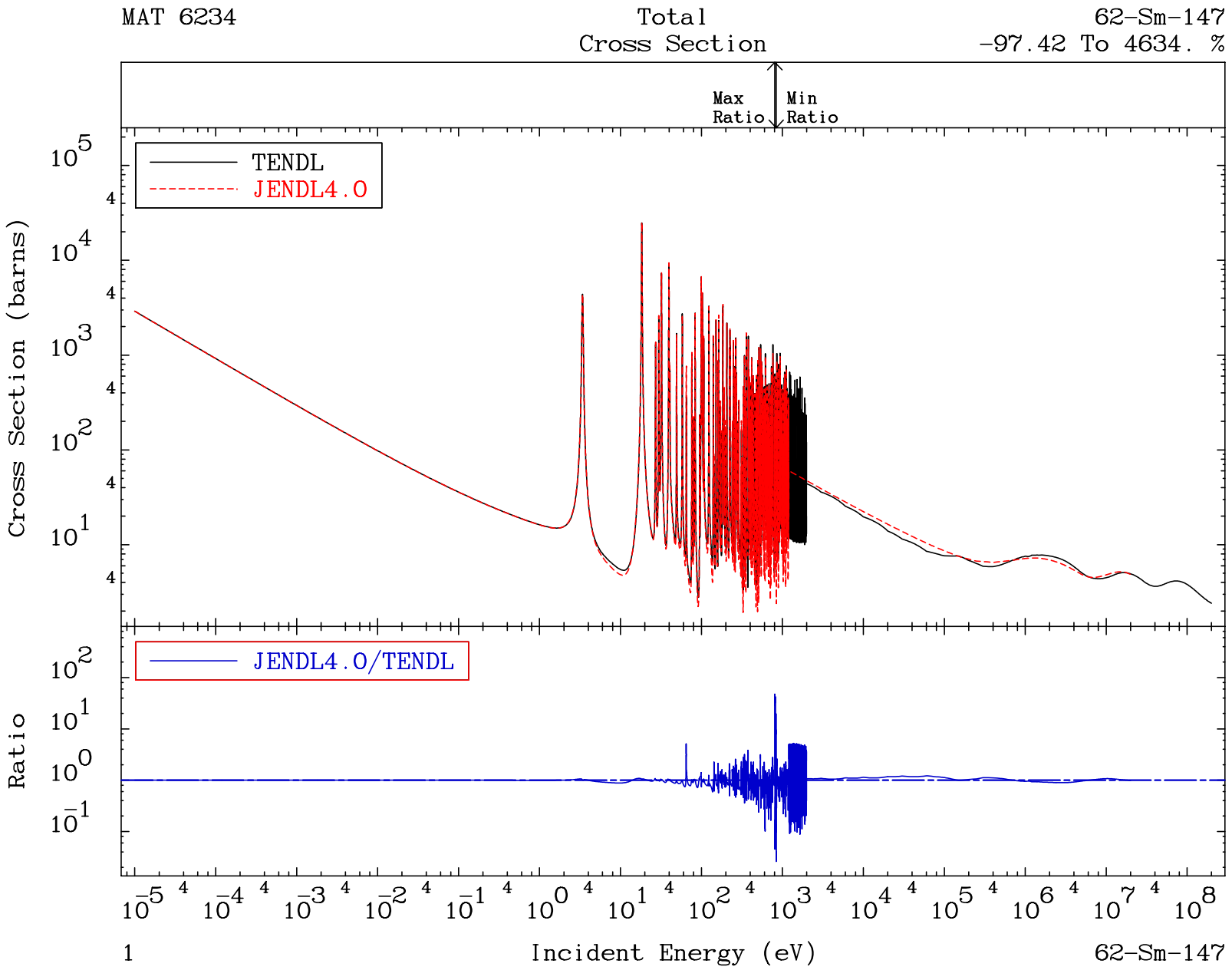
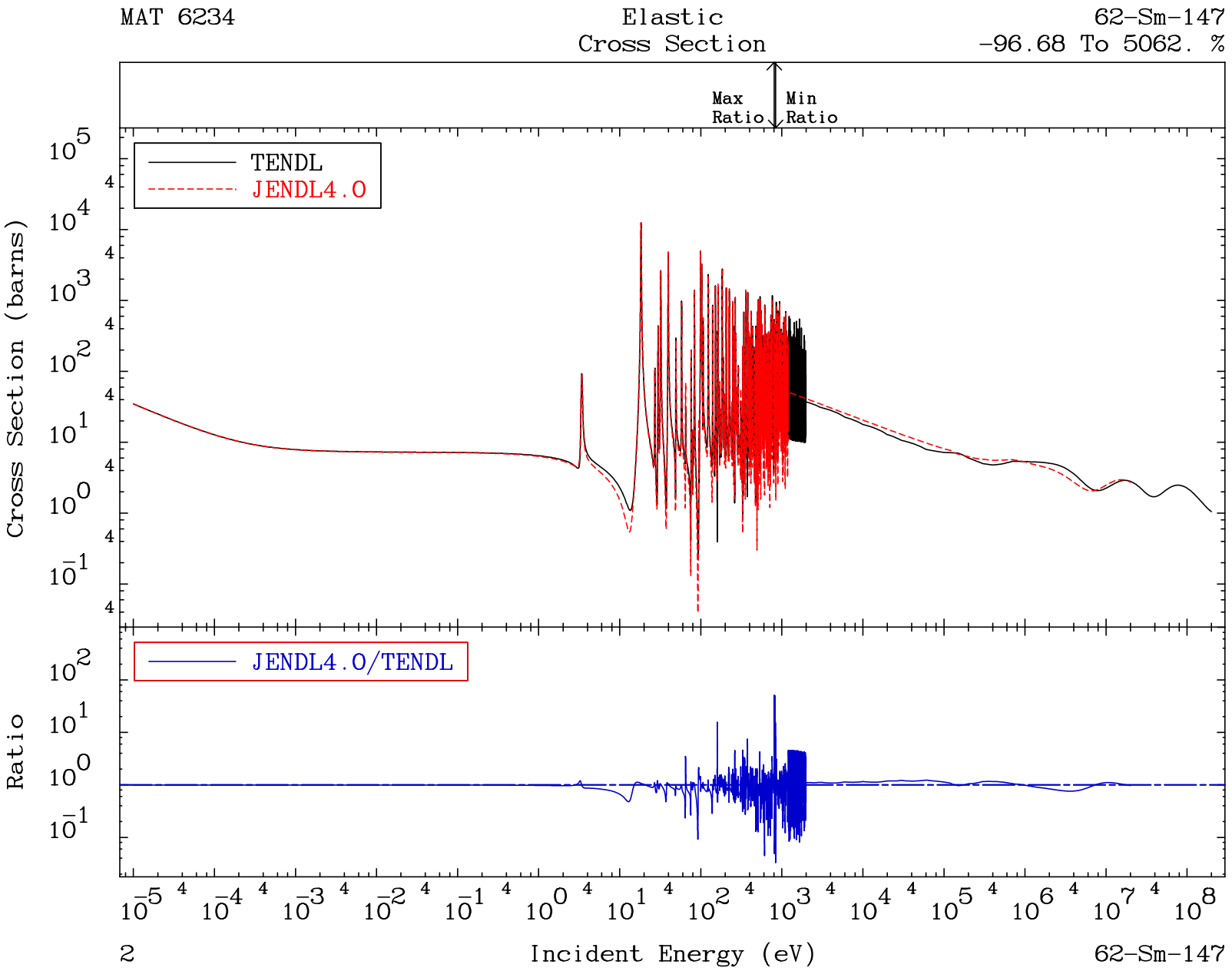
