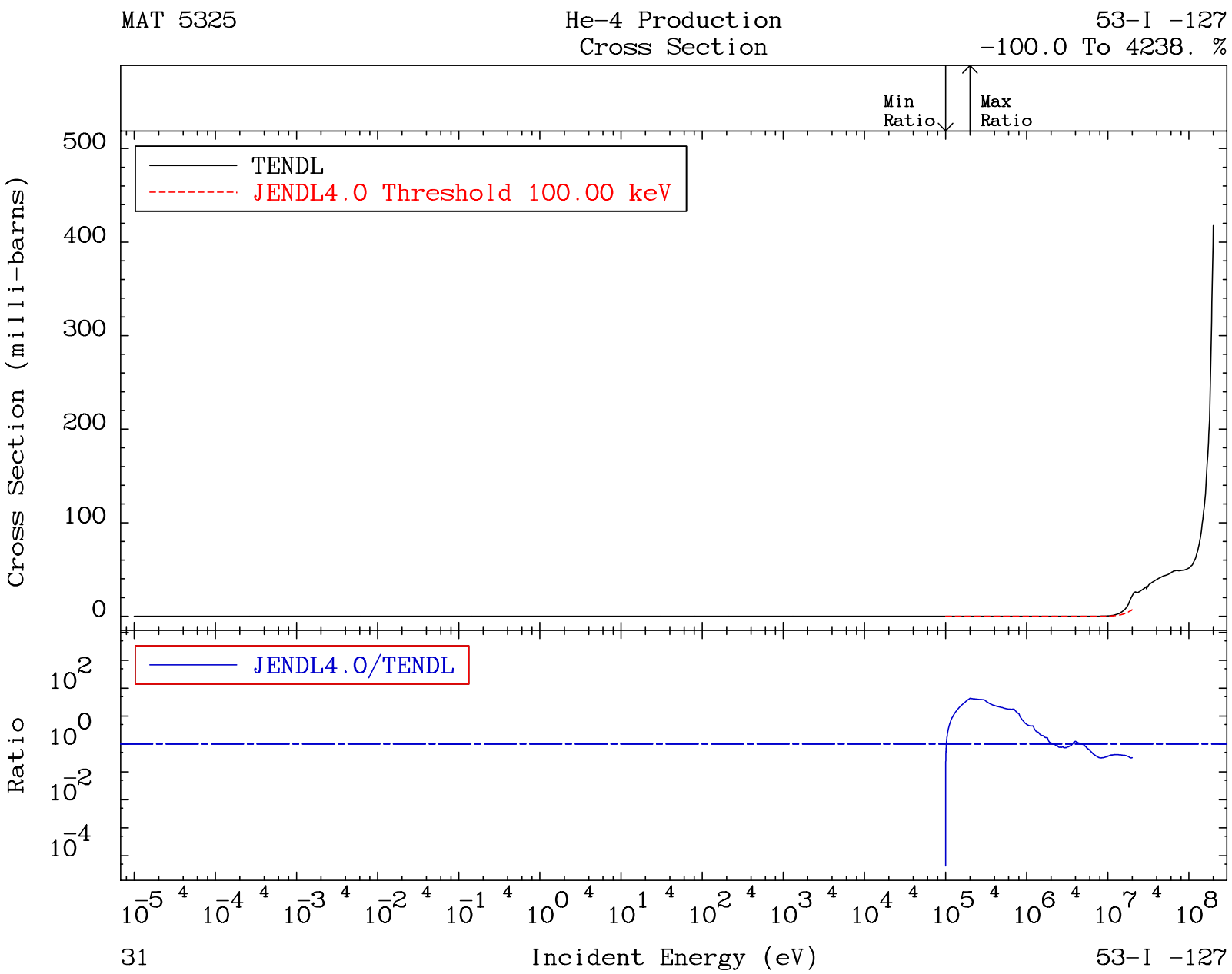

MAT 5325
(n,α)
Cross Section
53-I -127
-100.0 To 4238. %
Min Ratio
Max Ratio
TENDL
JENDL4.0 Threshold 100.00 keV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
26
53-I -127

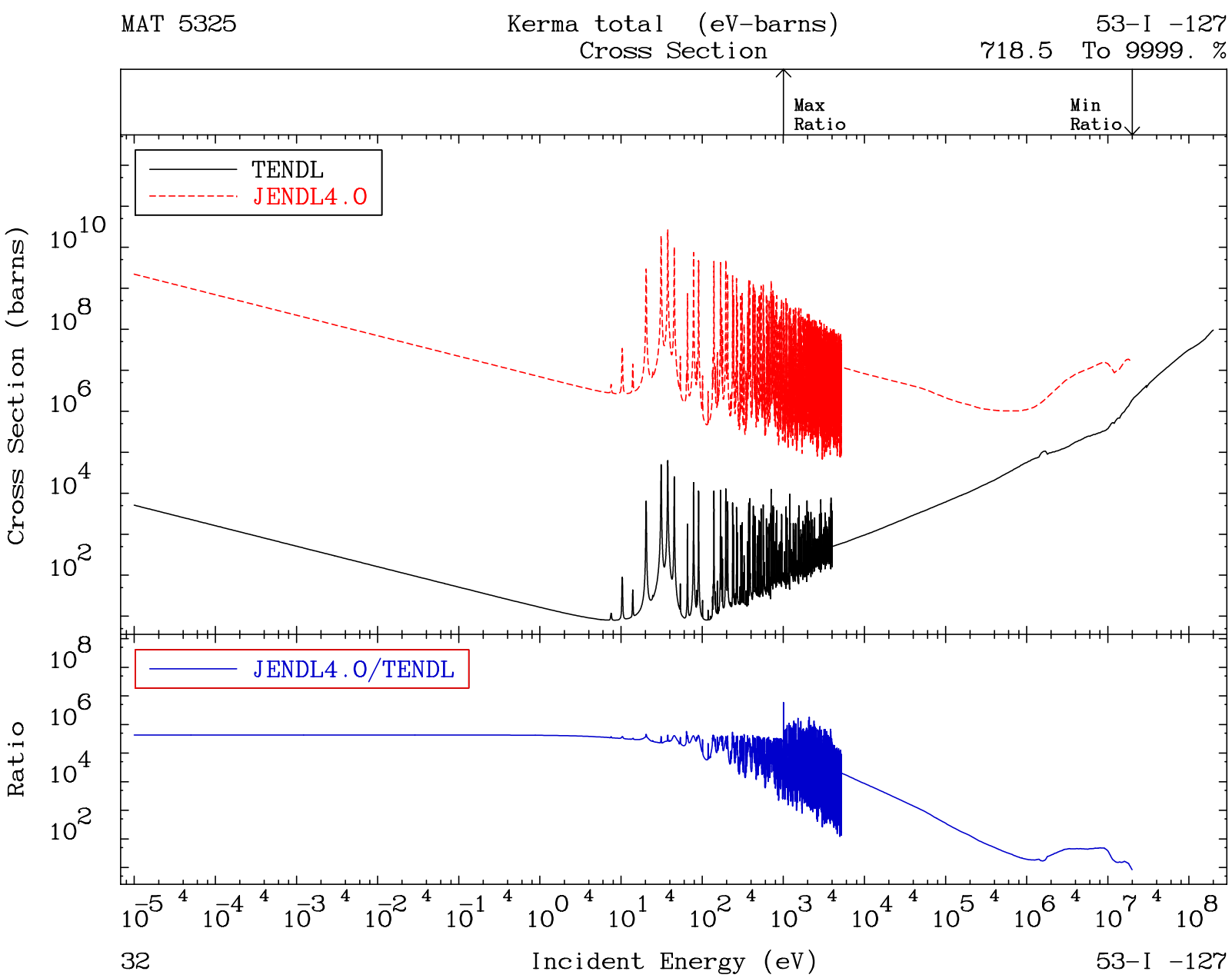

MAT 5325
Hydrogen Production
Cross Section
53-I -127
-100.0 To 16.76 %
Min Ratio
Max Ratio
TENDL Threshold 4.0120 keV
JENDL4.0 Threshold 500.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
4 5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
27
Incident Energy (eV)
53-I -127

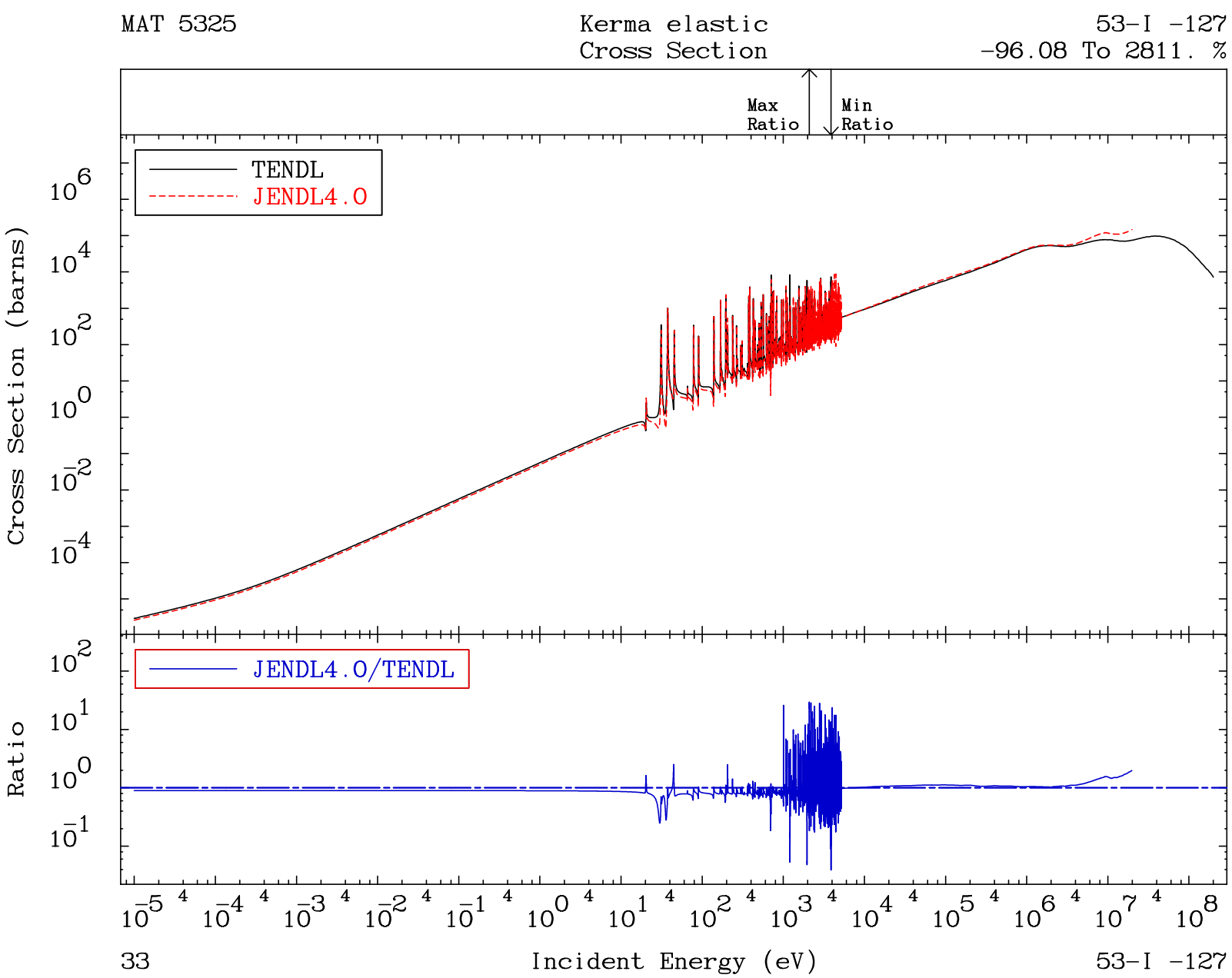

MAT 5325
Deuterium Production
Cross Section
53-I -127
-100.0 To 22.09 %
Min Ratio
Max Ratio
TENDL Threshold 4.0146 MeV
JENDL4.0 Threshold 5.0000 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^0
10^-2
10^-4
10^-6
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
53-I -127

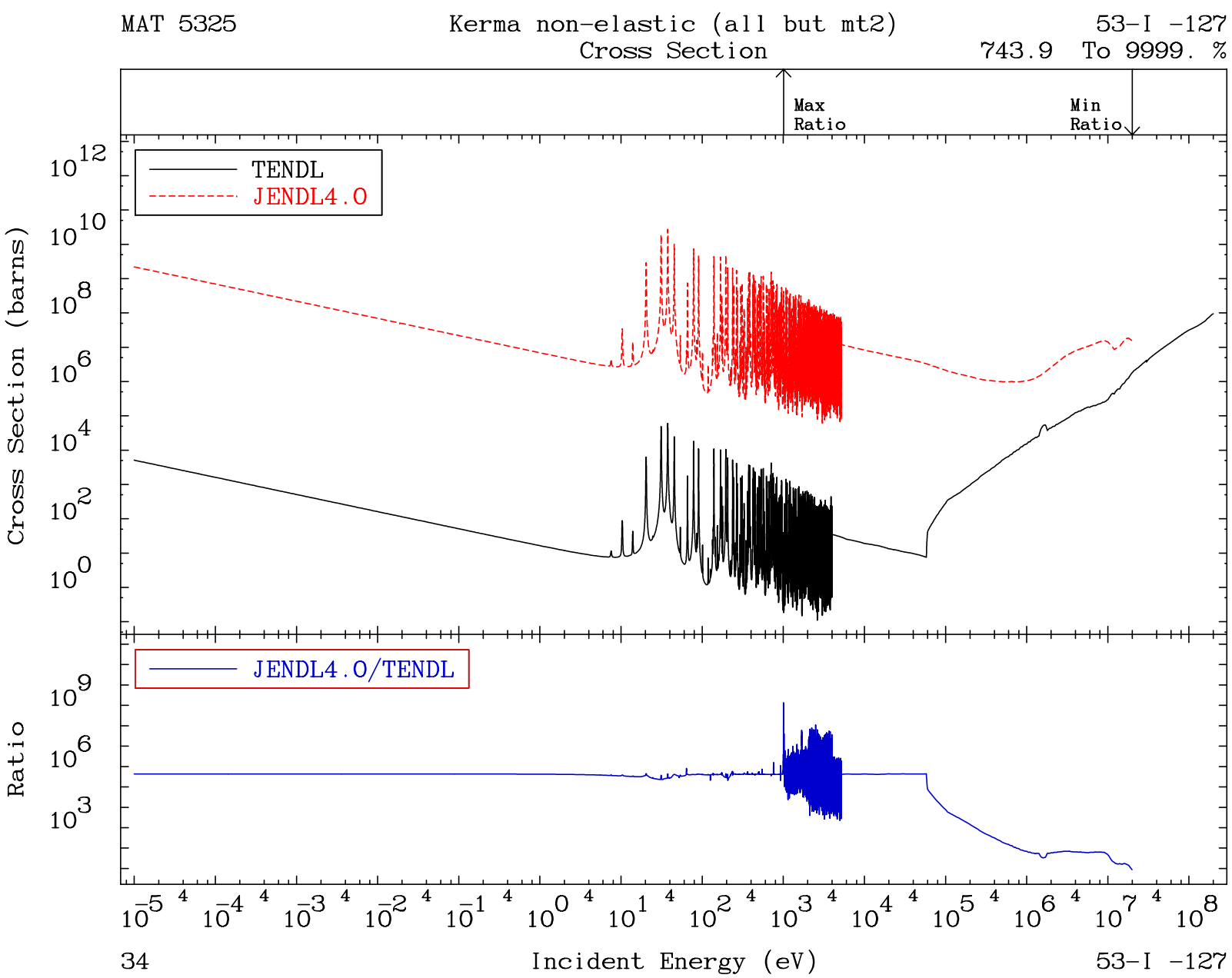

MAT 5325
Tritium Production
Cross Section
53-I -127
-100.0 To 43.60 %
Min Ratio
Max Ratio
TENDL Threshold 6.8938 MeV
JENDL4.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^0
10^-2
10^-4
10^-6
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
53-I -127

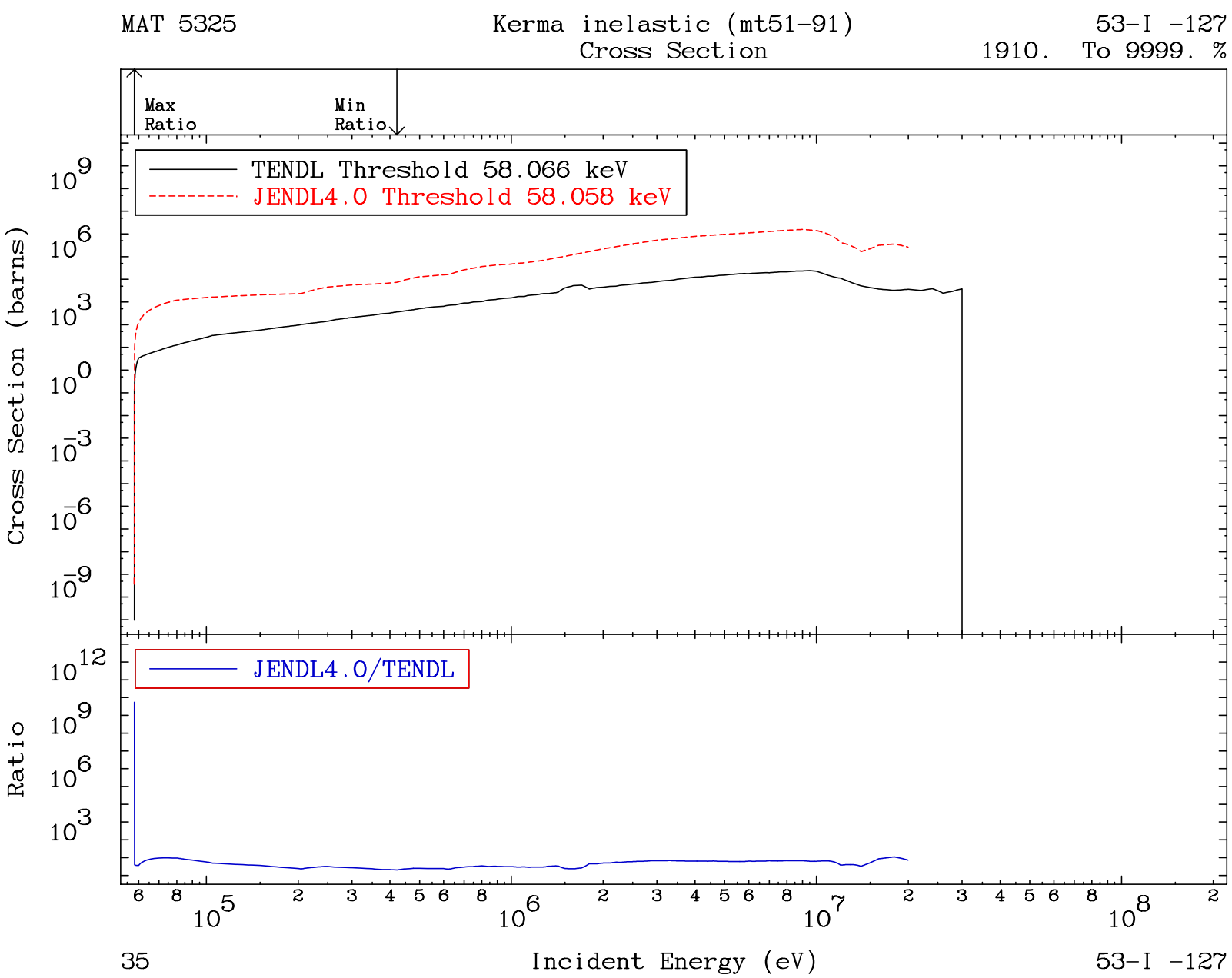

MAT 5325
He-3 Production
Cross Section
53-I -127
-99.98 To 425.2 %
Min Ratio
Max Ratio
TENDL Threshold 7.6478 MeV
JENDL4.0 Threshold 11.000 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^0
10^-2
10^-4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
53-I -127

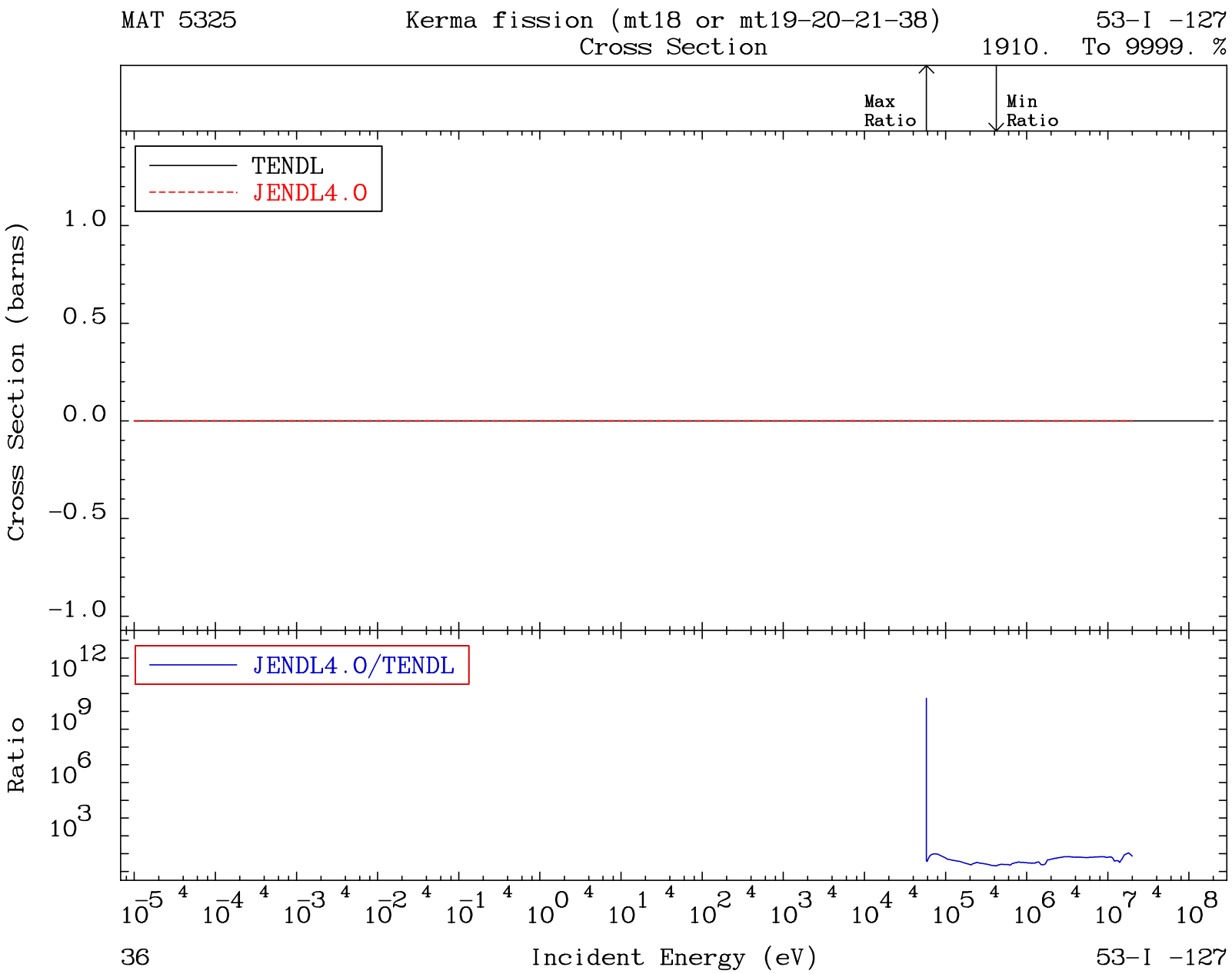

MAT 5325
He-4 Production
Cross Section
53-I -127
-100.0 To 4238. %
Min Ratio
Max Ratio
TENDL
JENDL4.0 Threshold 100.00 keV
Cross Section (milli-barns)
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^2
10^0
10^-2
10^-4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
31
Incident Energy (eV)
53-I -127