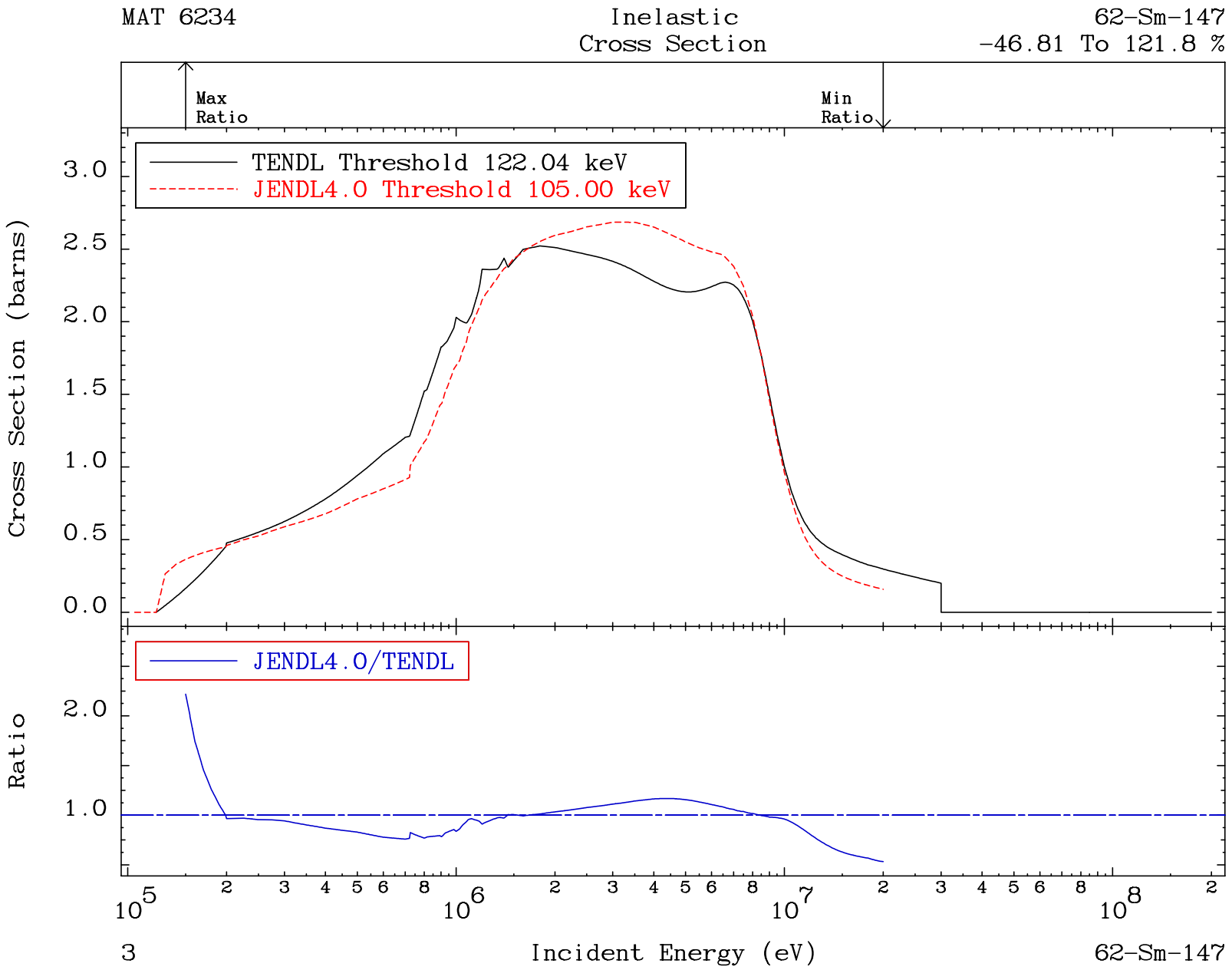
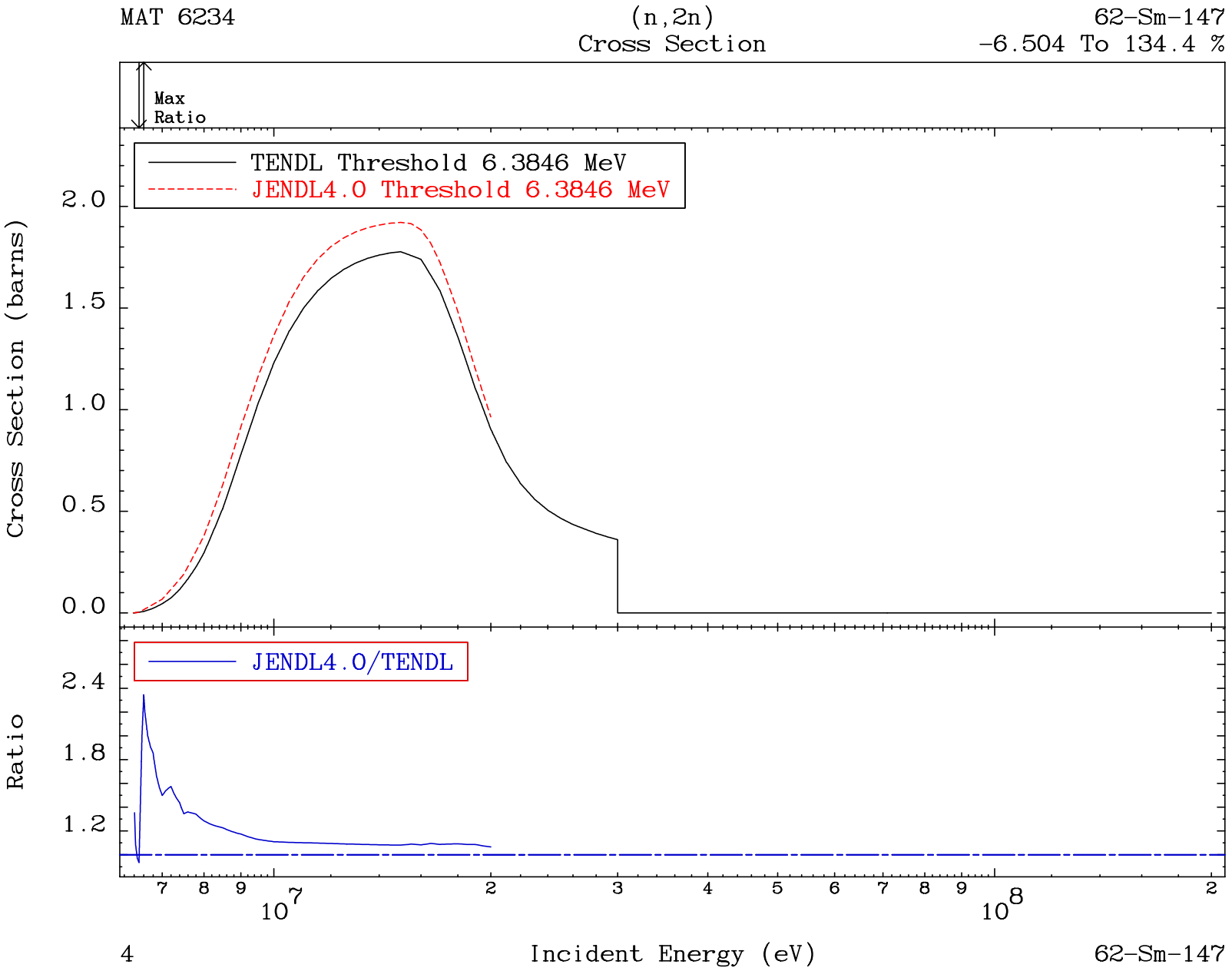