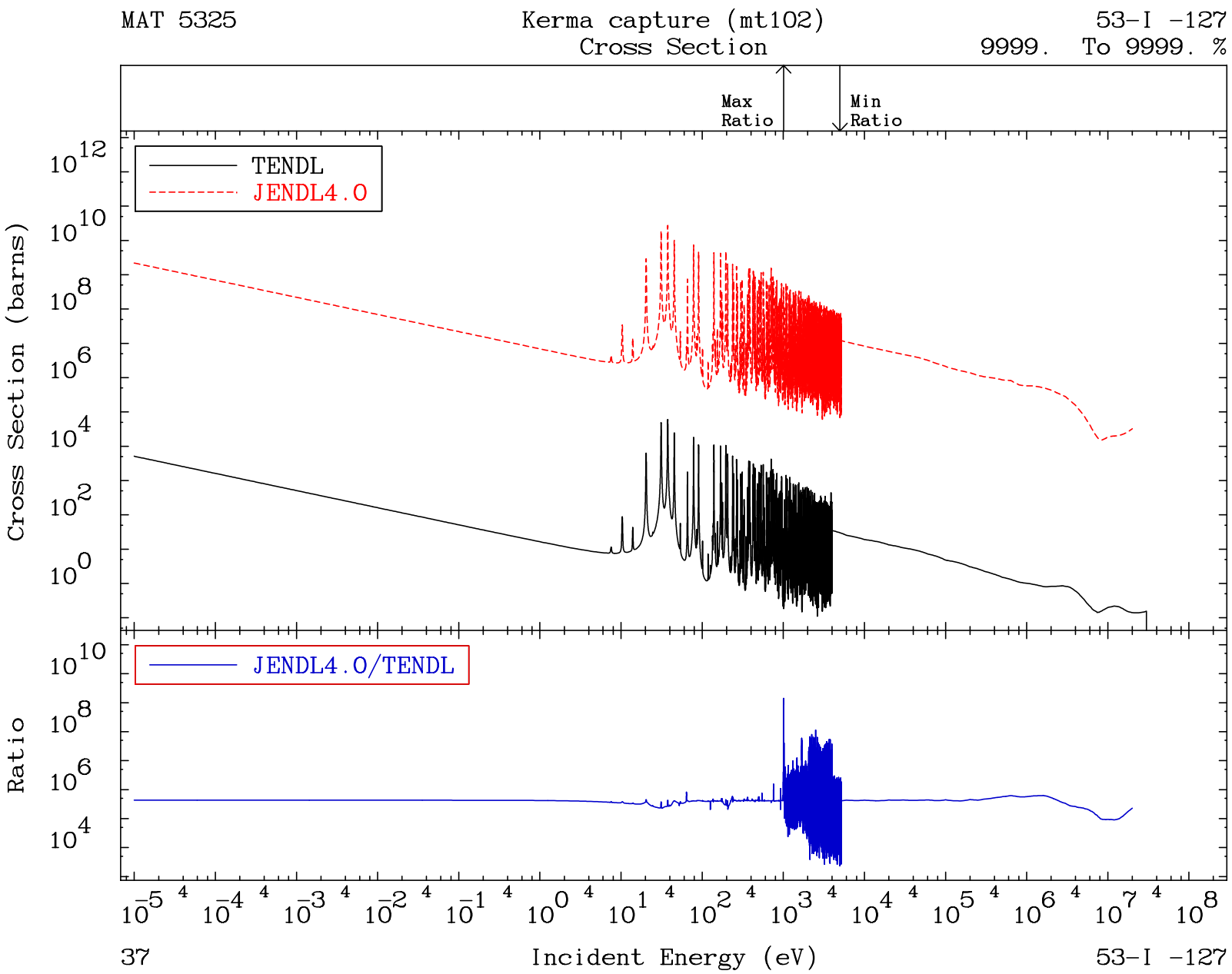

MAT 5325
Kerma total (eV-barns)
Cross Section
53-I -127
718.5 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
Ratio
JENDL4.0/TENDL
Incident Energy (eV)
32
53-I -127

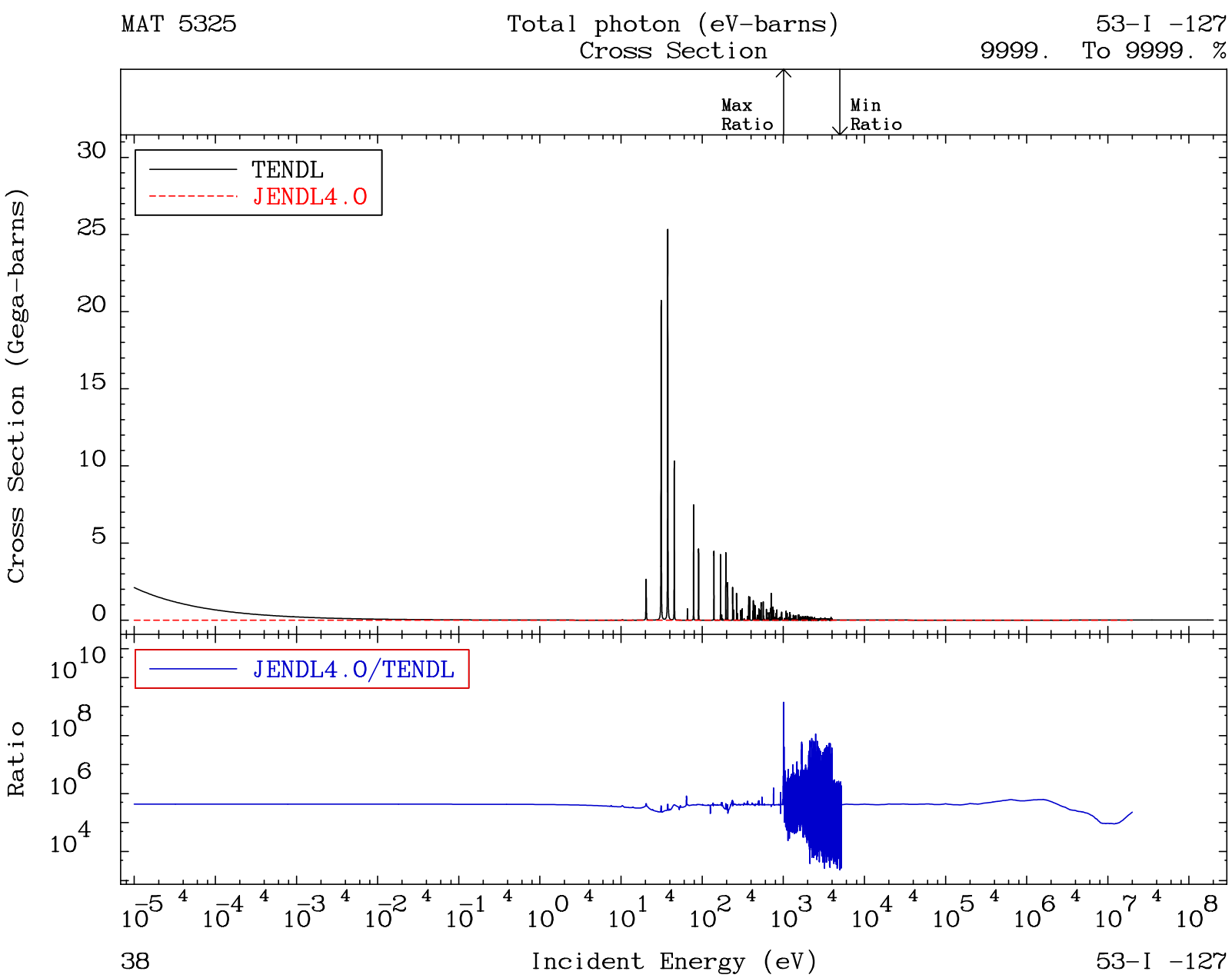

MAT 5325
Kerma elastic
Cross Section
53-I -127
-96.08 To 2811. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
33
53-I -127

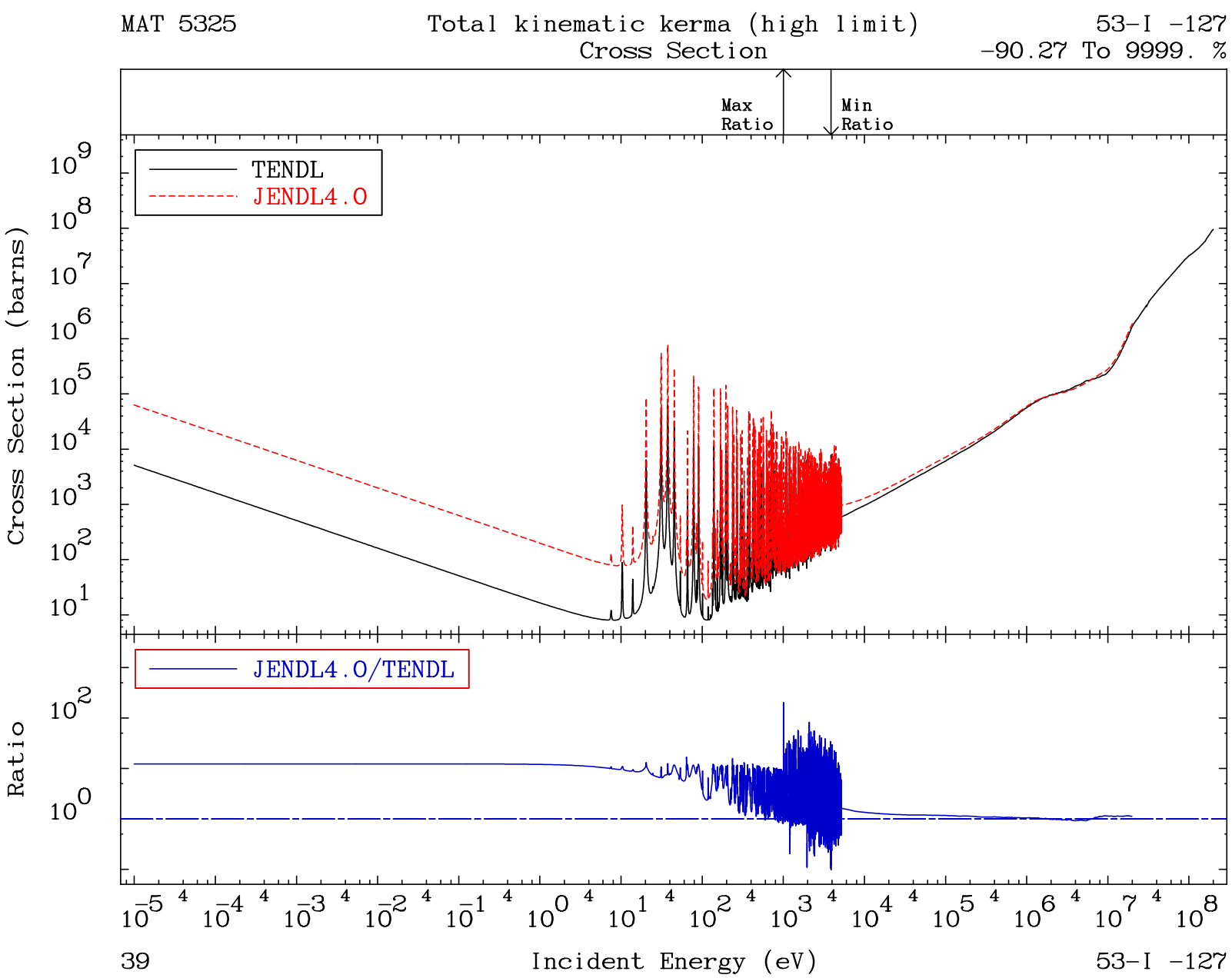

MAT 5325
Kerma non-elastic (all but mt2)
Cross Section
53-I -127
743.9 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
34
53-I -127

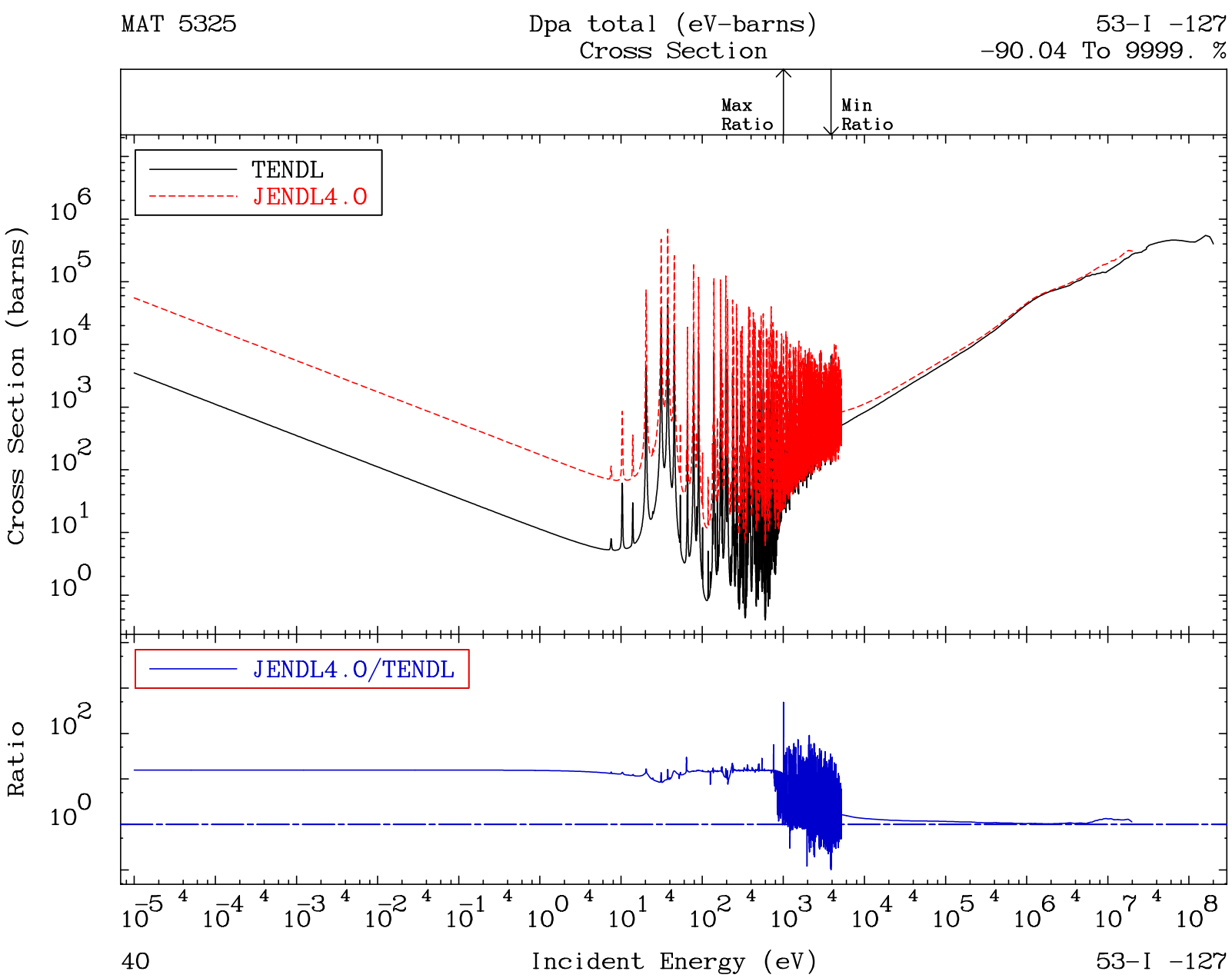

MAT 5325
Kerma inelastic (mt51-91)
Cross Section
53-I -127
1910. To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 58.066 keV
JENDL4.0 Threshold 58.058 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
35
53-I -127

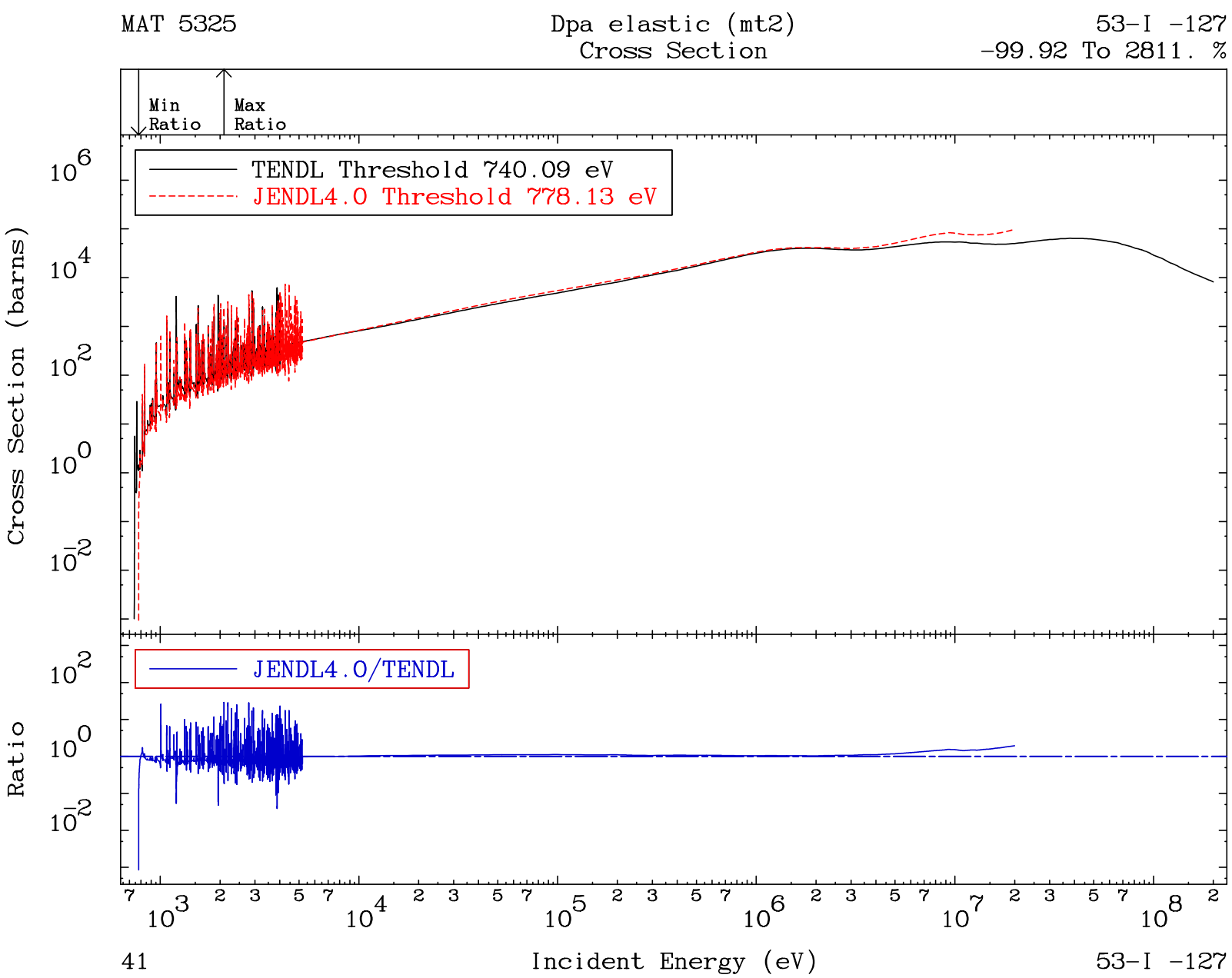

MAT 5325
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
53-I -127
1910. To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JENDL4.0/TENDL
Ratio
10^{12}
10^{9}
10^{6}
10^{3}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
36
Incident Energy (eV)
53-I -127

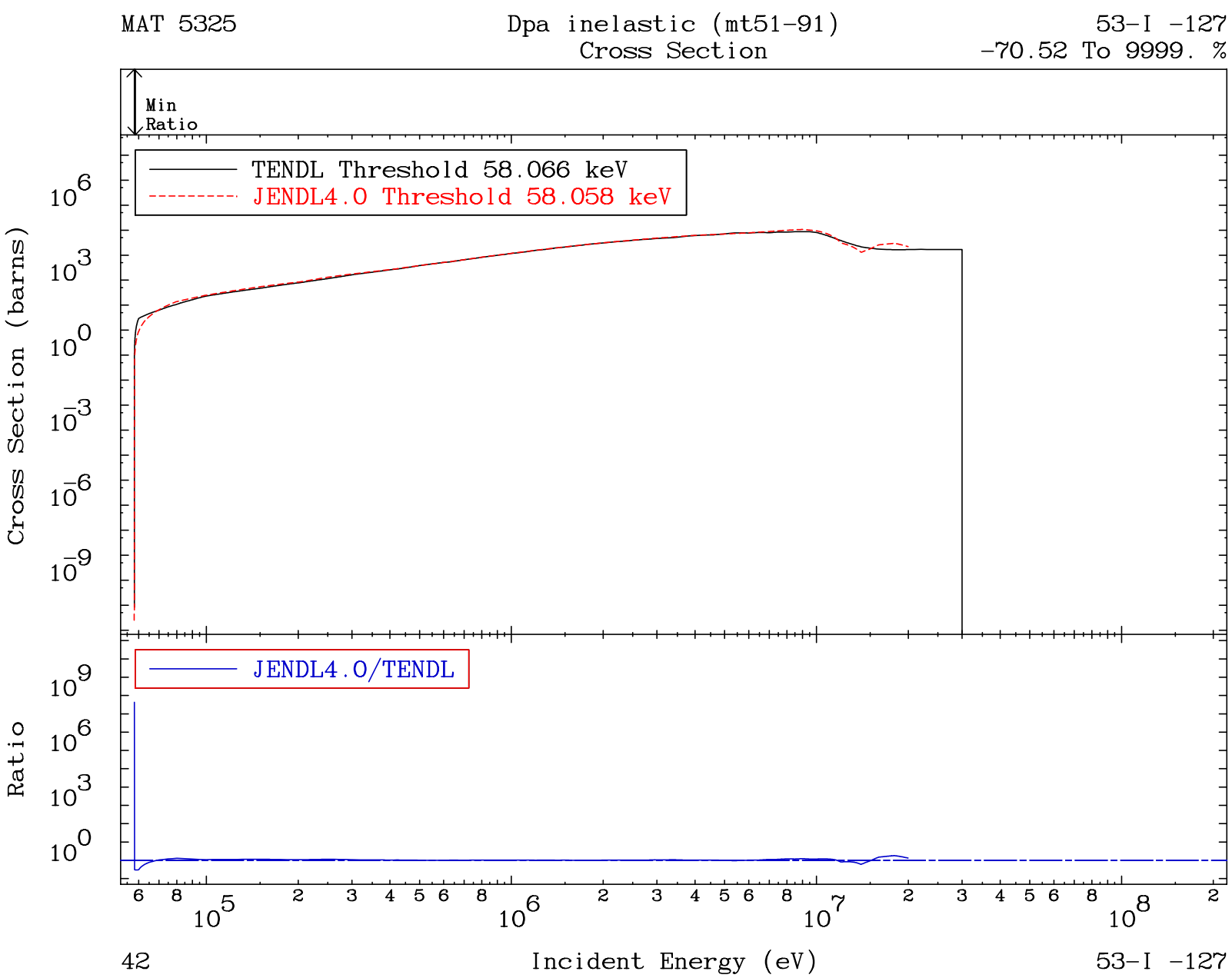

MAT 5325
Kerma capture (mt102)
Cross Section
53-I -127
9999. To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
Ratio
JENDL4.0/TENDL
Incident Energy (eV)
37
53-I -127

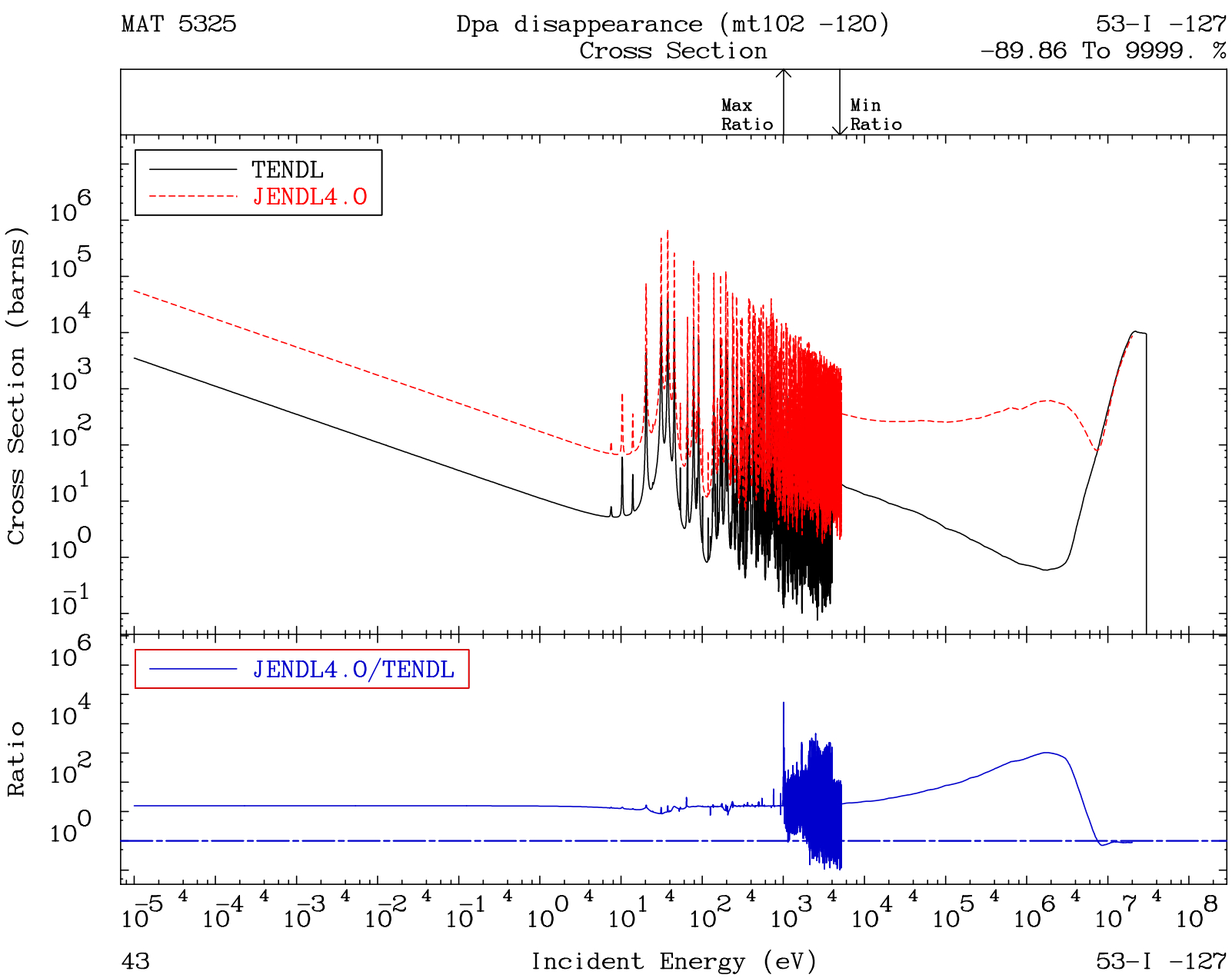

MAT 5325
Total photon (eV-barns)
Cross Section
53-I -127
9999. To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (Giga-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
38
53-I -127

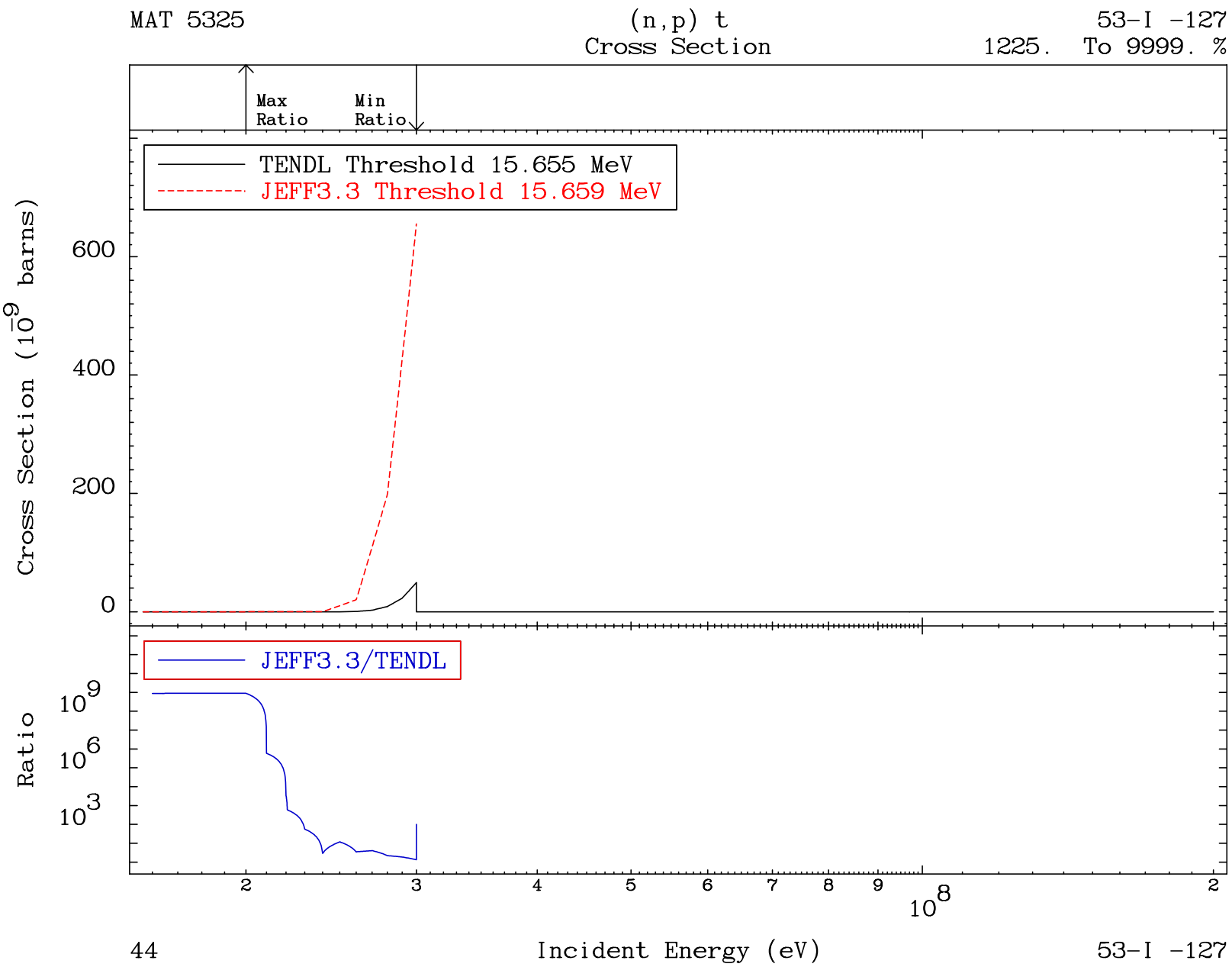

MAT 5325
Total kinematic kerma (high limit)
Cross Section
53-I -127
-90.27 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
39
53-I -127

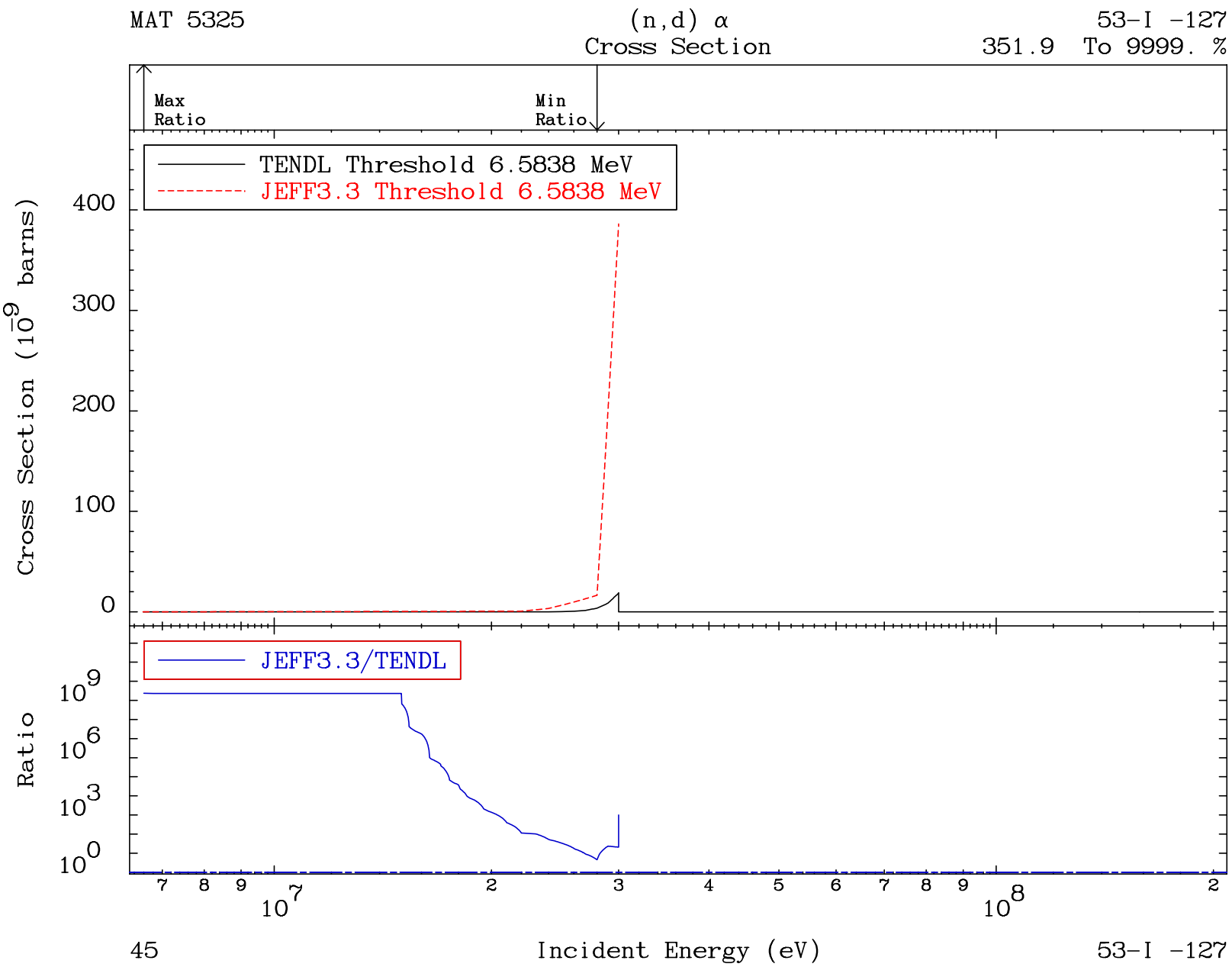

MAT 5325
Dpa total (eV-barns)
Cross Section
53-I -127
-90.04 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
40
53-I -127

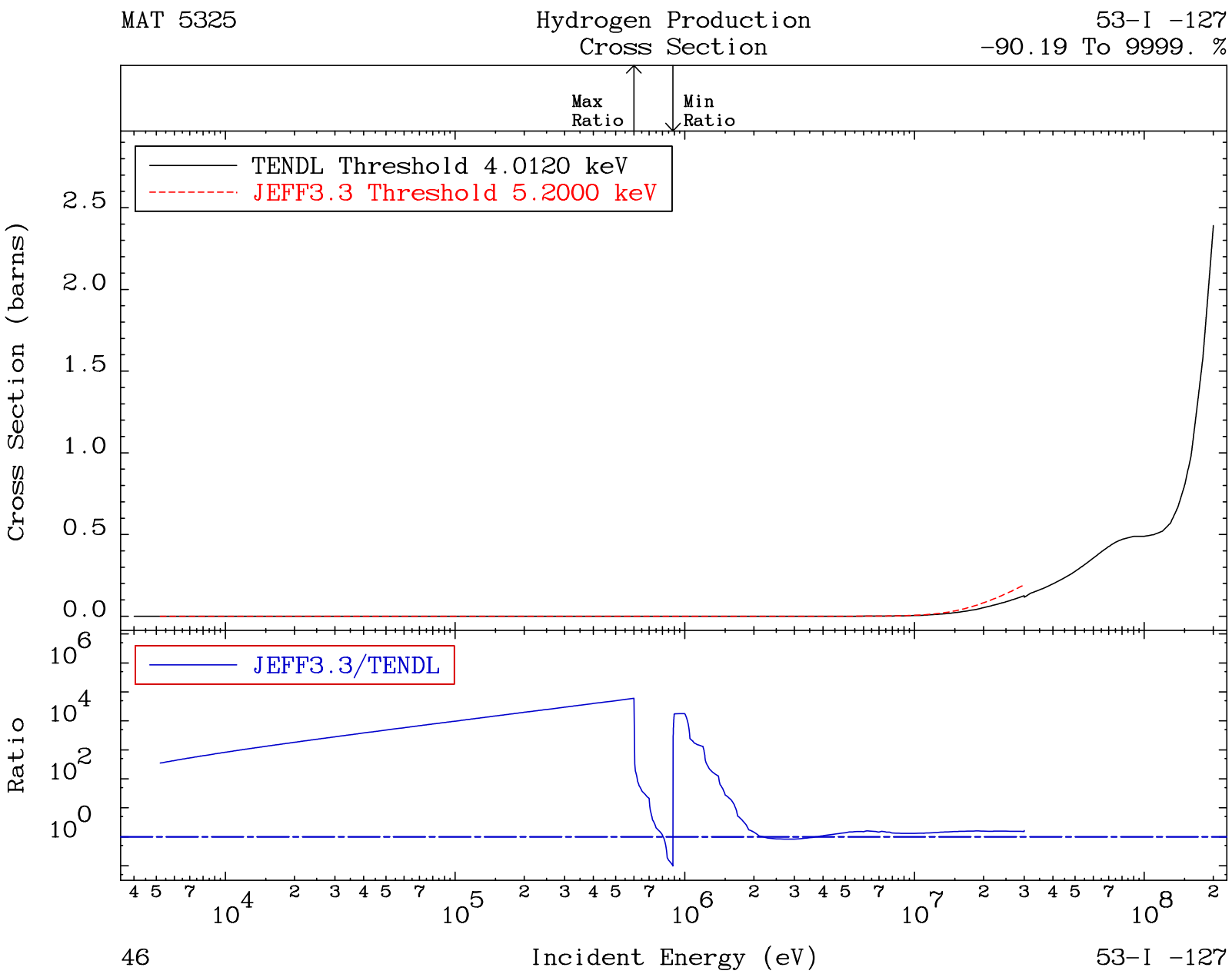

MAT 5325
Dpa elastic (mt2)
Cross Section
53-I -127
-99.92 To 2811. %
Min Ratio
Max Ratio
TENDL Threshold 740.09 eV
JENDL4.0 Threshold 778.13 eV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
41
53-I -127

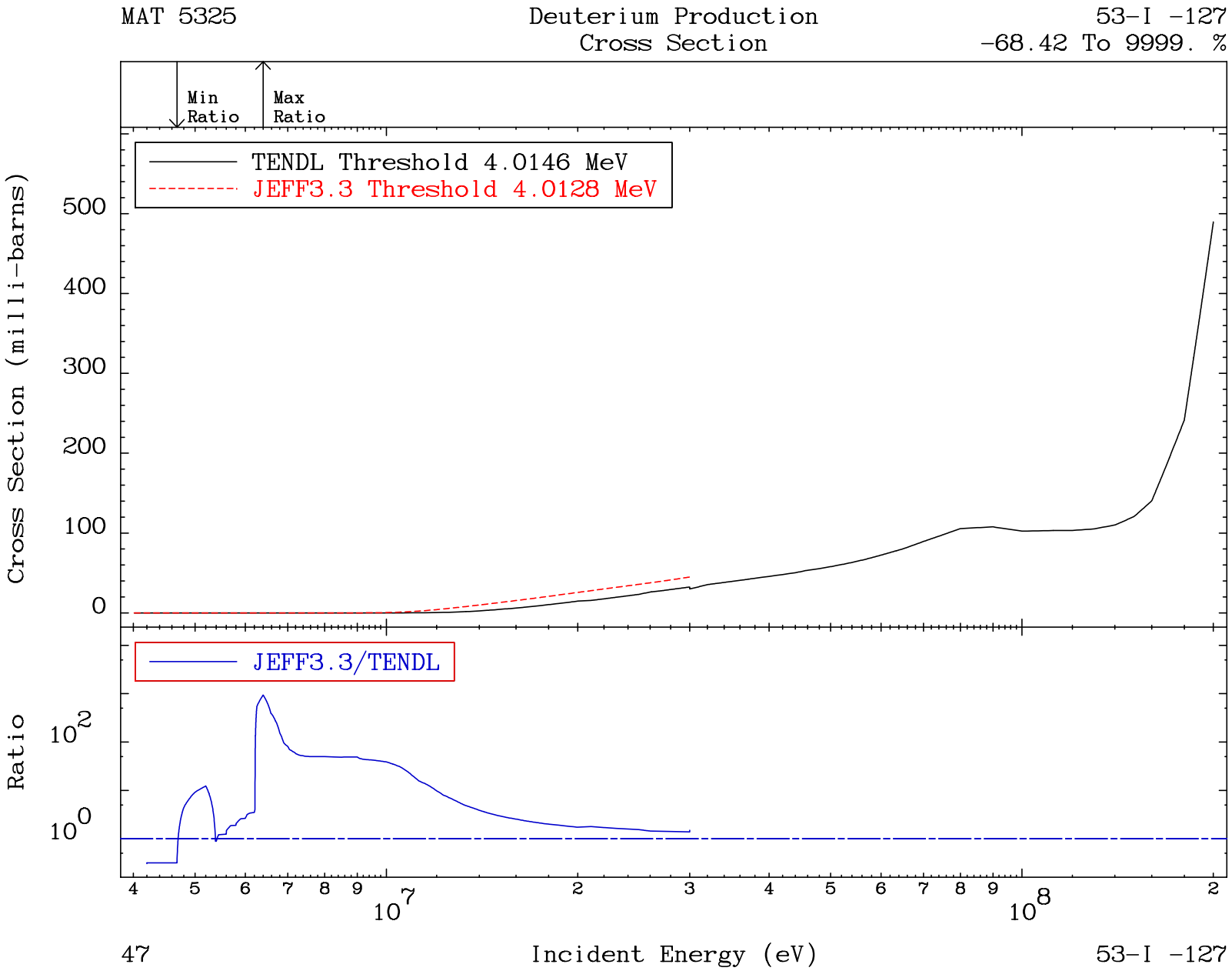

MAT 5325
Dpa inelastic (mt51-91)
Cross Section
53-I -127
-70.52 To 9999. %
Min
Ratio
TENDL Threshold 58.066 keV
JENDL4.0 Threshold 58.058 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
42
53-I -127

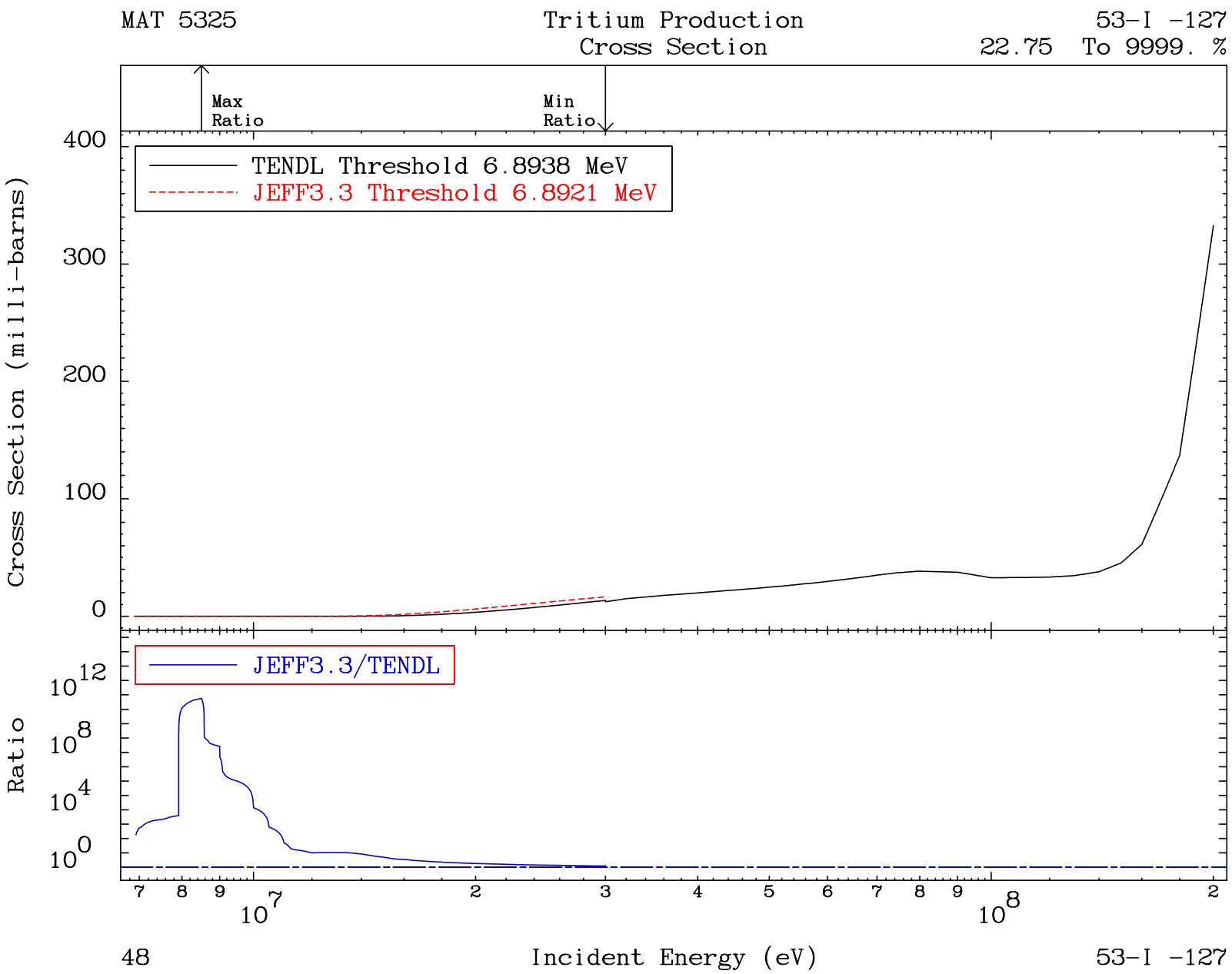

MAT 5325
Dpa disappearance (mt102 -120)
Cross Section
53-I -127
-89.86 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
43
53-I -127

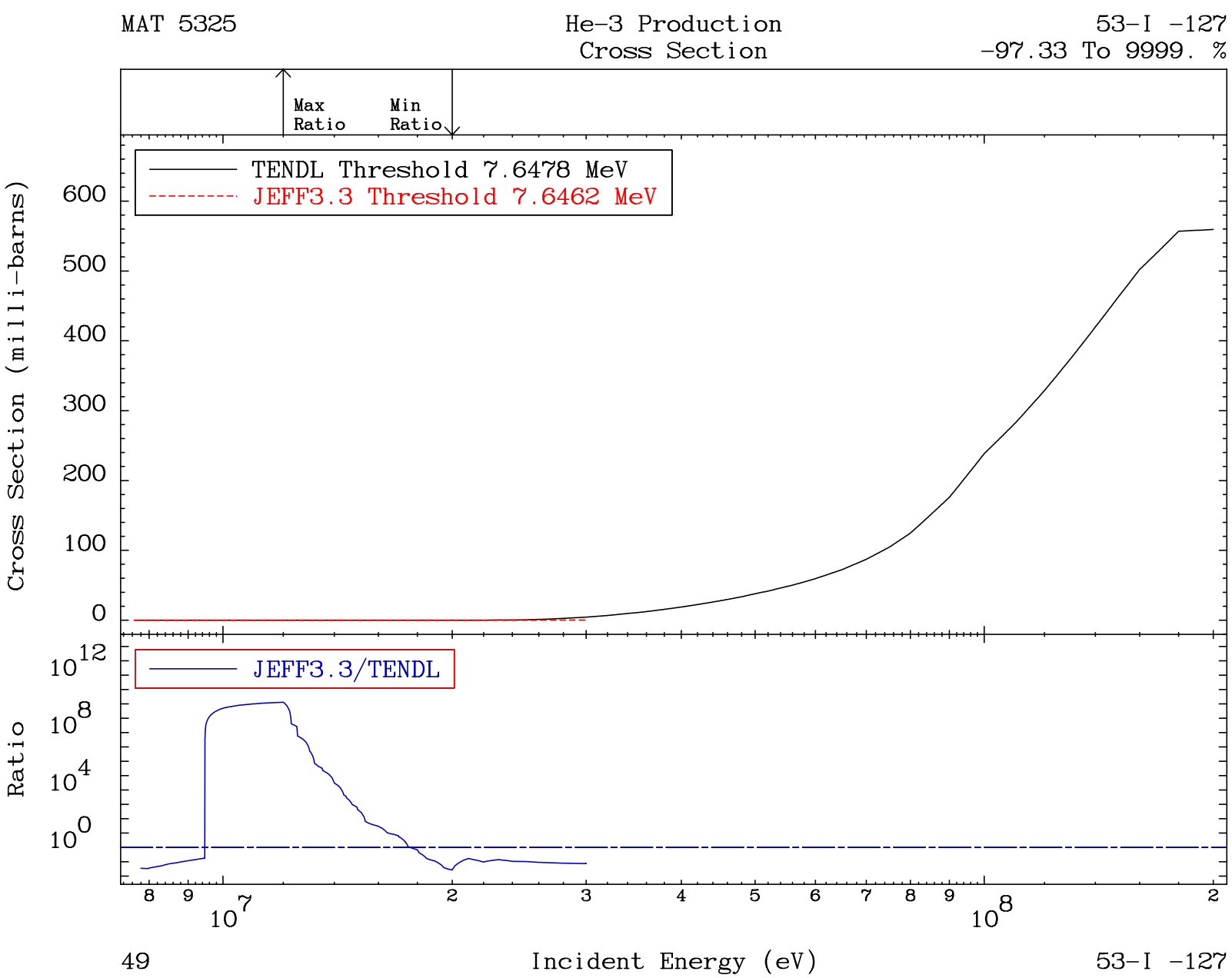

MAT 5325
(n,p) t
Cross Section
53-I -127
1225. To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 15.655 MeV
JEFF3.3 Threshold 15.659 MeV
Cross Section (10^{-9} barns)
600
400
200
0
JEFF3.3/TENDL
Ratio
10^{9}
10^{6}
10^{3}
2
3
4
5
6
7
8
9
10^{8}
2
44
Incident Energy (eV)
53-I -127