Program Complot
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

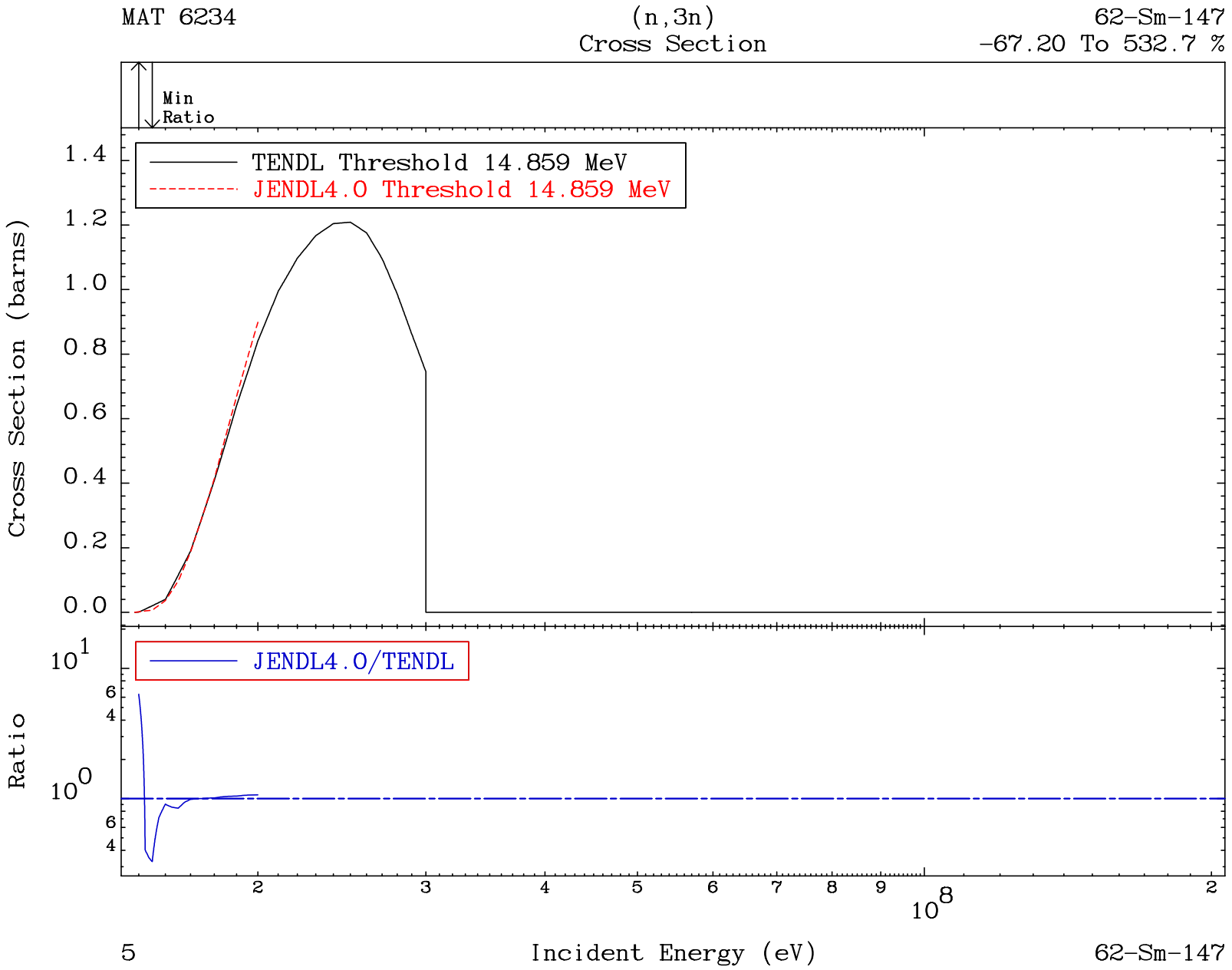
Press Mouse Button to Start