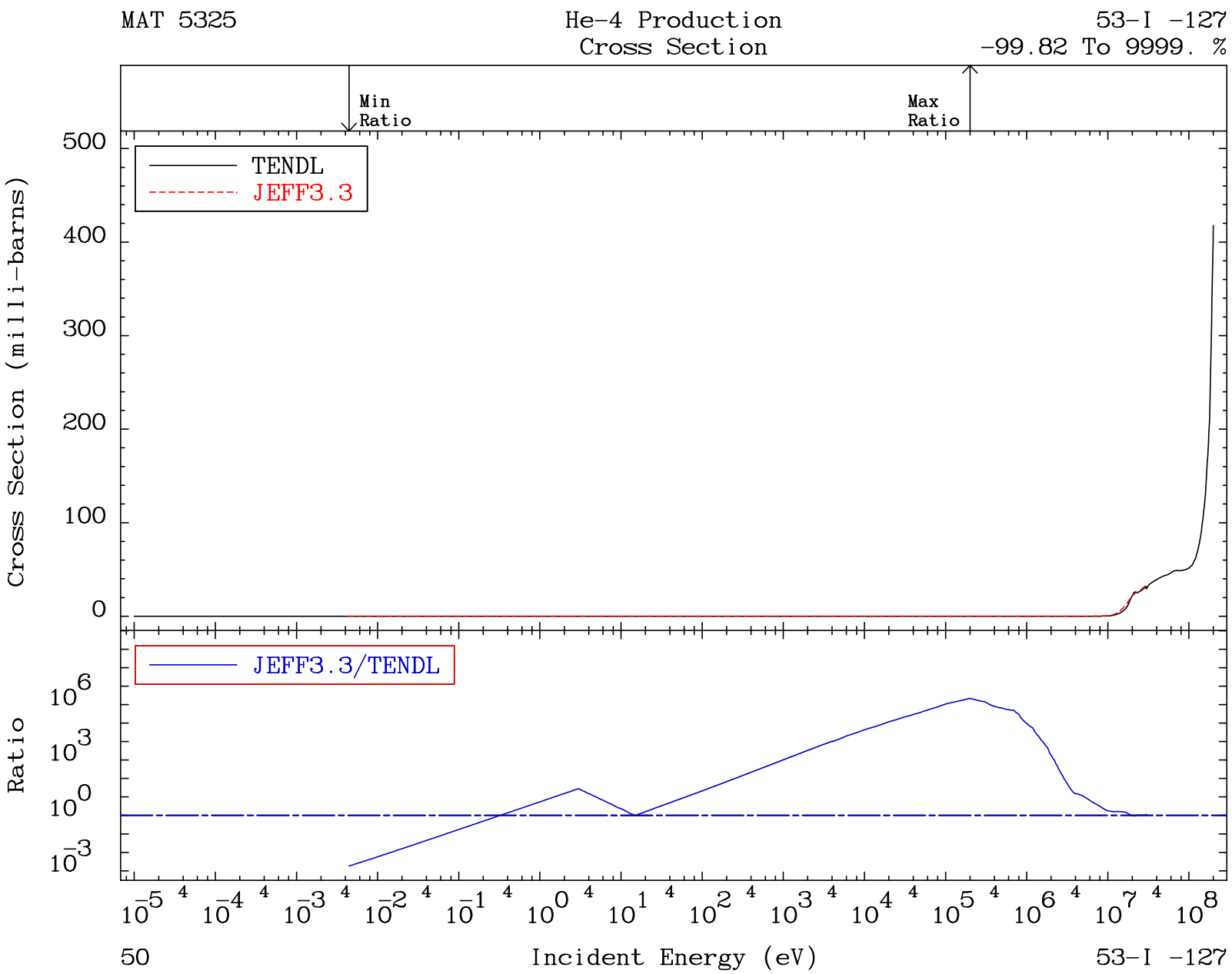

MAT 5325
(n,d) α
Cross Section
53-I -127
351.9 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.5838 MeV
JEFF3.3 Threshold 6.5838 MeV
Cross Section (10^{-9} barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^{9}
10^{6}
10^{3}
10^{0}
7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
45
Incident Energy (eV)
53-I -127

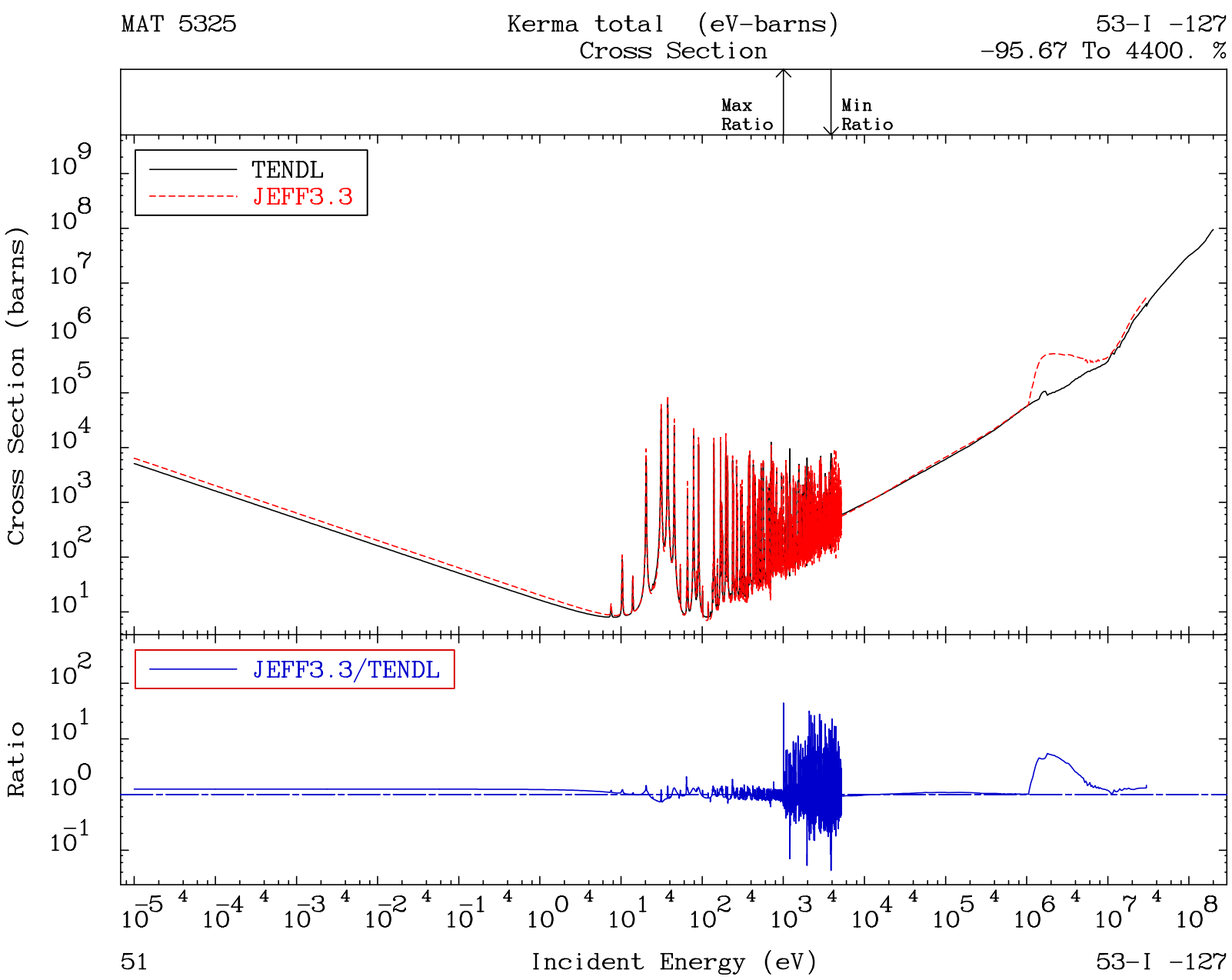

MAT 5325
Hydrogen Production
Cross Section
53-I -127
-90.19 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.0120 keV
JEFF3.3 Threshold 5.2000 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
4 5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
46
Incident Energy (eV)
53-I -127

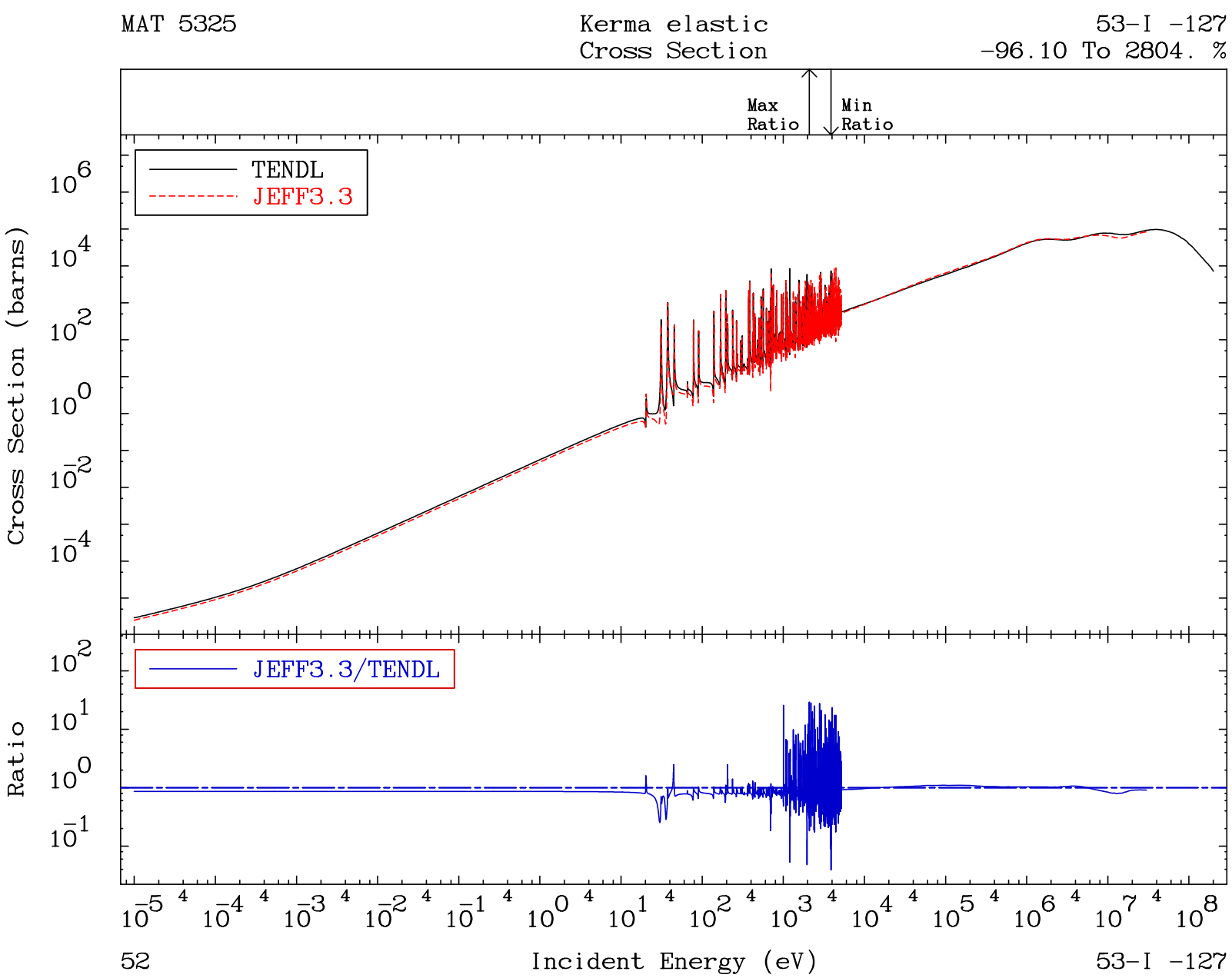

MAT 5325
Deuterium Production
Cross Section
53-I -127
-68.42 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.0146 MeV
JEFF3.3 Threshold 4.0128 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^2
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
53-I -127

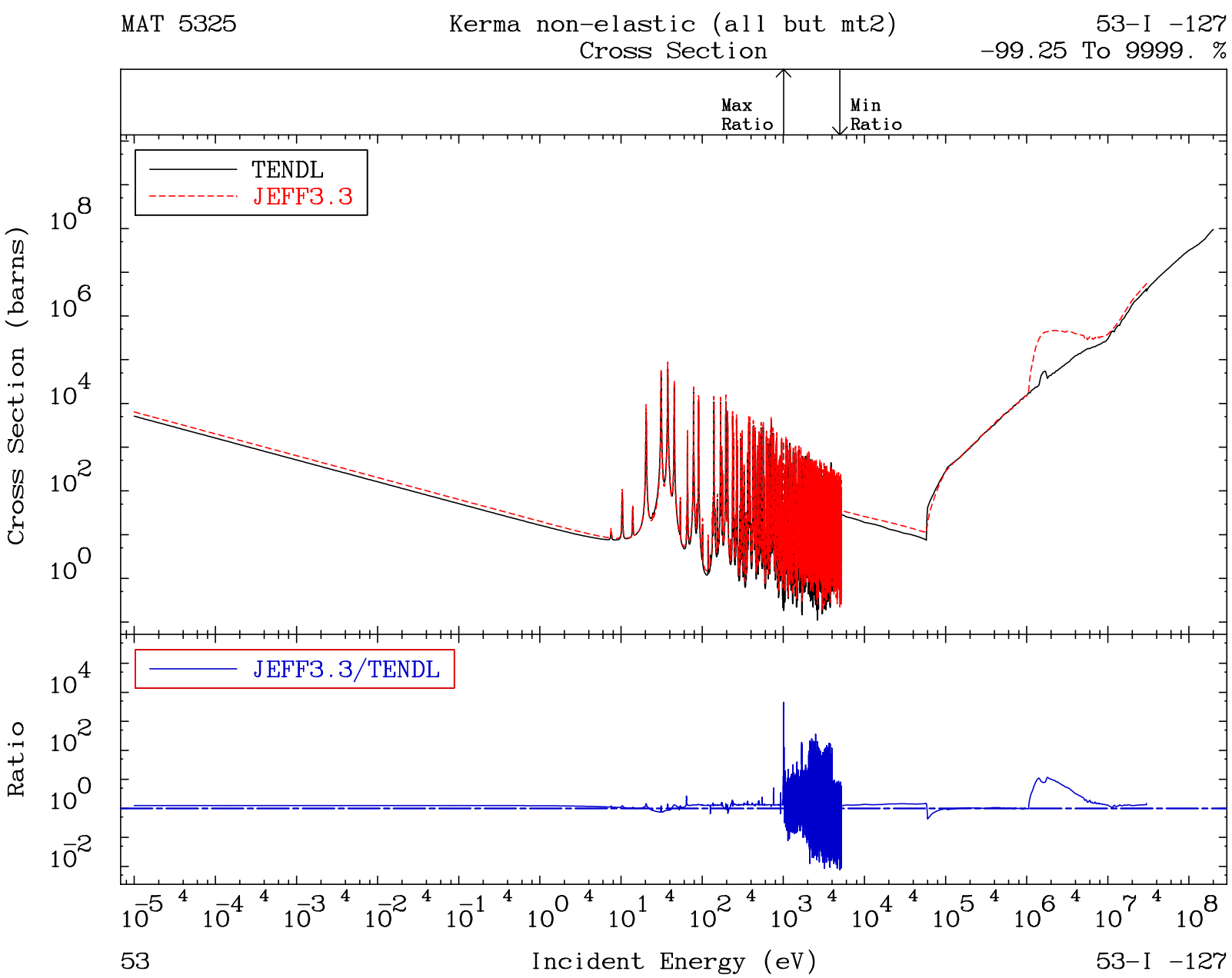

MAT 5325
Tritium Production
Cross Section
53-I -127
22.75 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.8938 MeV
JEFF3.3 Threshold 6.8921 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^12
10^8
10^4
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
53-I -127

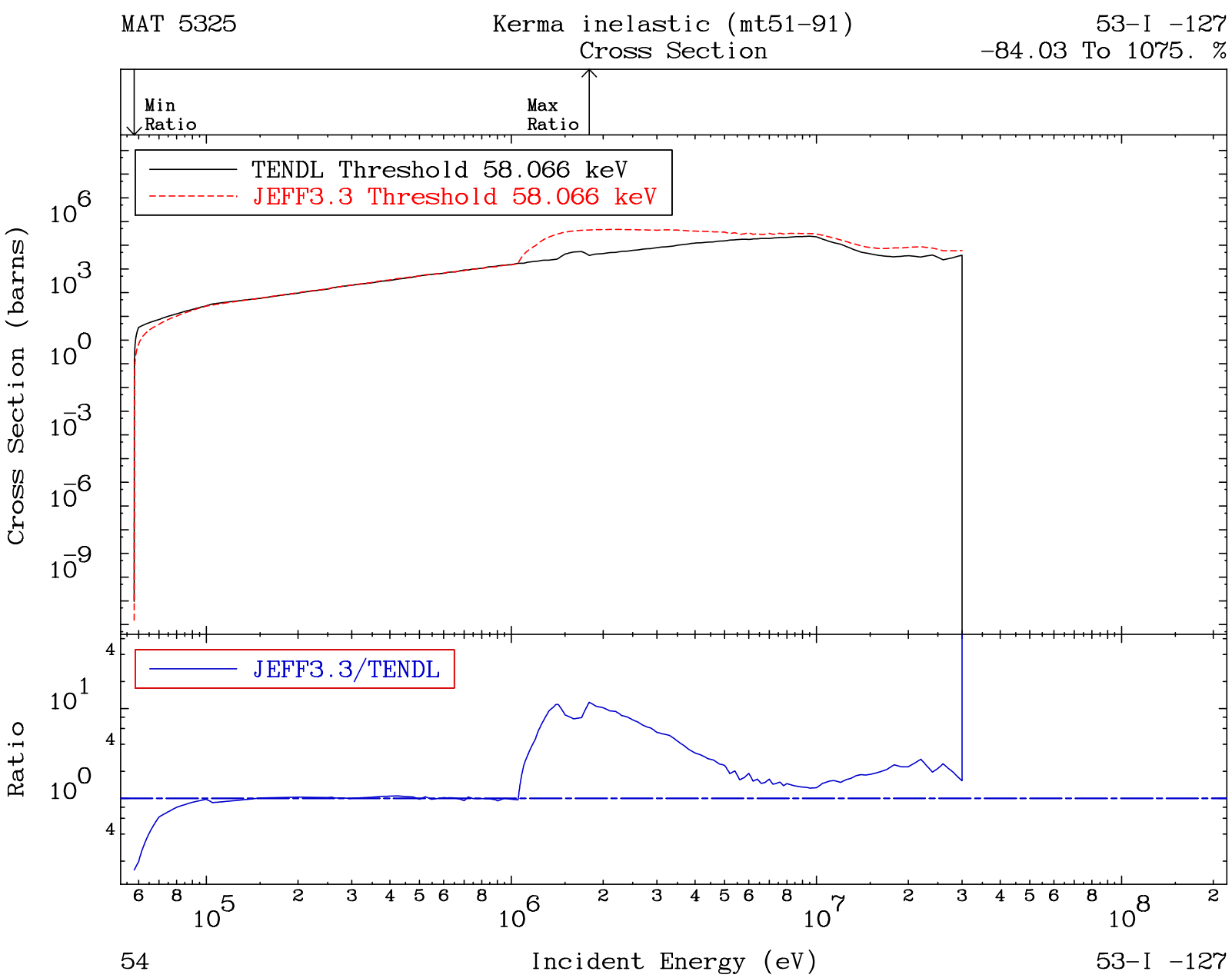

MAT 5325
He-3 Production
Cross Section
53-I -127
-97.33 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 7.6478 MeV
JEFF3.3 Threshold 7.6462 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^12
10^8
10^4
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
53-I -127

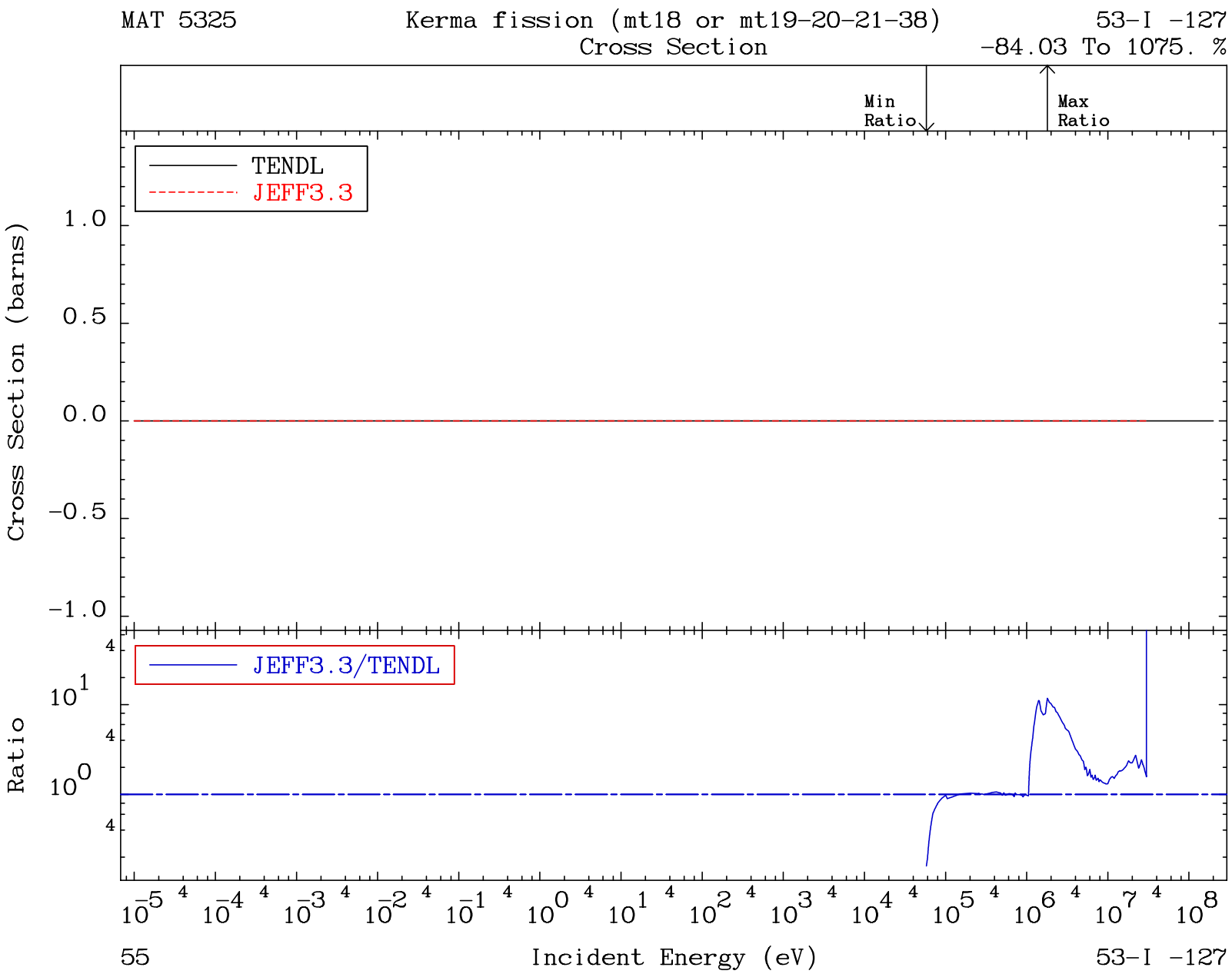

MAT 5325
He-4 Production
Cross Section
53-I -127
-99.82 To 9999. %
Min
Ratio
Max
Ratio
TENDL
JEFF3.3
Cross Section (milli-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^6
10^3
10^0
10^-3
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
50
Incident Energy (eV)
53-I -127

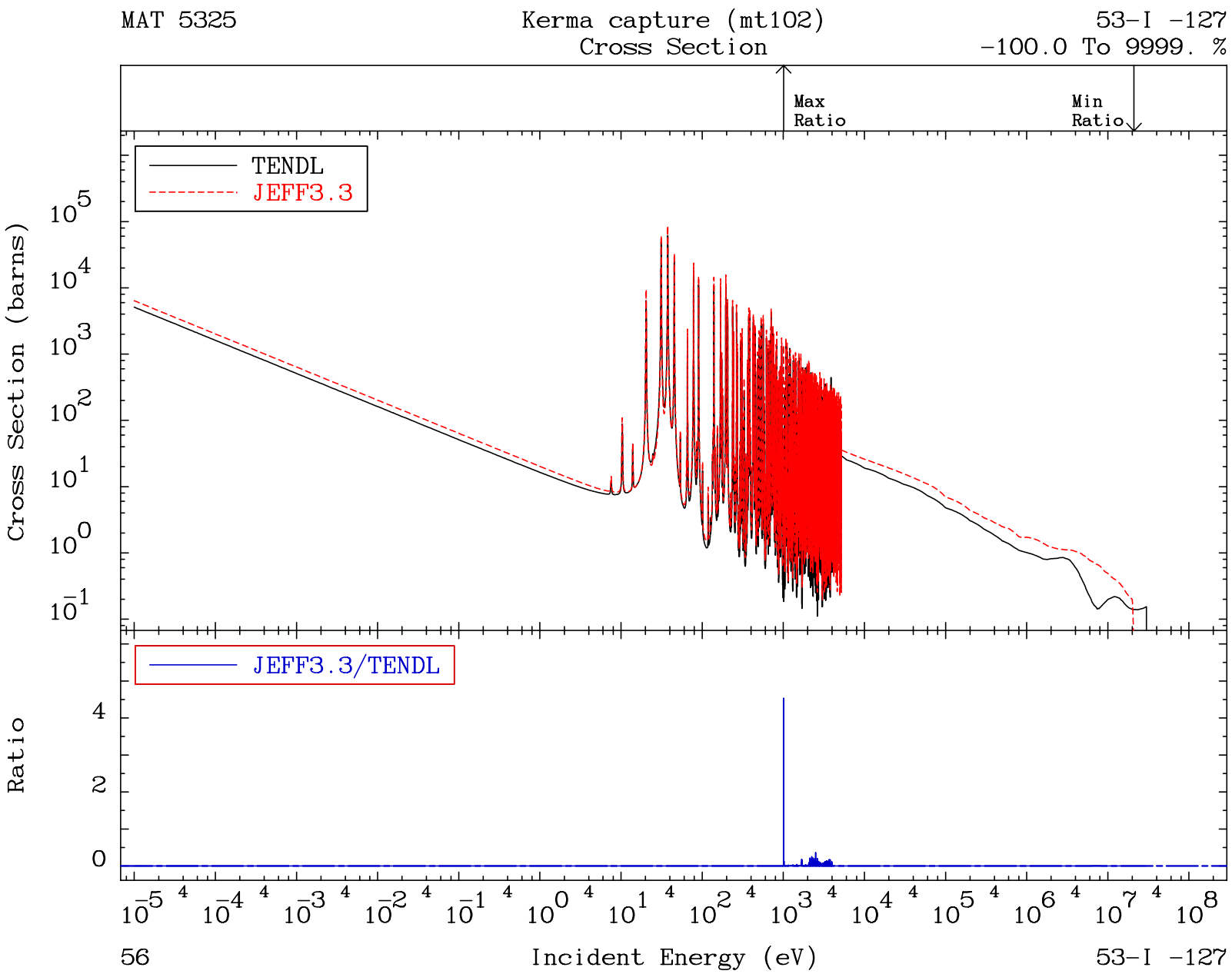

MAT 5325
Kerma total (eV-barns)
Cross Section
53-I -127
-95.67 To 4400. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
51
53-I -127

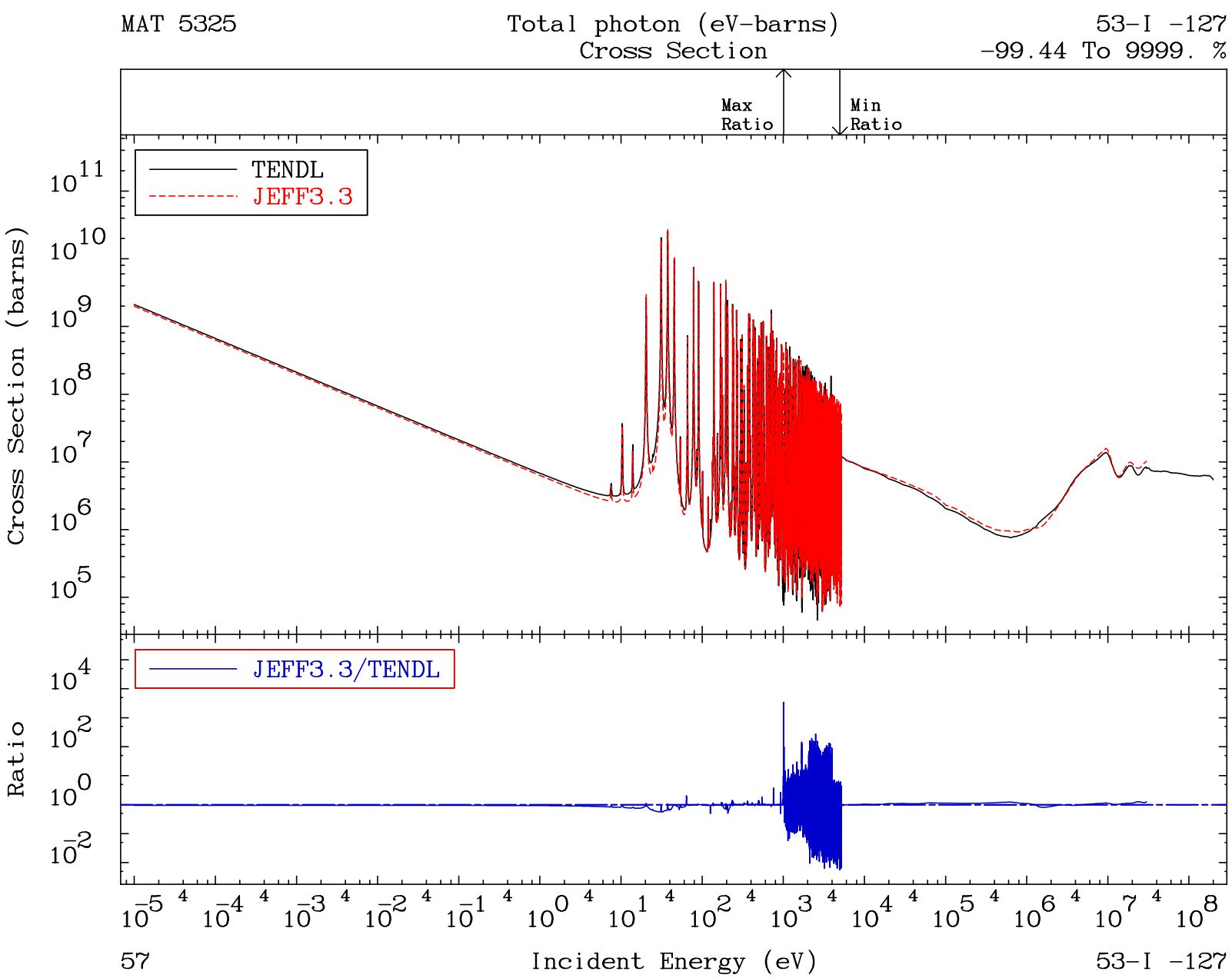

MAT 5325
Kerma elastic
Cross Section
53-I -127
-96.10 To 2804. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
52
53-I -127

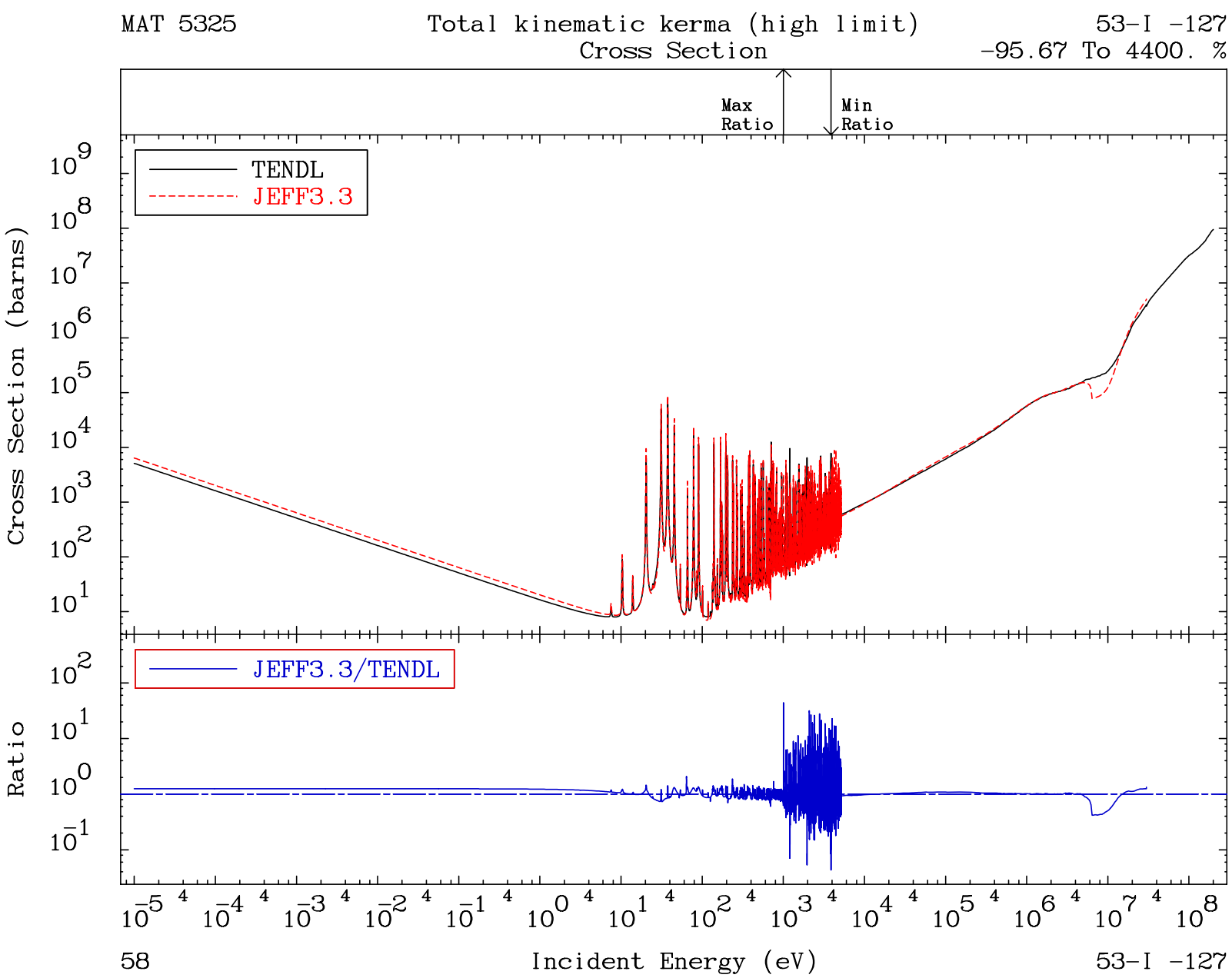

MAT 5325
Kerma non-elastic (all but mt2)
Cross Section
53-I -127
-99.25 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
53
53-I -127

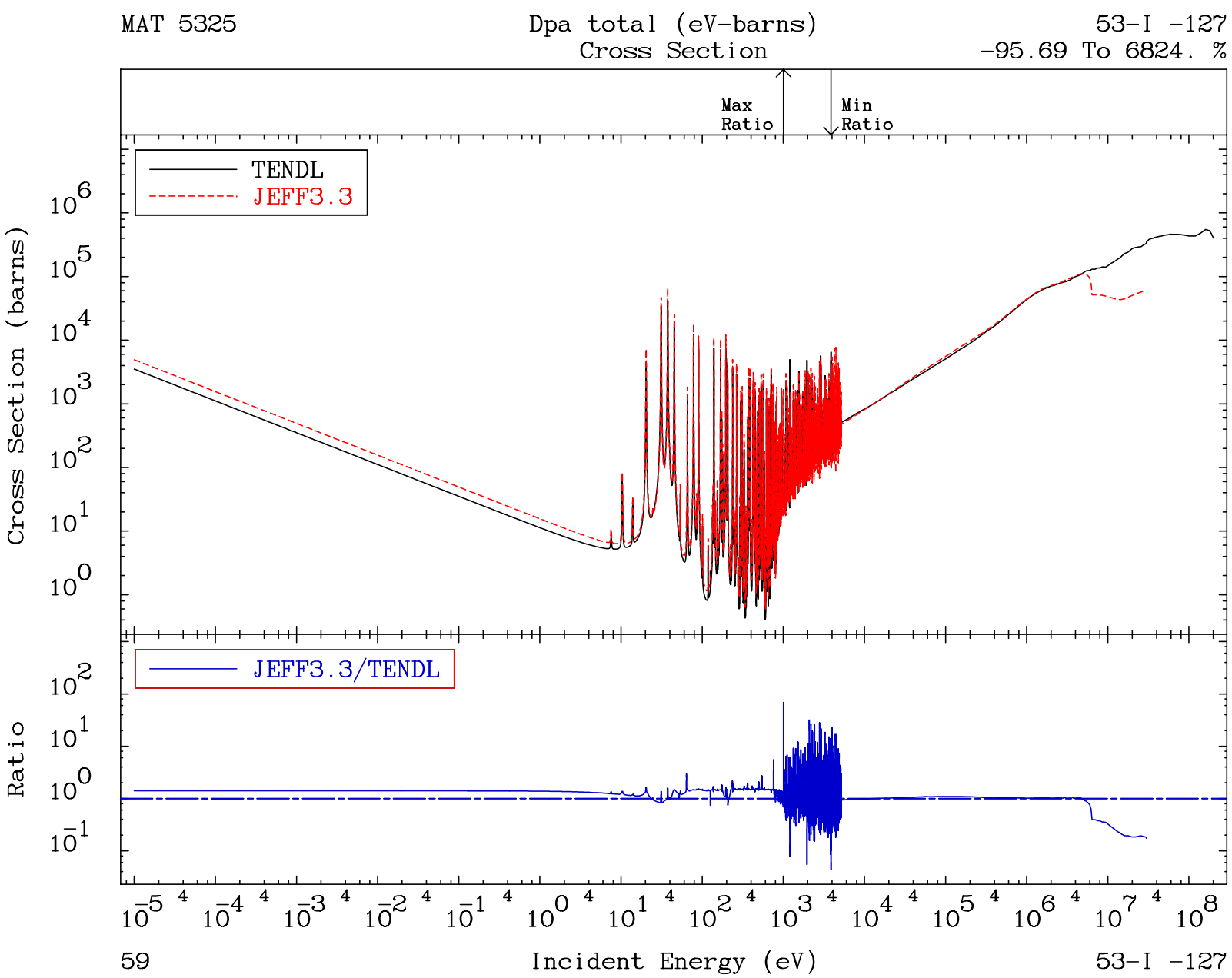

MAT 5325
Kerma inelastic (mt51-91)
Cross Section
53-I -127
-84.03 To 1075. %
Min Ratio
Max Ratio
TENDL Threshold 58.066 keV
JEFF3.3 Threshold 58.066 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
54
53-I -127

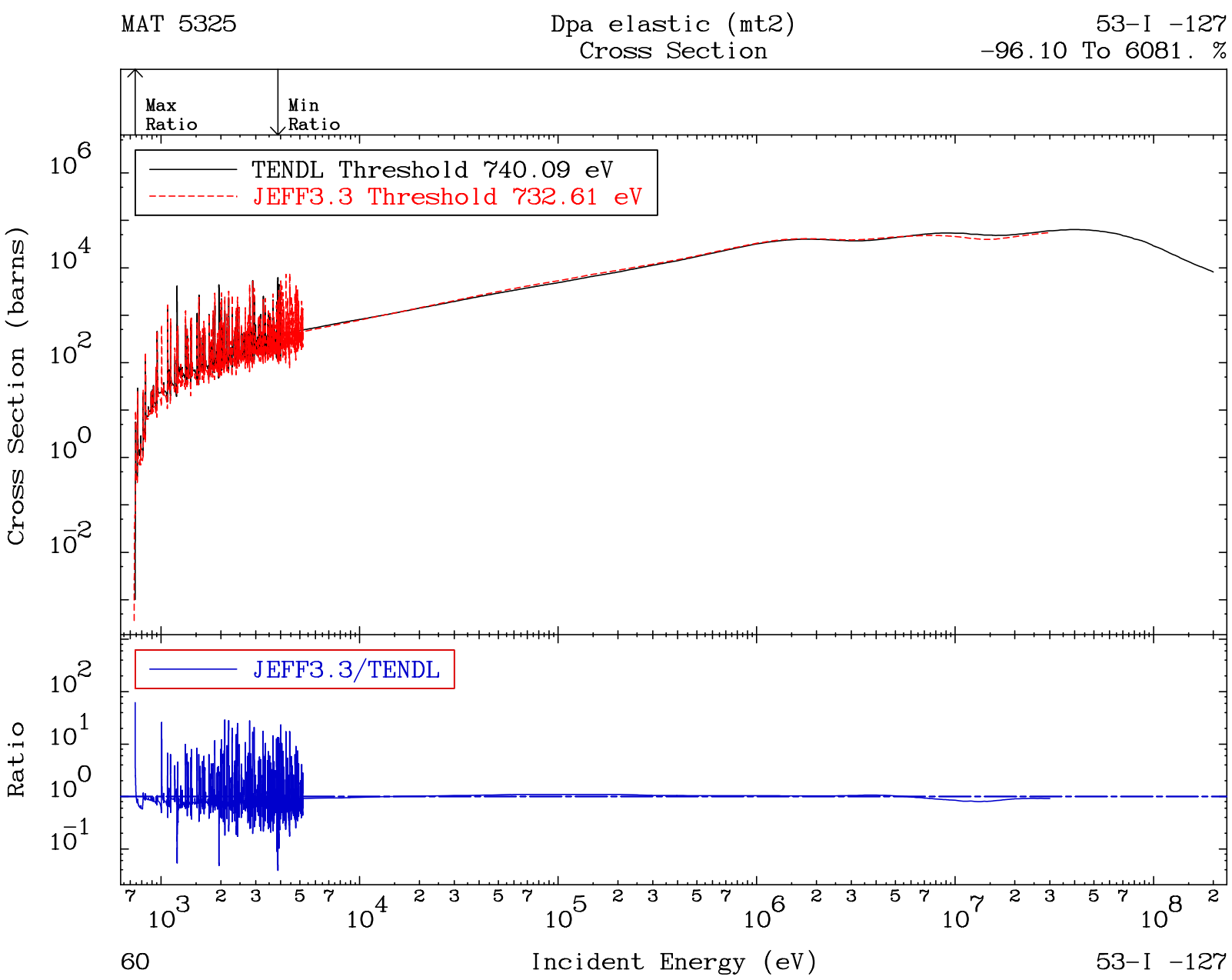

MAT 5325
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
53-I -127
-84.03 To 1075. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
10^{1}
10^{0}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
55
Incident Energy (eV)
53-I -127

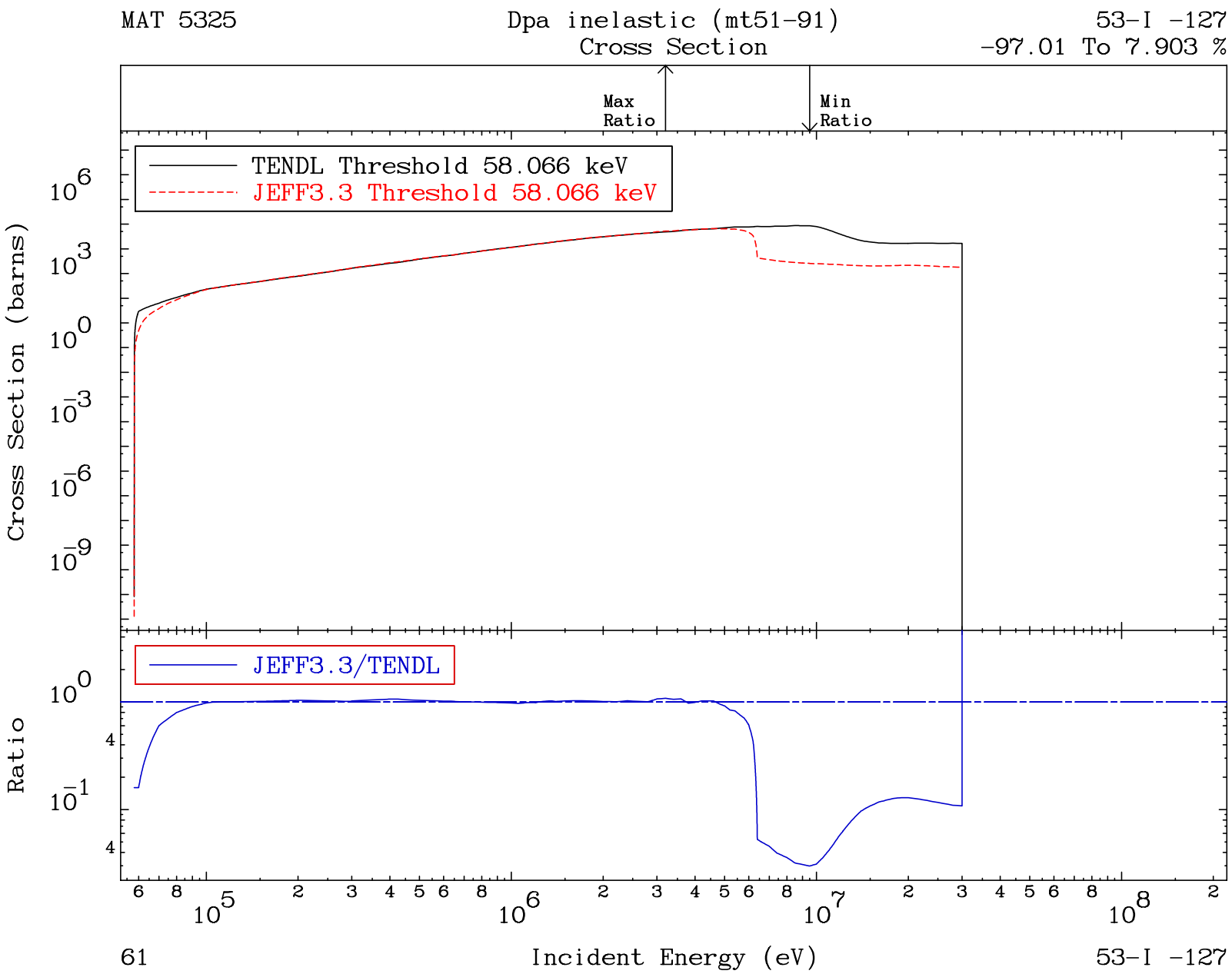

MAT 5325
Kerma capture (mt102)
Cross Section
53-I -127
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
56
53-I -127

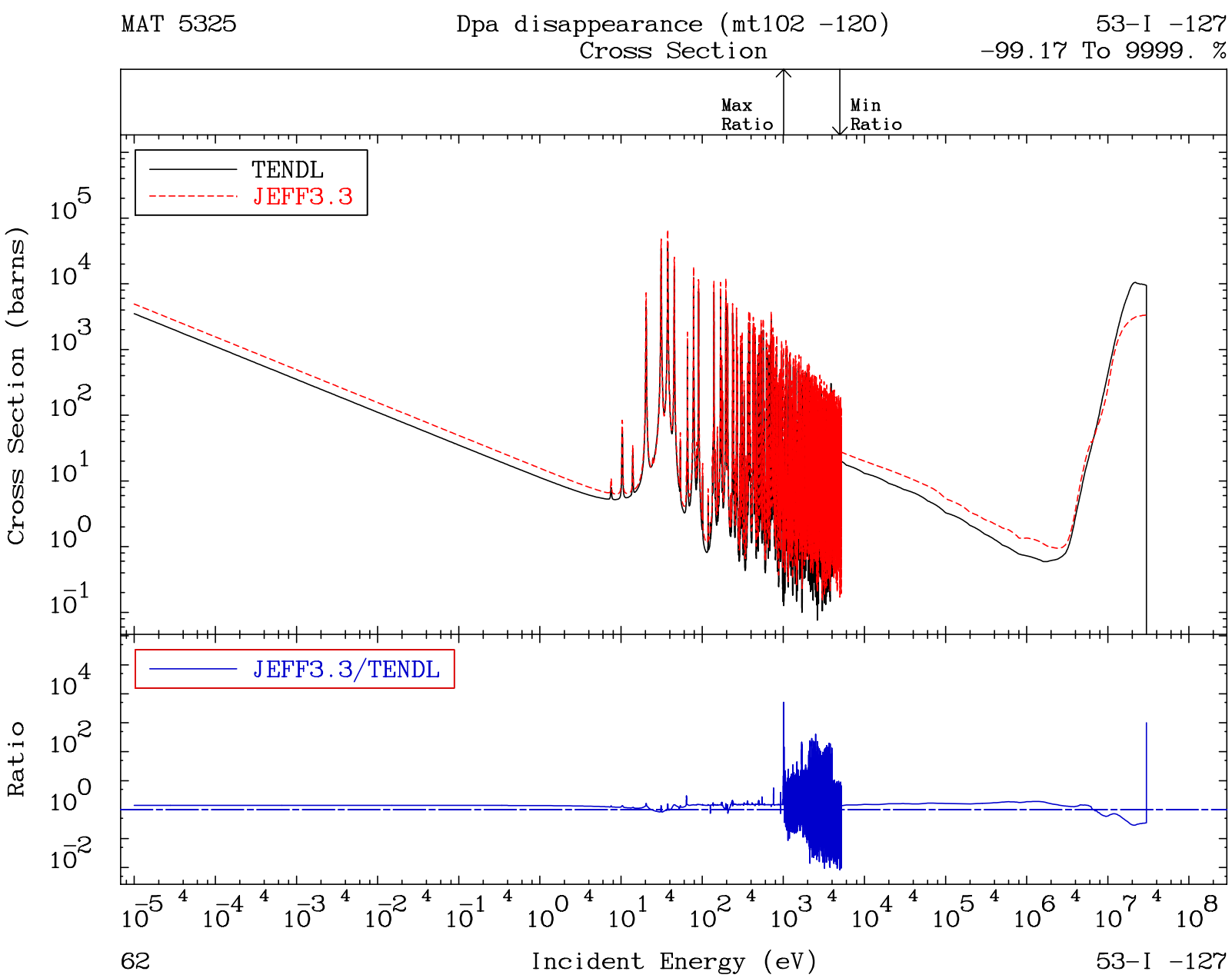

MAT 5325
Total photon (eV-barns)
Cross Section
53-I -127
-99.44 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
57
53-I -127

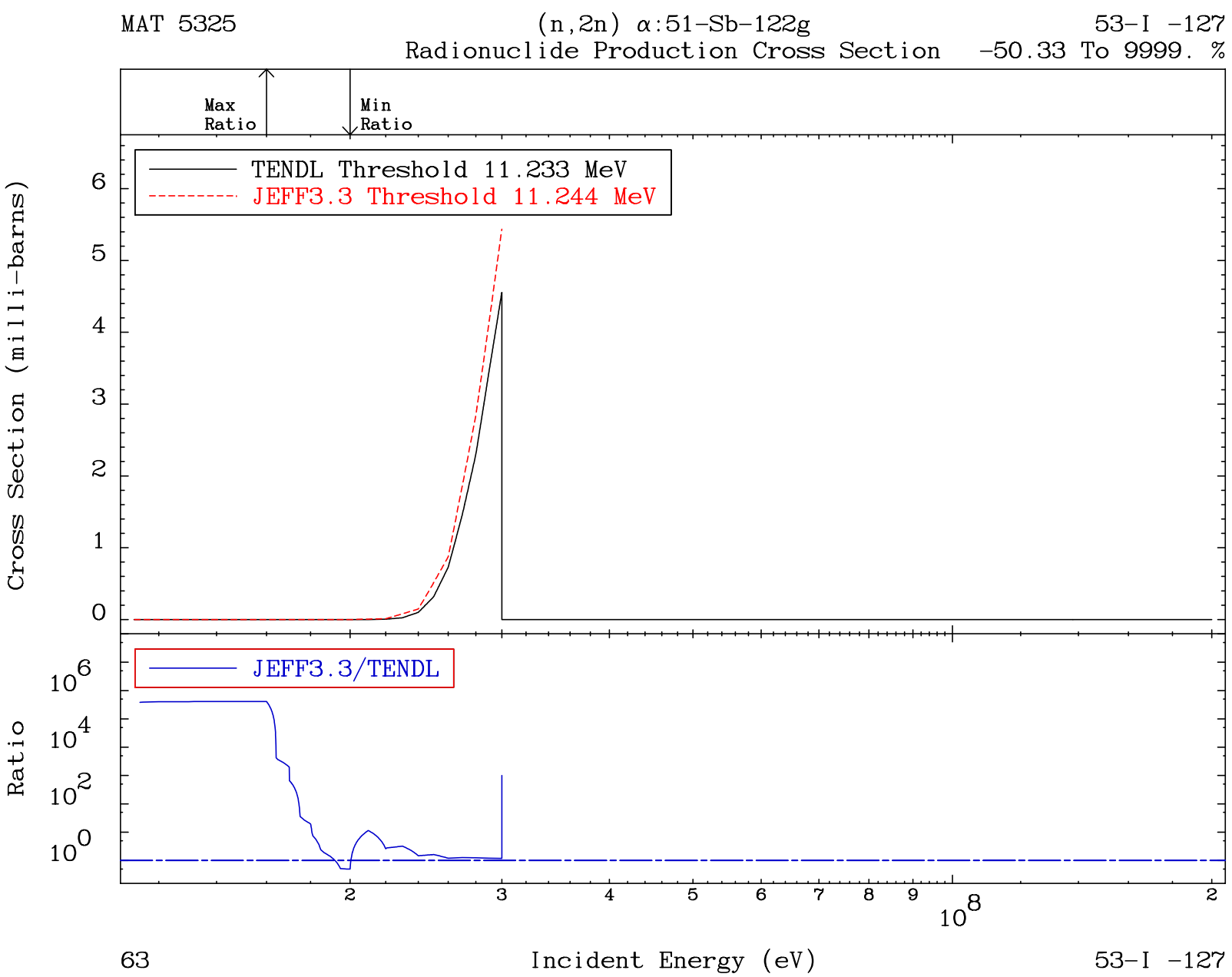

MAT 5325
Total kinematic kerma (high limit)
Cross Section
53-I -127
-95.67 To 4400. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
58
53-I -127

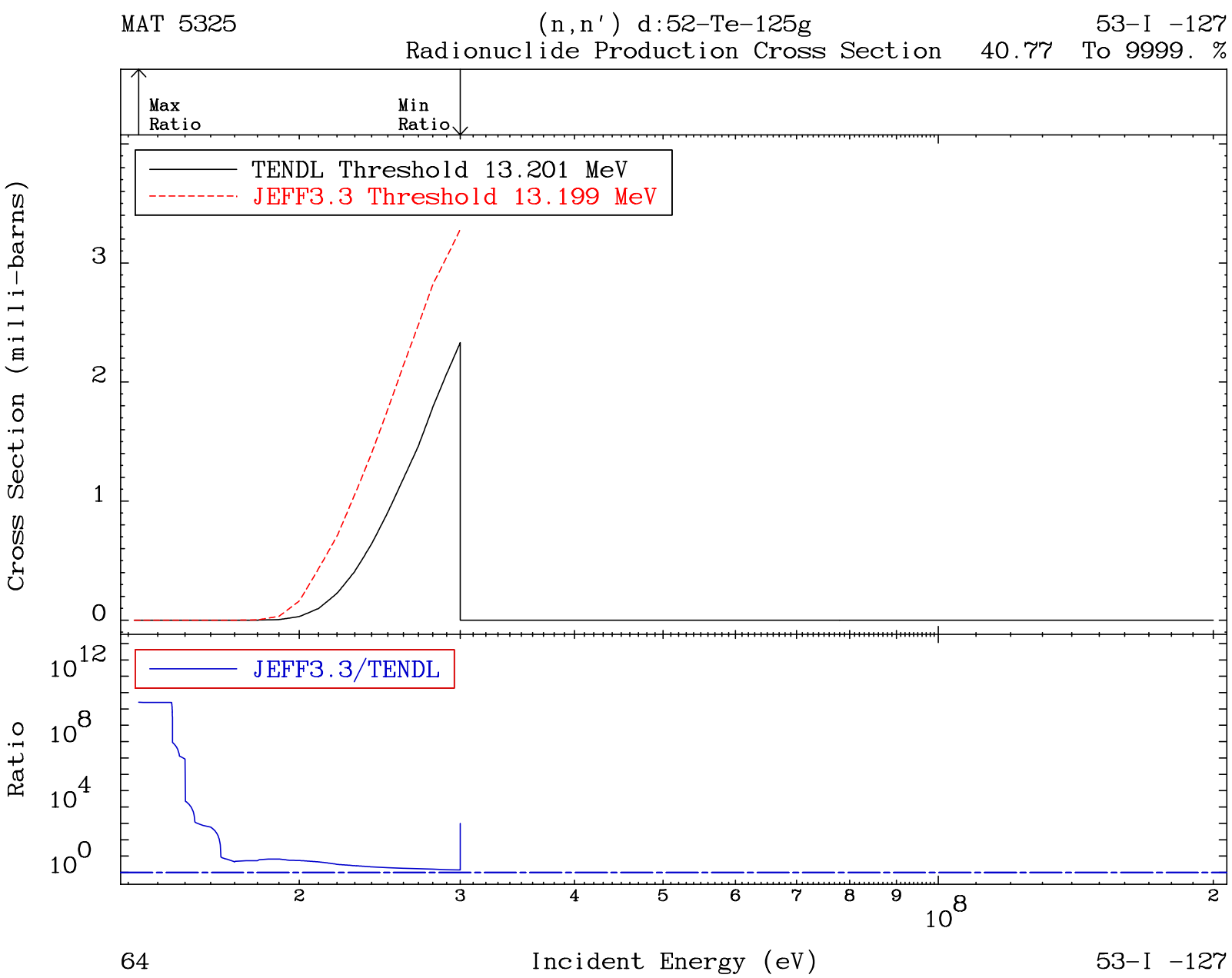

MAT 5325
Dpa total (eV-barns)
Cross Section
53-I -127
-95.69 To 6824. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
59
Incident Energy (eV)
53-I -127

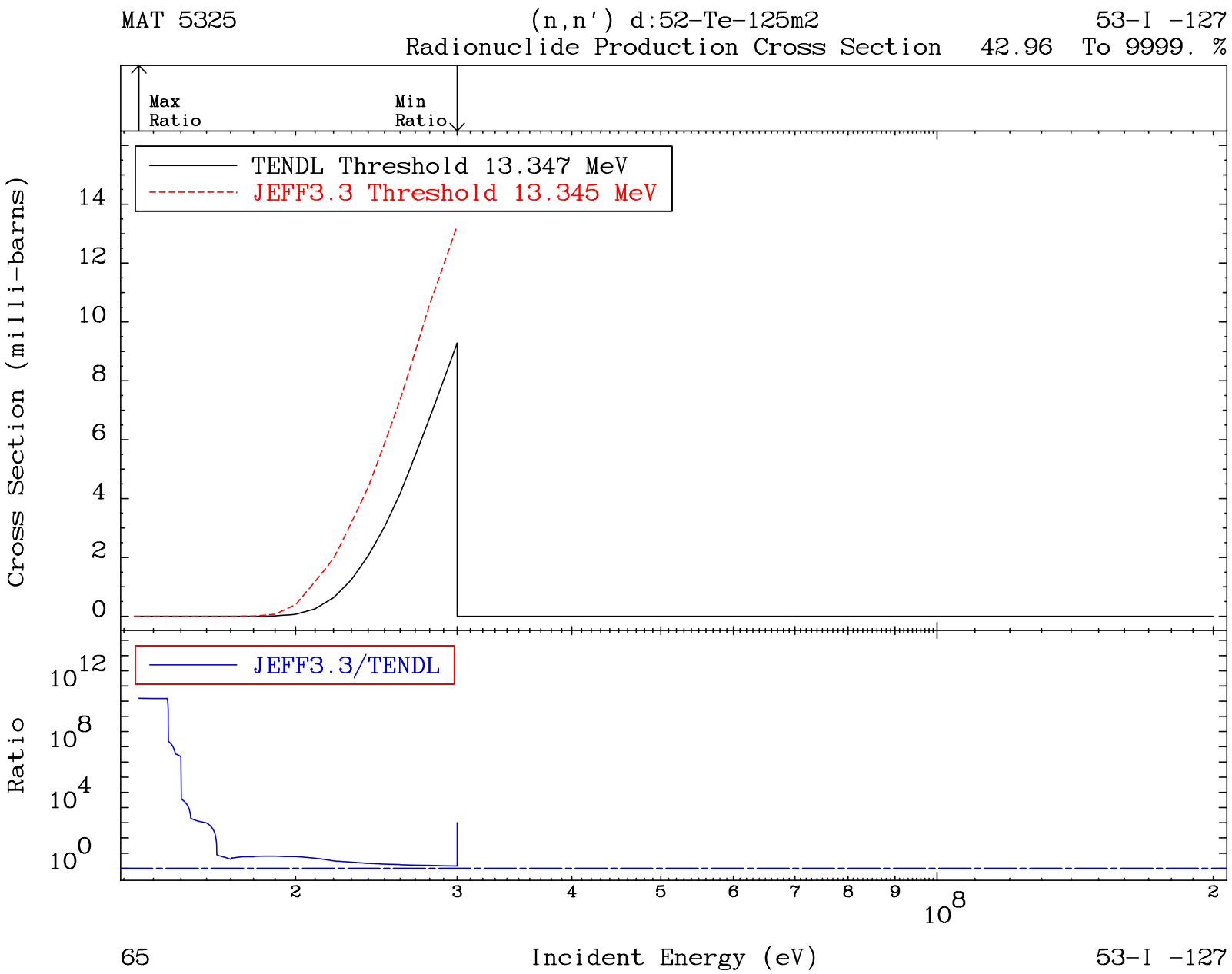

MAT 5325
Dpa elastic (mt2)
Cross Section
53-I -127
-96.10 To 6081. %
Max Ratio
Min Ratio
TENDL Threshold 740.09 eV
JEFF3.3 Threshold 732.61 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
60
53-I -127

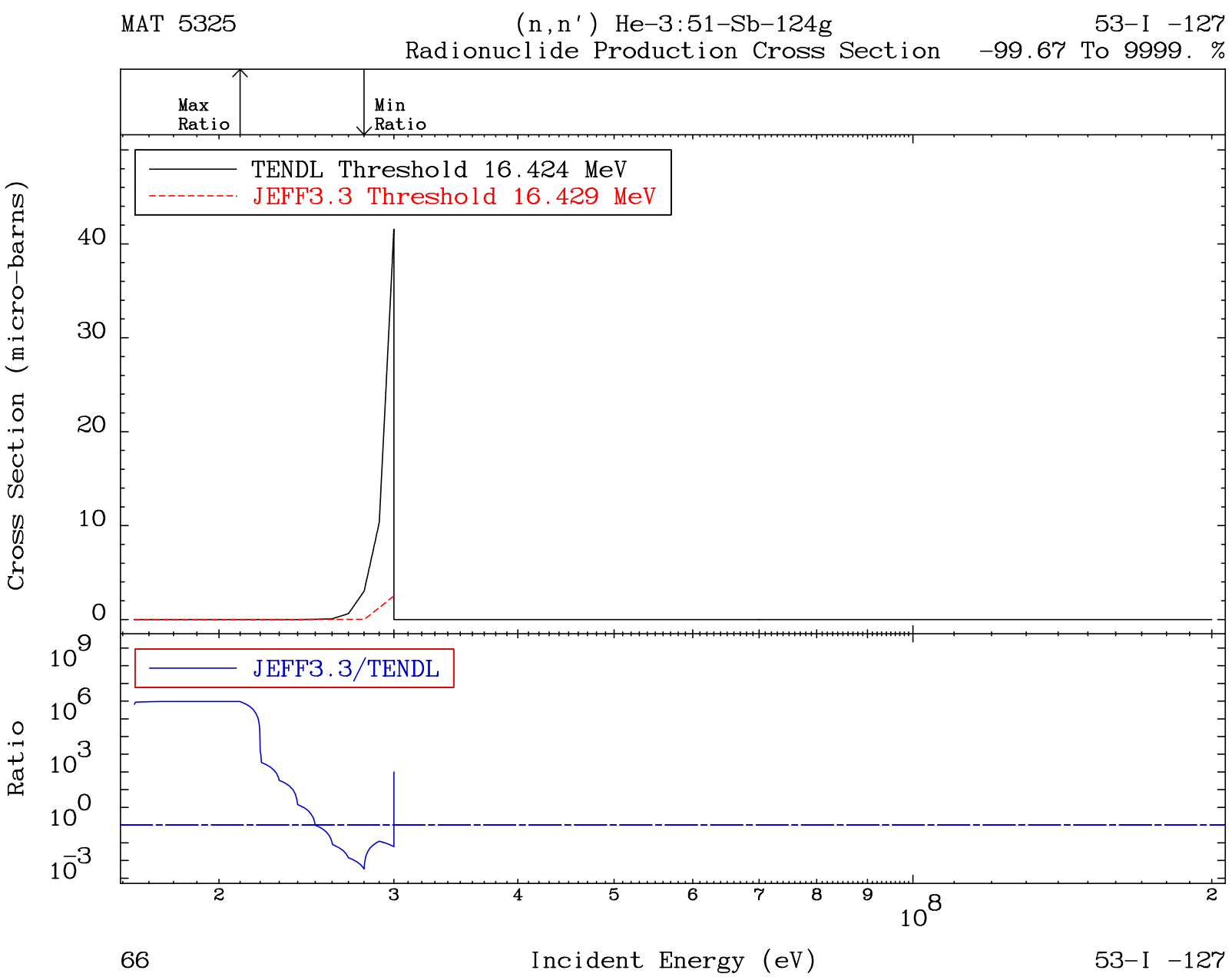

MAT 5325
Dpa inelastic (mt51-91)
Cross Section
53-I -127
-97.01 To 7.903 %
Max Ratio
Min Ratio
TENDL Threshold 58.066 keV
JEFF3.3 Threshold 58.066 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
61
53-I -127

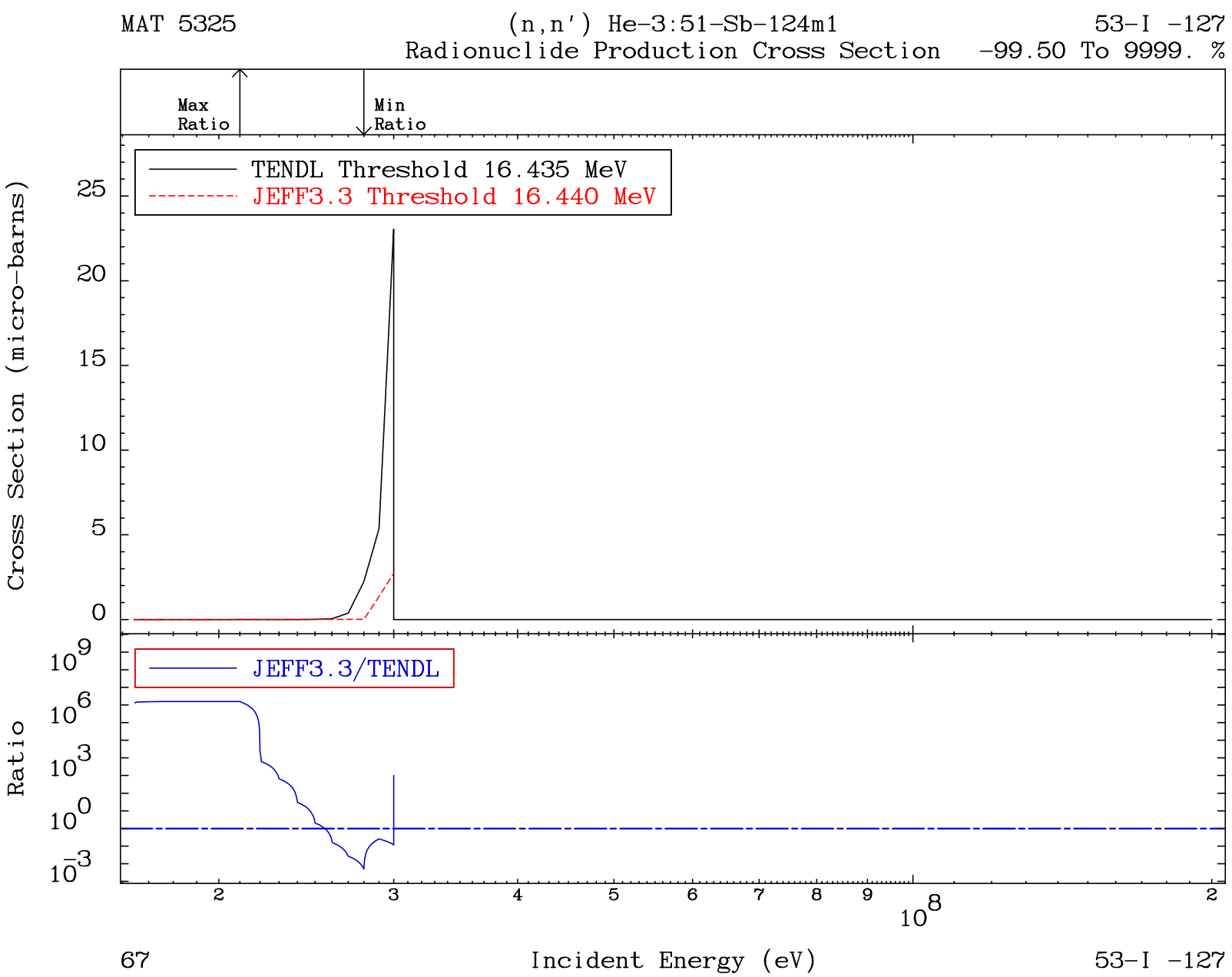

MAT 5325
Dpa disappearance (mt102 -120)
Cross Section
53-I -127
-99.17 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
62
53-I -127

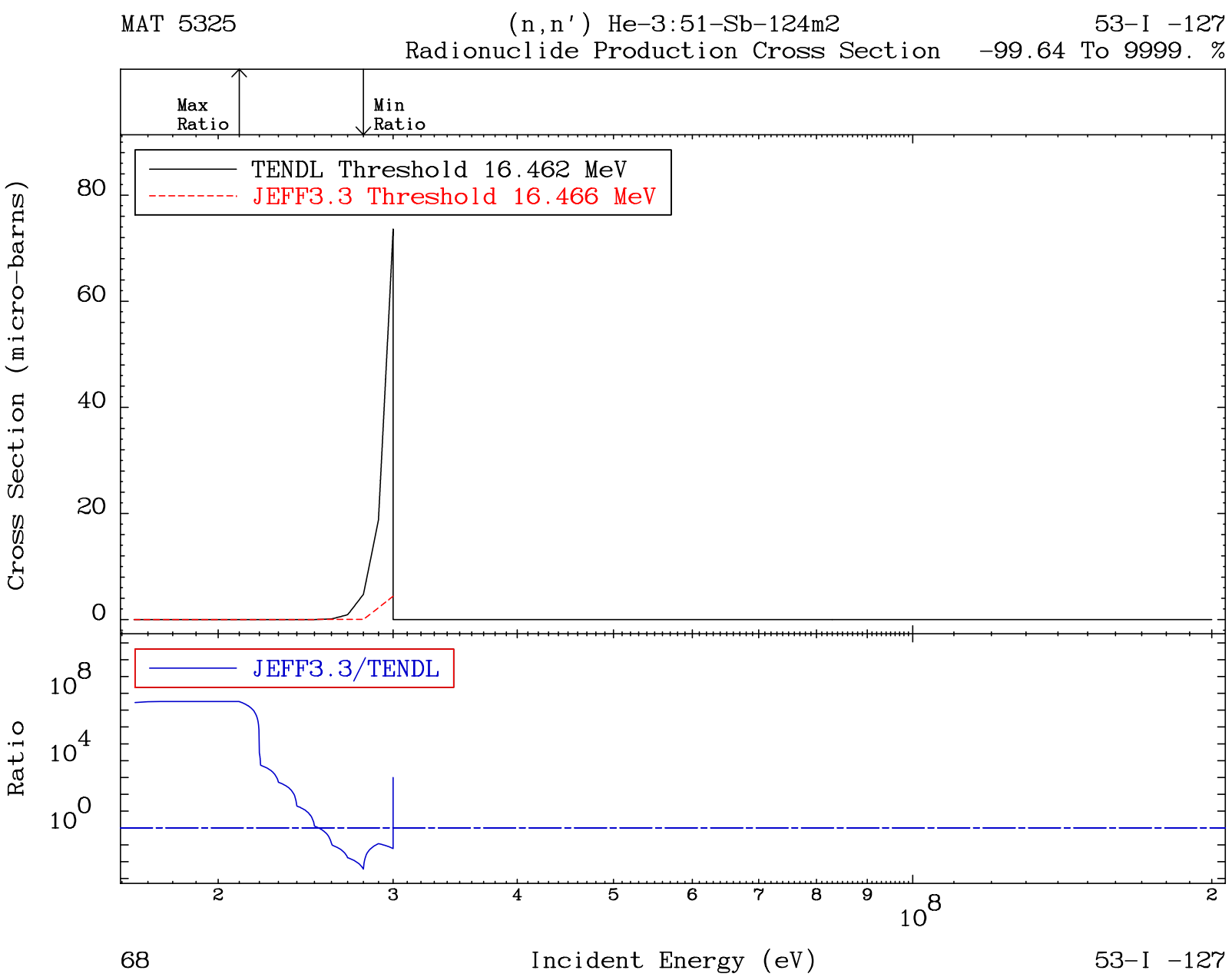

MAT 5325
(n,2n) α:51-Sb-122g
53-I -127
Radionuclide Production Cross Section -50.33 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 11.233 MeV
JEFF3.3 Threshold 11.244 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
53-I -127

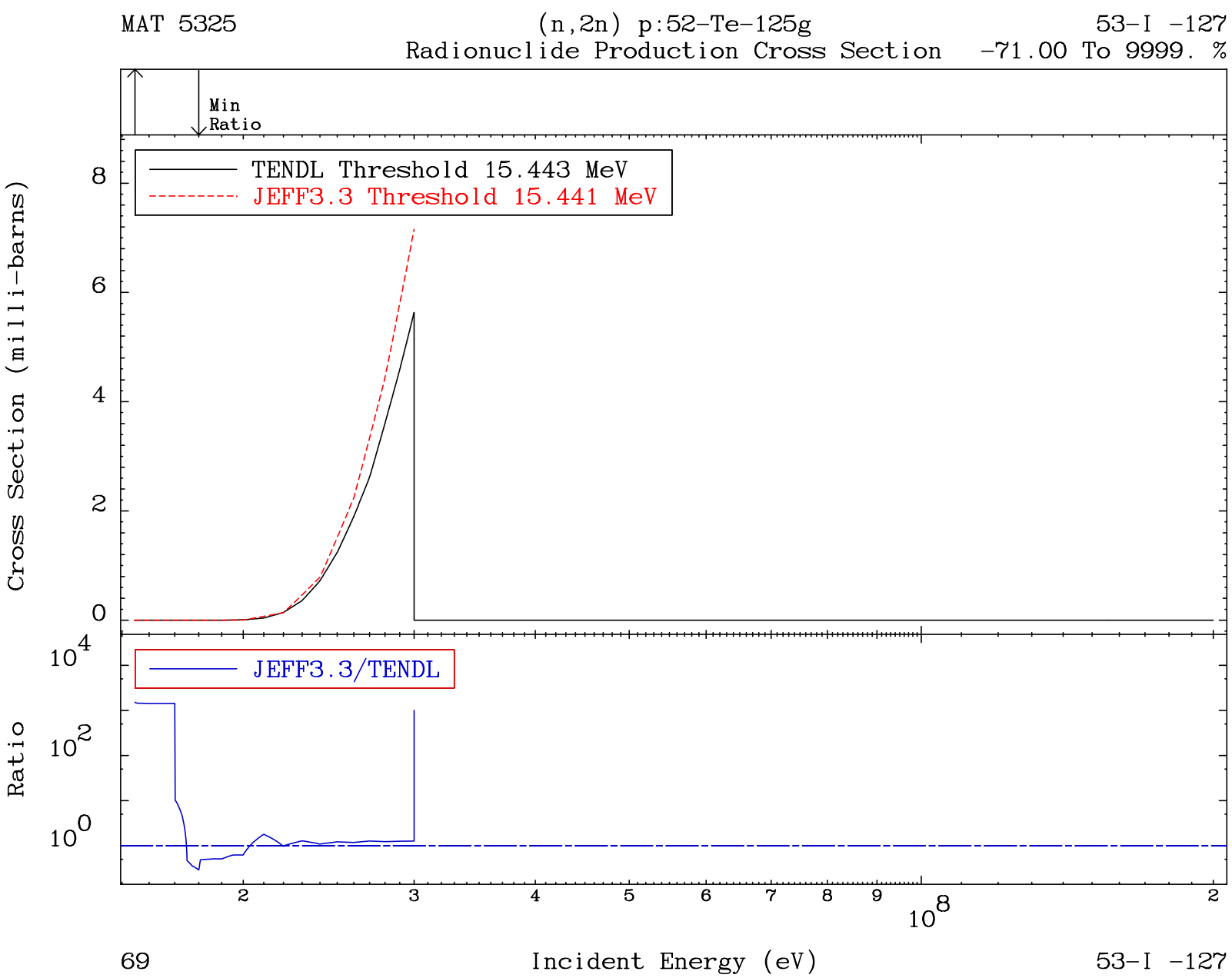

MAT 5325
(n,n') d:52-Te-125g
53-I -127
Radionuclide Production Cross Section 40.77 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.201 MeV
JEFF3.3 Threshold 13.199 MeV
Cross Section (milli-barns)
0
1
2
3
JEFF3.3/TENDL
Ratio
10^12
10^8
10^4
10^0
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
53-I -127

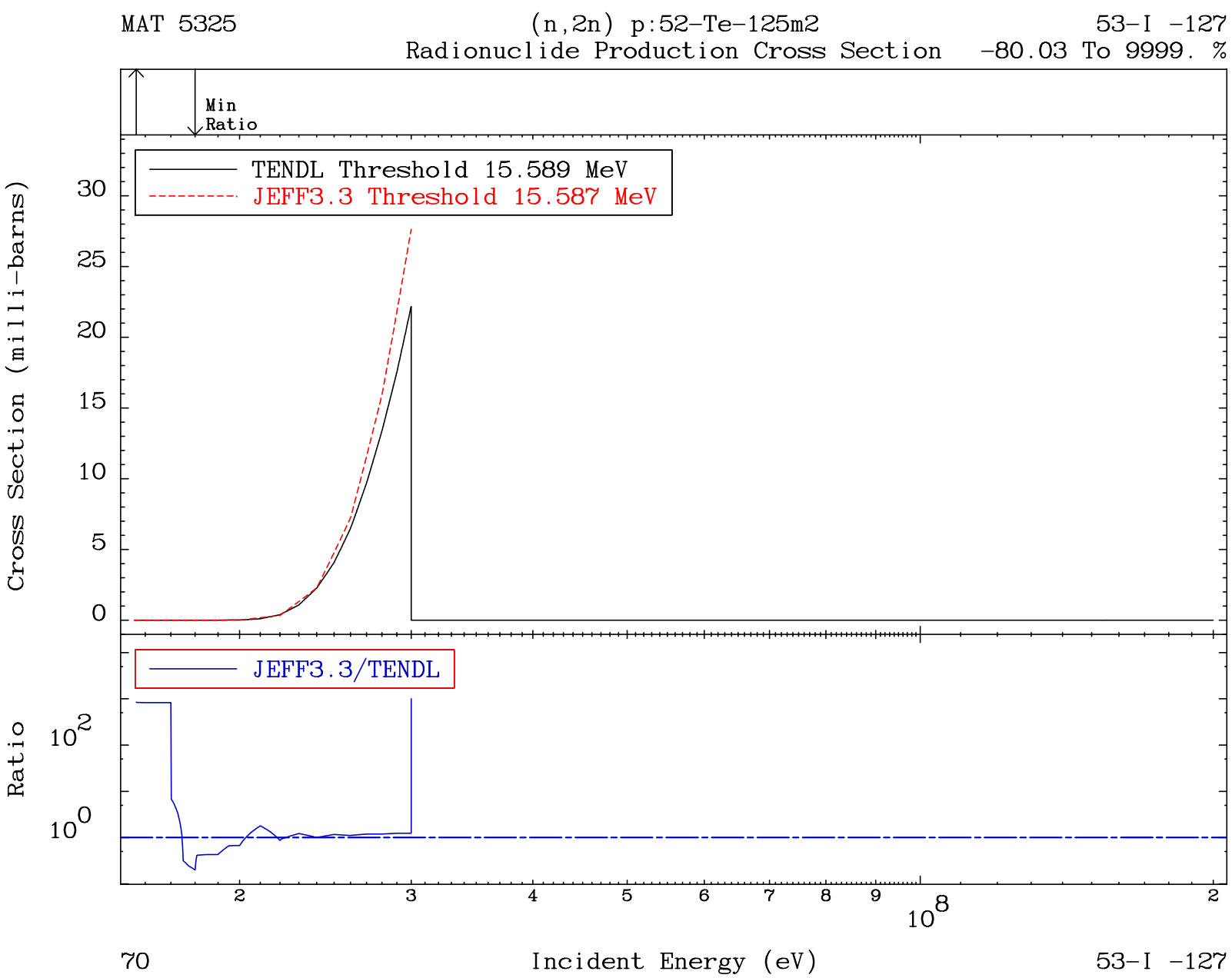

MAT 5325
(n,n') d:52-Te-125m2
53-I -127
Radionuclide Production Cross Section 42.96 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.347 MeV
JEFF3.3 Threshold 13.345 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
10^12
10^8
10^4
10^0
2
3
4
5
6
7
8
9
10^8
2
65
Incident Energy (eV)
53-I -127

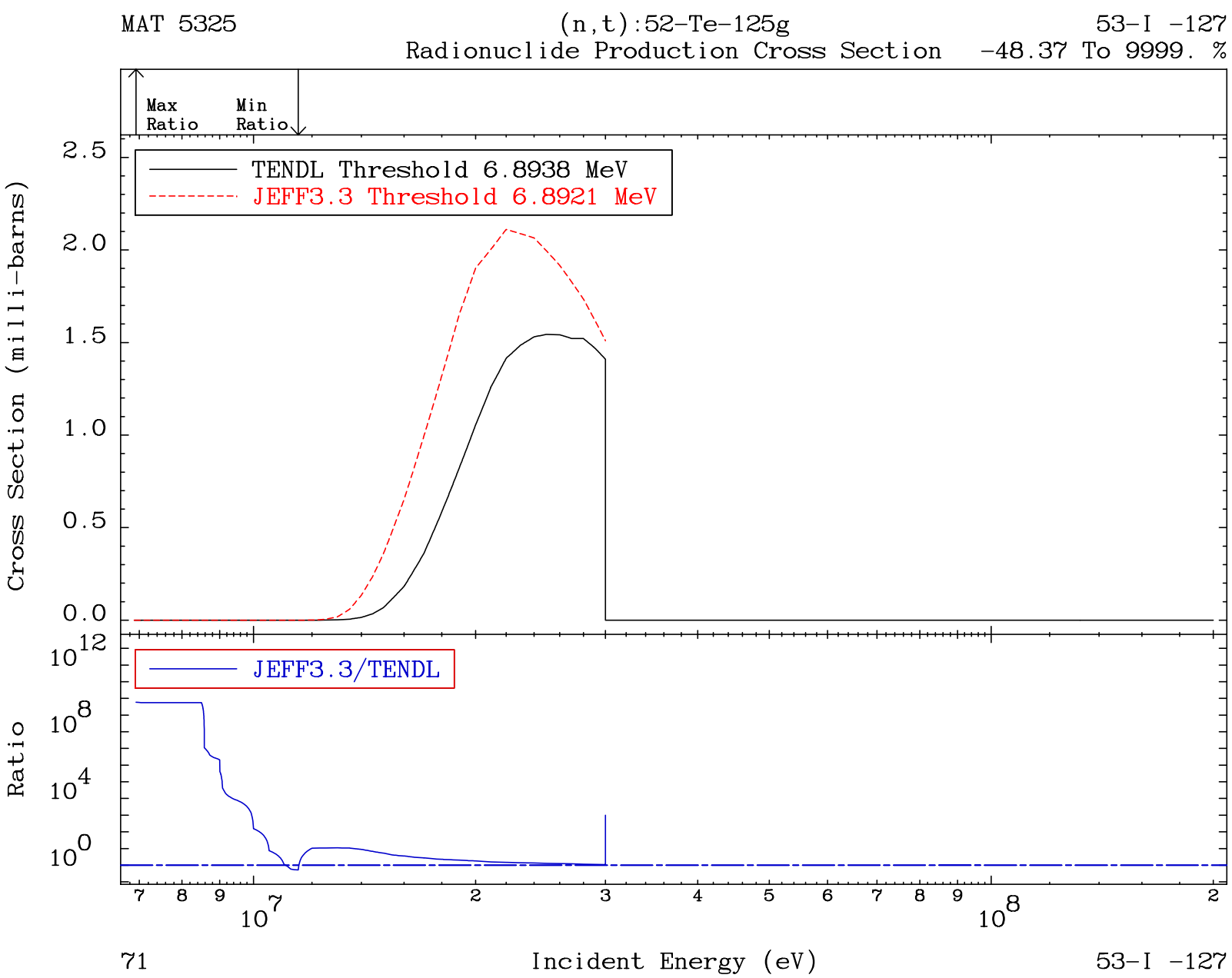

MAT 5325
(n,n') He-3:51-Sb-124g
53-I -127
Radionuclide Production Cross Section
-99.67 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 16.424 MeV
JEFF3.3 Threshold 16.429 MeV
Cross Section (micro-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
10^-3
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
53-I -127

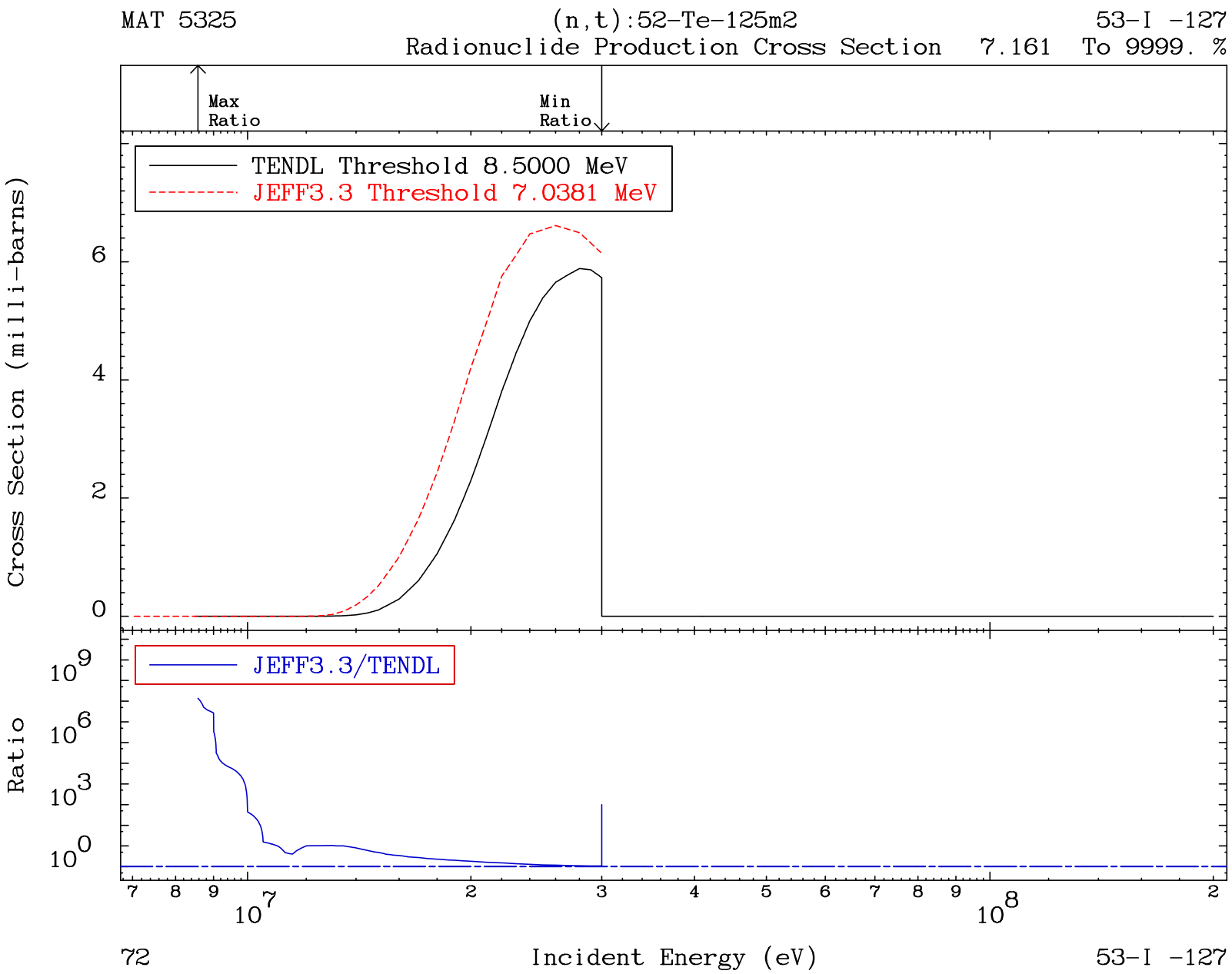

MAT 5325
(n,n') He-3:51-Sb-124m1
53-I -127
Radionuclide Production Cross Section
-99.50 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 16.435 MeV
JEFF3.3 Threshold 16.440 MeV
Cross Section (micro-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
10^-3
2
3
4
5
6
7
8
9
10^8
2
67
Incident Energy (eV)
53-I -127

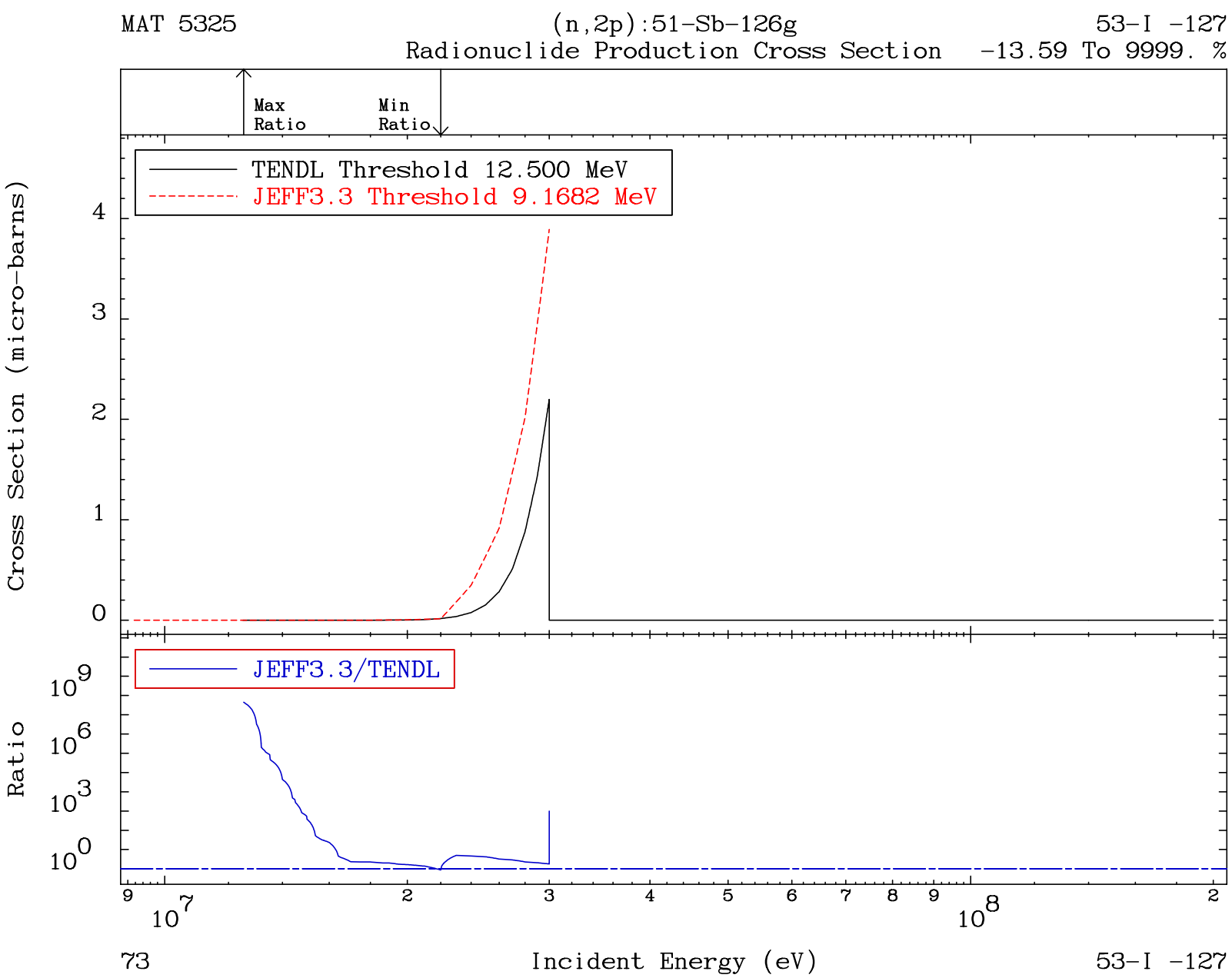

MAT 5325
(n,n') He-3:51-Sb-124m2
53-I -127
Radionuclide Production Cross Section
-99.64 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 16.462 MeV
JEFF3.3 Threshold 16.466 MeV
Cross Section (micro-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^8
10^4
10^0
2
3
4
5
6
7
8
9
10^8
2
68
Incident Energy (eV)
53-I -127

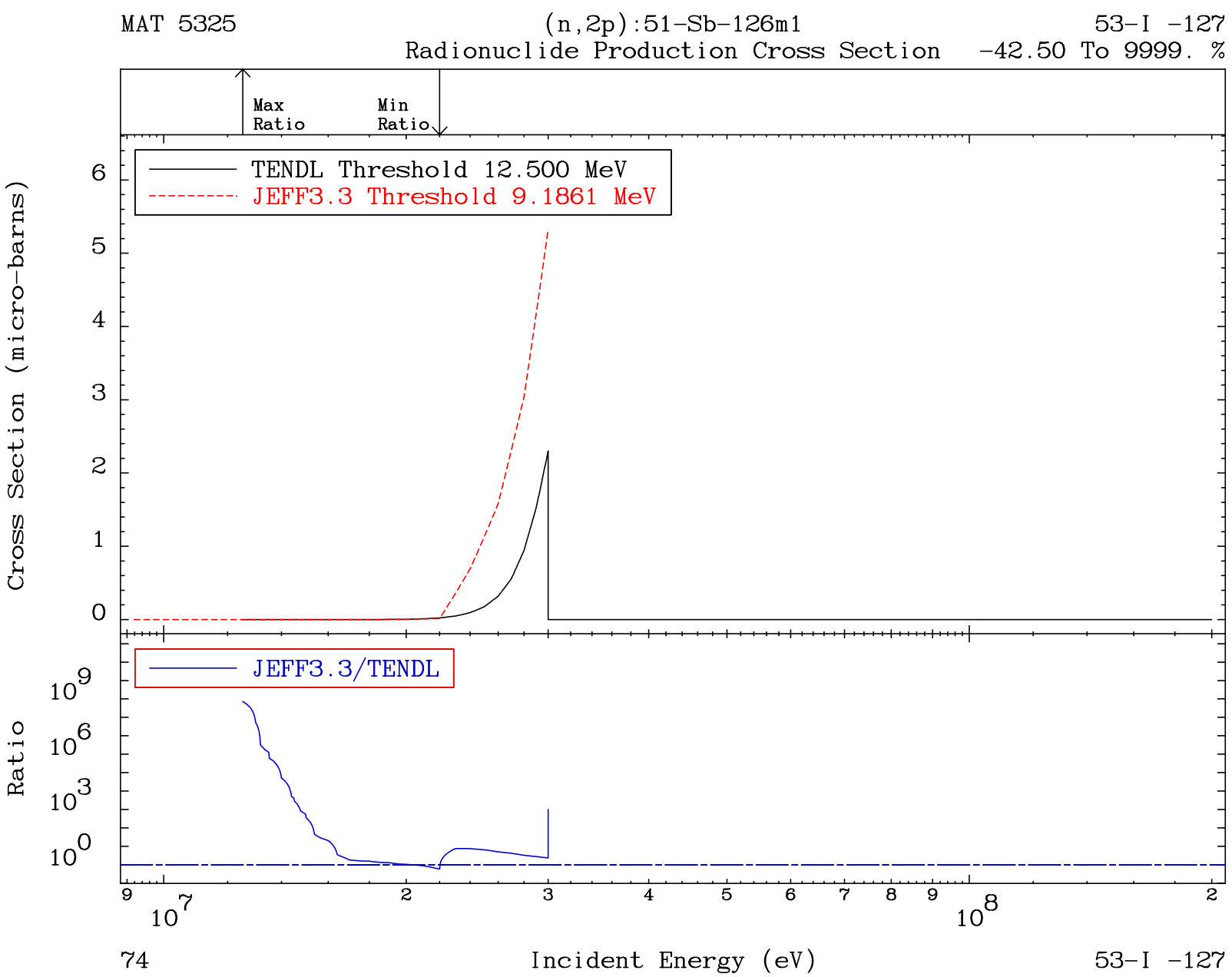

MAT 5325
(n,2n) p:52-Te-125g
53-I -127
Radionuclide Production Cross Section
-71.00 To 9999. %
Min
Ratio
TENDL Threshold 15.443 MeV
JEFF3.3 Threshold 15.441 MeV
Cross Section (milli-barns)
8
6
4
2
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
69
Incident Energy (eV)
53-I -127

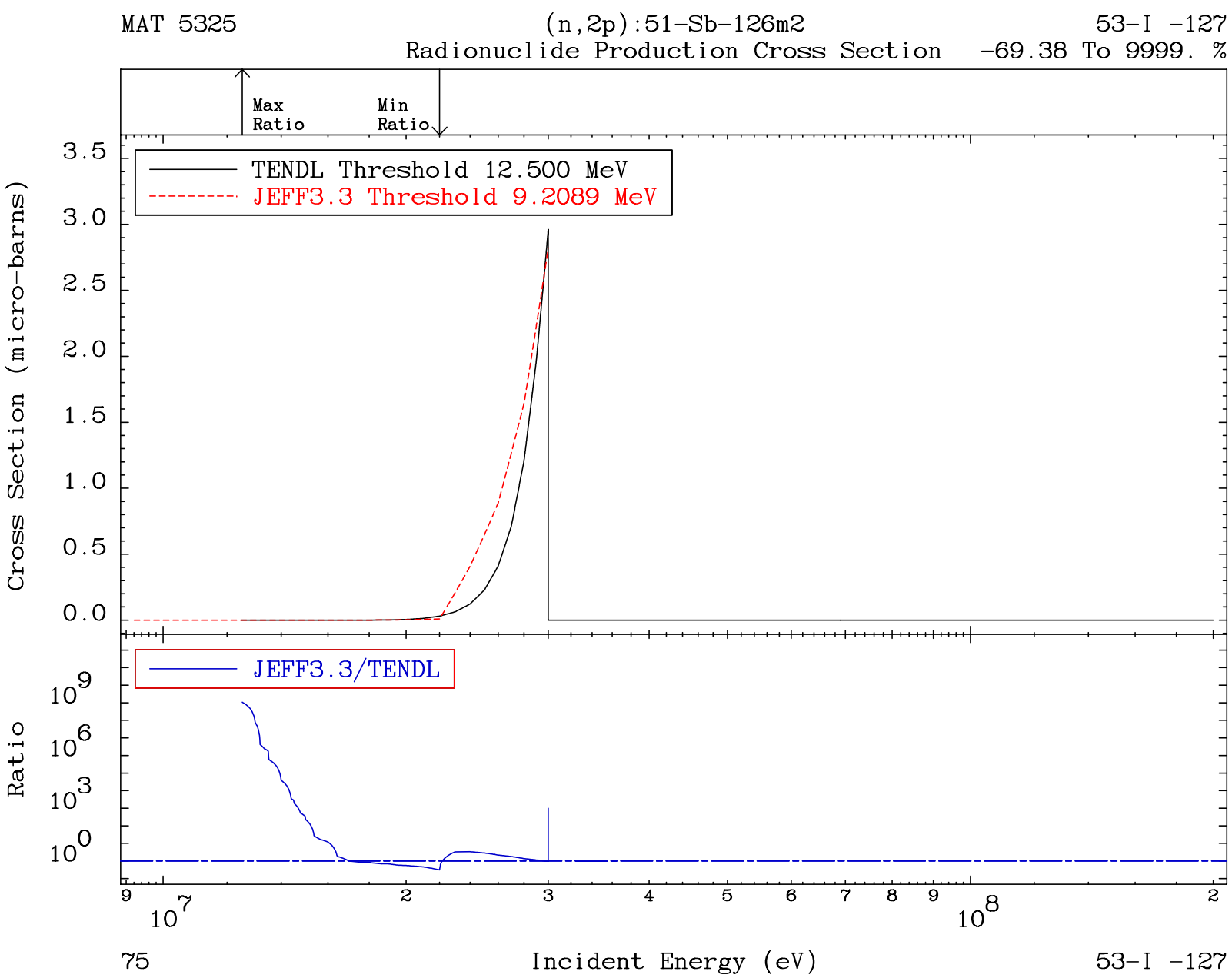

MAT 5325
(n,2n) p:52-Te-125m2
53-I -127
Radionuclide Production Cross Section
-80.03 To 9999. %
Min
Ratio
TENDL Threshold 15.589 MeV
JEFF3.3 Threshold 15.587 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
70
Incident Energy (eV)
53-I -127

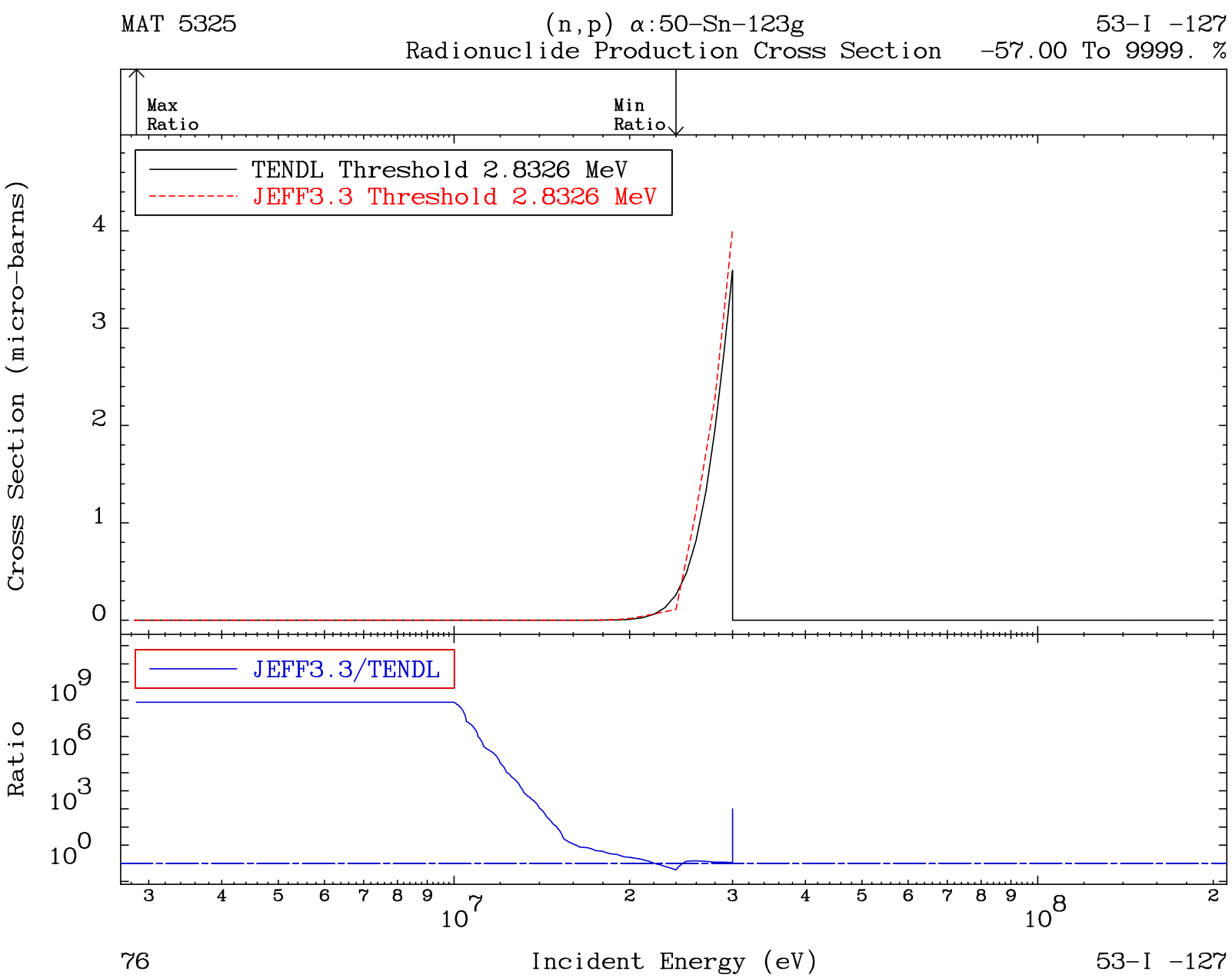

MAT 5325
(n,t):52-Te-125g
53-I -127
Radionuclide Production Cross Section -48.37 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.8938 MeV
JEFF3.3 Threshold 6.8921 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^{12}
10^{8}
10^{4}
10^{0}
7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
71
Incident Energy (eV)
53-I -127

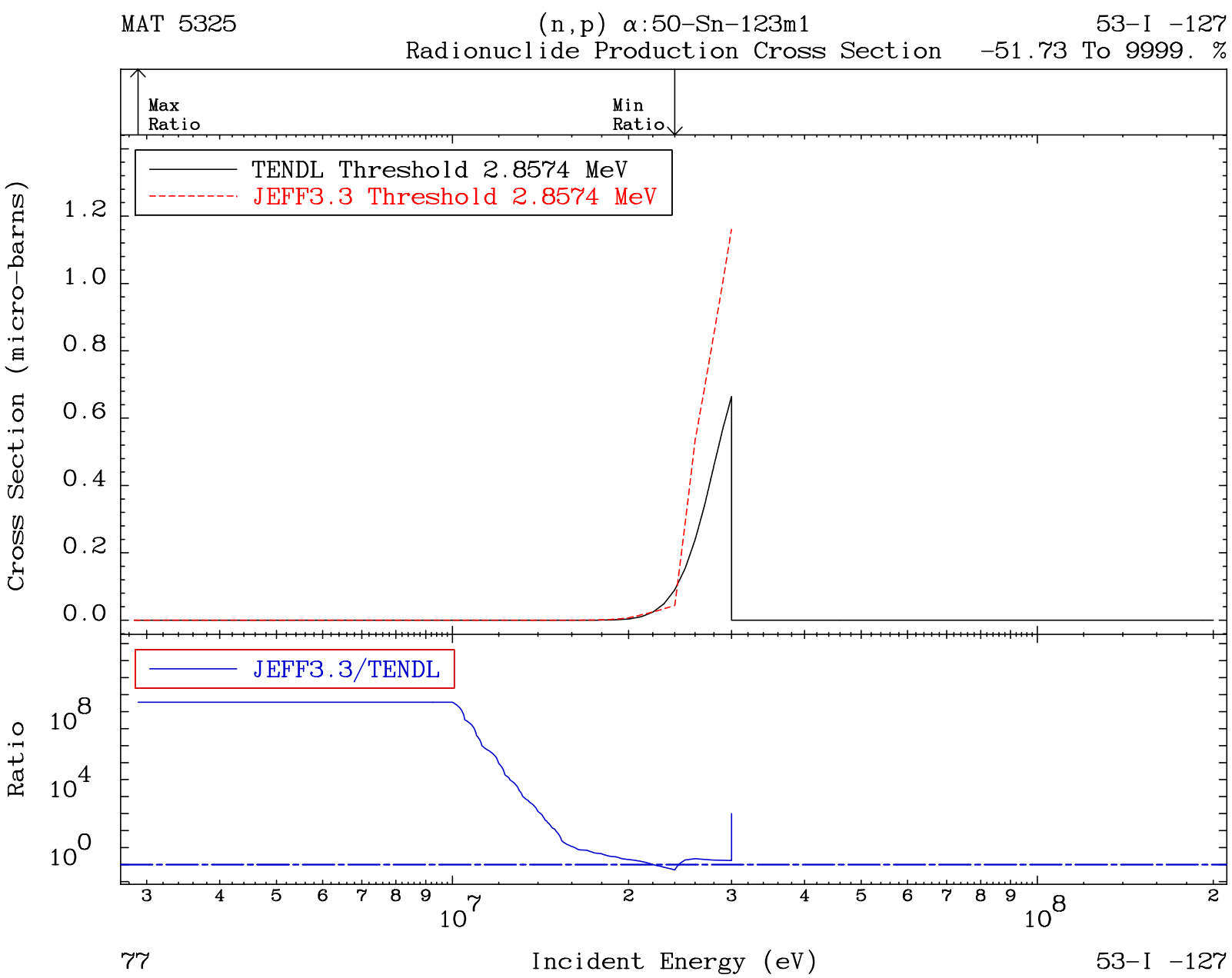

MAT 5325
(n,t):52-Te-125m2
53-I -127
Radionuclide Production Cross Section 7.161 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 8.5000 MeV
JEFF3.3 Threshold 7.0381 MeV
Cross Section (milli-barns)
0
2
4
6
JEFF3.3/TENDL
Ratio
10^0
10^3
10^6
10^9
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
72
53-I -127

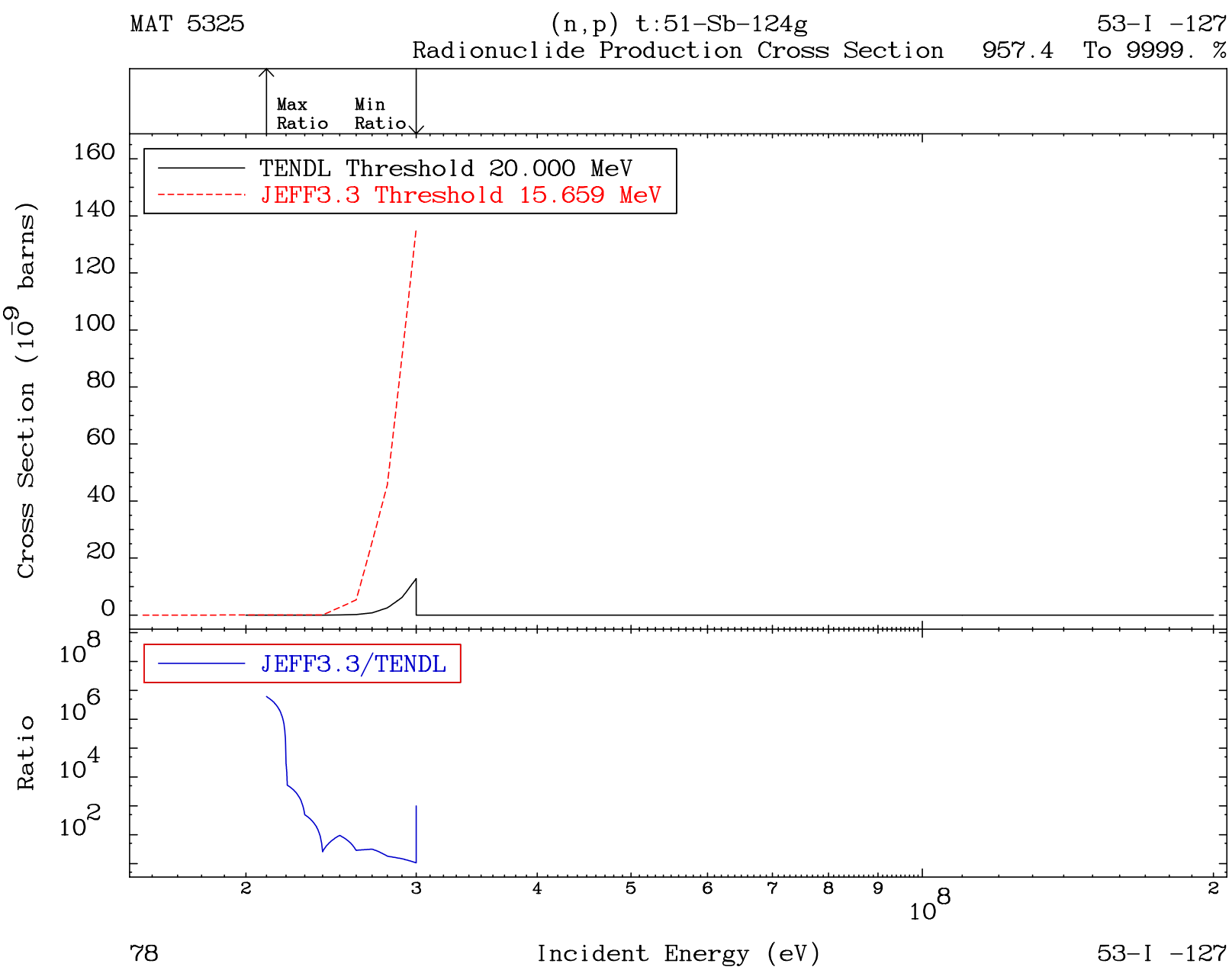

MAT 5325
(n,2p):51-Sb-126g
53-I -127
Radionuclide Production Cross Section -13.59 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 12.500 MeV
JEFF3.3 Threshold 9.1682 MeV
Cross Section (micro-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
73
Incident Energy (eV)
53-I -127

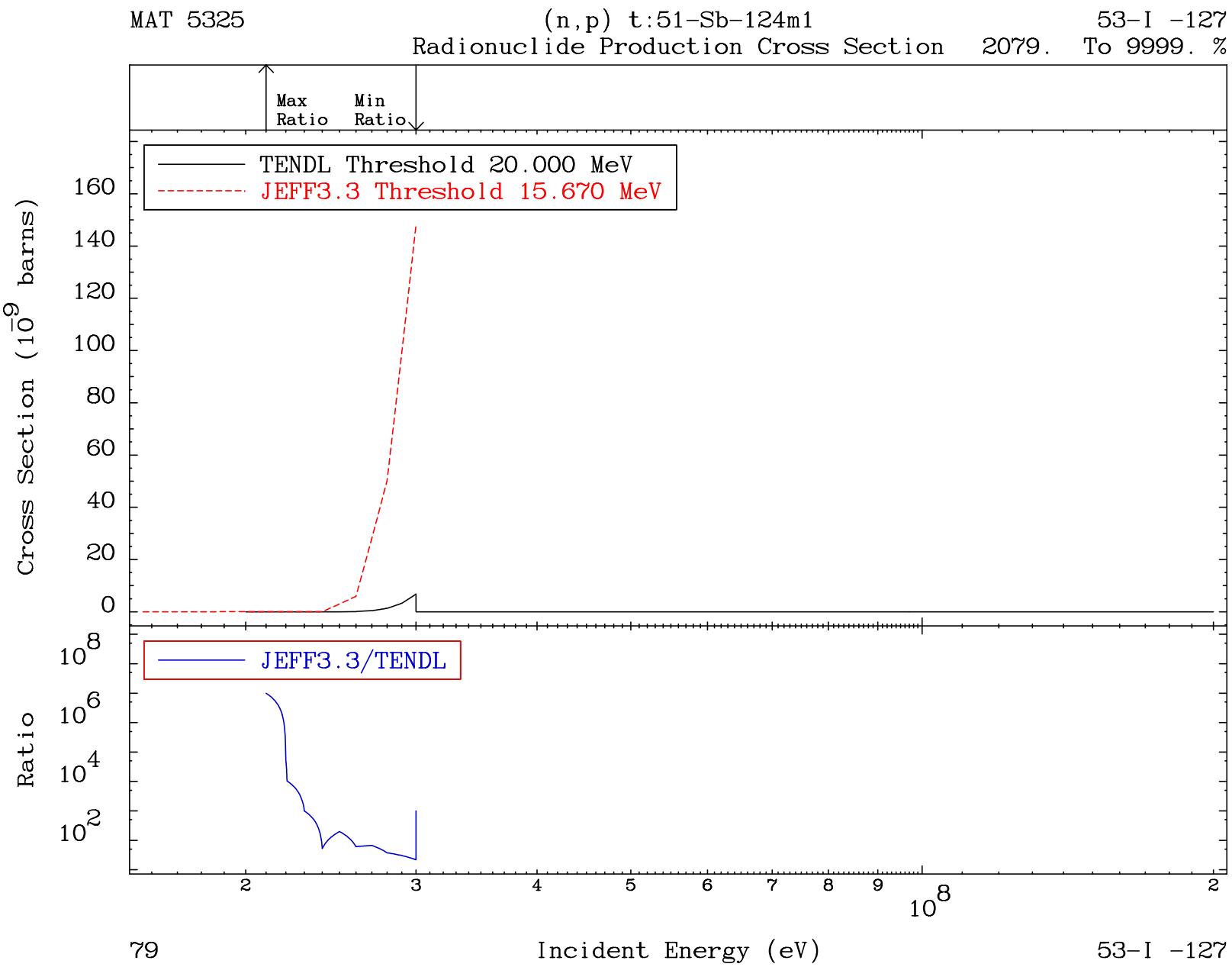

MAT 5325
(n,2p):51-Sb-126m1
53-I -127
Radionuclide Production Cross Section -42.50 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 12.500 MeV
JEFF3.3 Threshold 9.1861 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
74
Incident Energy (eV)
53-I -127

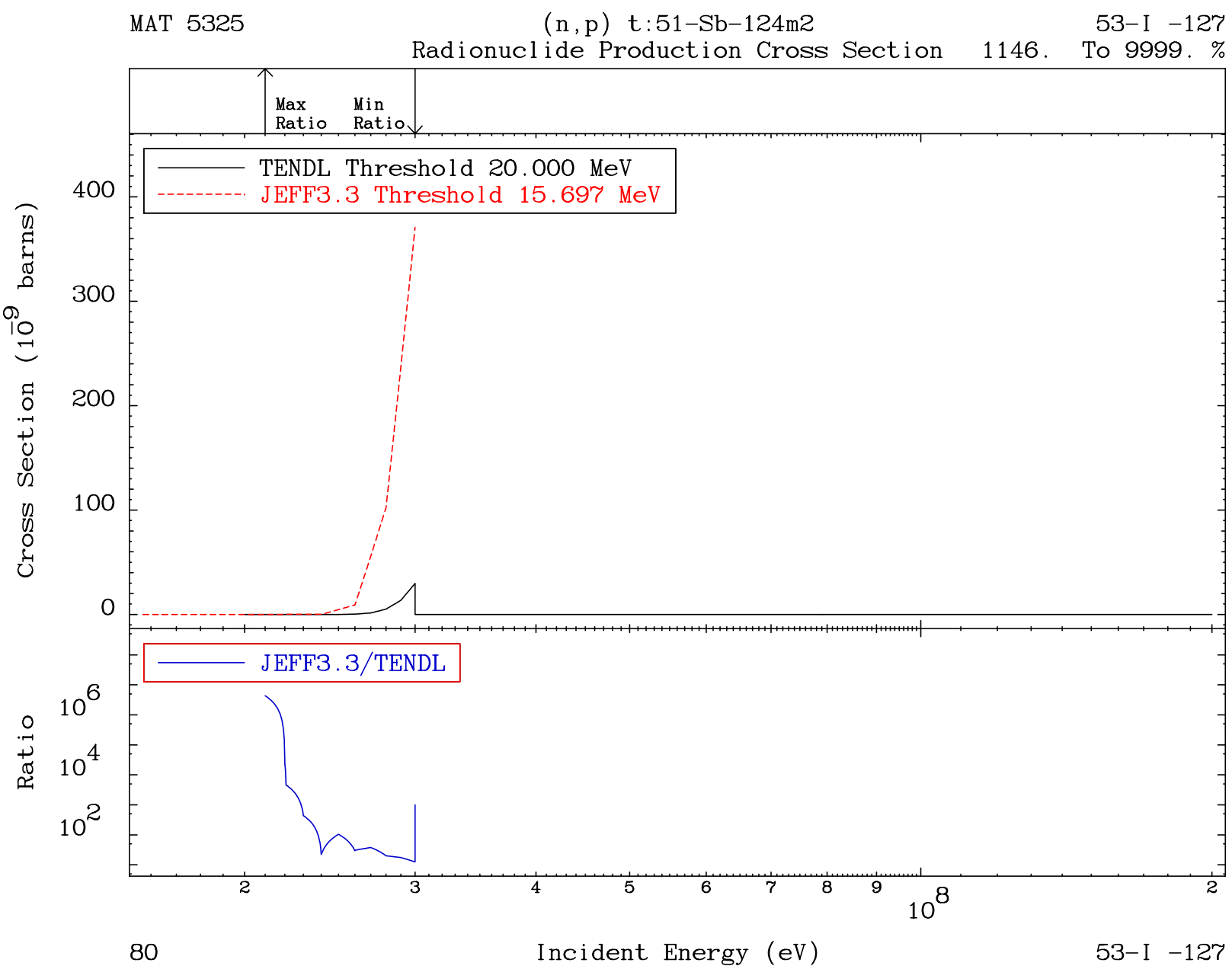

MAT 5325
(n,2p):51-Sb-126m2
53-I -127
Radionuclide Production Cross Section -69.38 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 12.500 MeV
JEFF3.3 Threshold 9.2089 MeV
Cross Section (micro-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
75
Incident Energy (eV)
53-I -127


MAT 5325
(n,p) α:50-Sn-123g
53-I -127
Radionuclide Production Cross Section
-57.00 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.8326 MeV
JEFF3.3 Threshold 2.8326 MeV
Cross Section (micro-barns)
0
1
2
3
4
JEFF3.3/TENDL
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
76
Incident Energy (eV)
53-I -127


MAT 5325
(n,p) α:50-Sn-123m1
53-I -127
Radionuclide Production Cross Section -51.73 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.8574 MeV
JEFF3.3 Threshold 2.8574 MeV
Cross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^8
10^4
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
77
Incident Energy (eV)
53-I -127


MAT 5325
(n,p) t:51-Sb-124g
53-I -127
Radionuclide Production Cross Section 957.4 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 20.000 MeV
JEFF3.3 Threshold 15.659 MeV
Cross Section (10^{-9} barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^{8}
10^{6}
10^{4}
10^{2}
2
3
4
5
6
7
8
9
10^{8}
2
78
Incident Energy (eV)
53-I -127


MAT 5325
(n,p) t:51-Sb-124m1
53-I -127
Radionuclide Production Cross Section 2079. To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 20.000 MeV
JEFF3.3 Threshold 15.670 MeV
Cross Section (10^{-9} barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^8
10^6
10^4
10^2
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
53-I -127


MAT 5325
(n,p) t:51-Sb-124m2
53-I -127
Radionuclide Production Cross Section 1146. To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 20.000 MeV
JEFF3.3 Threshold 15.697 MeV
Cross Section (10^{-9} barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^6
10^4
10^2
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
53-I -127