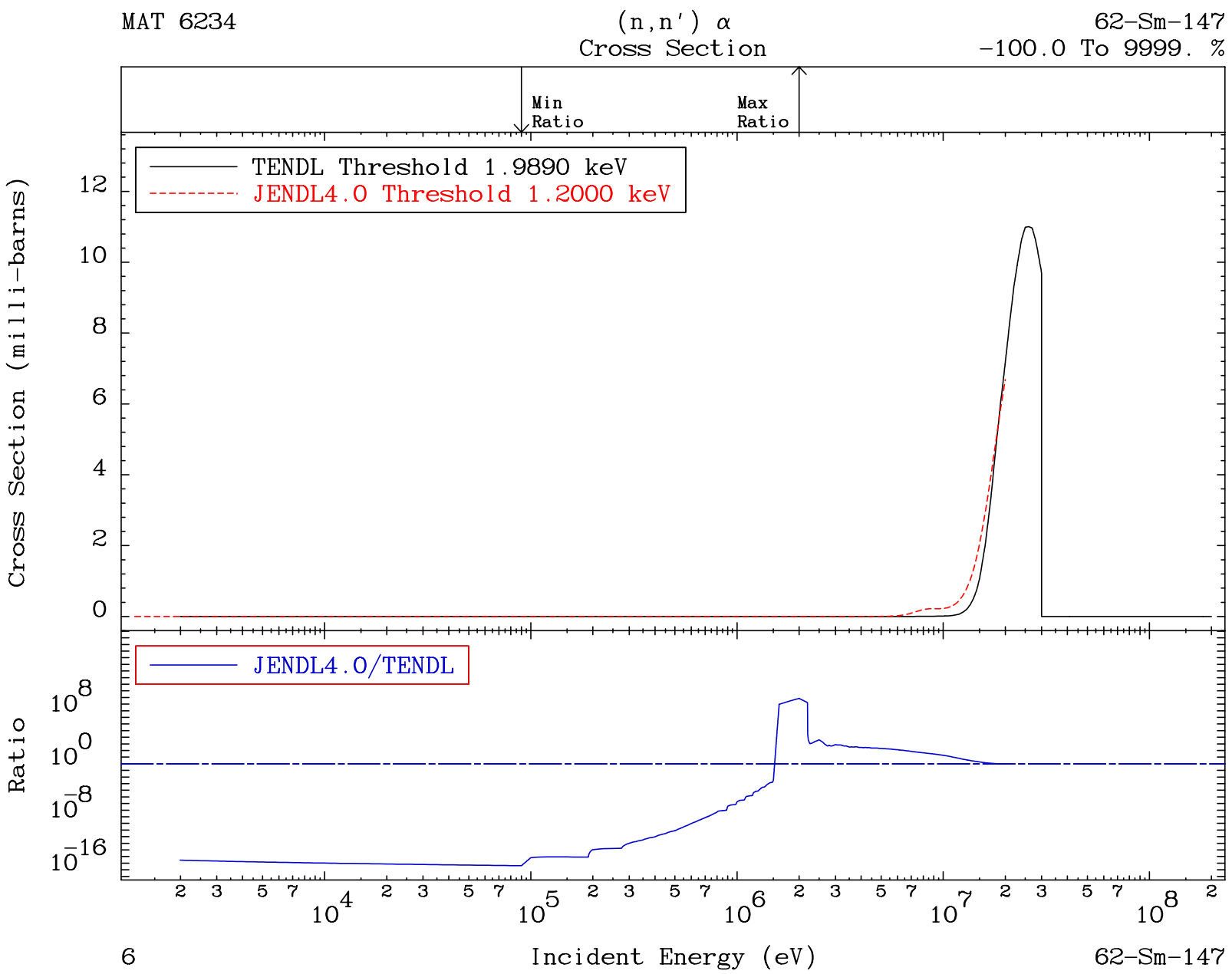

MAT 6234
Total
Cross Section
62-Sm-147
-97.42 To 4634. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
1
62-Sm-147

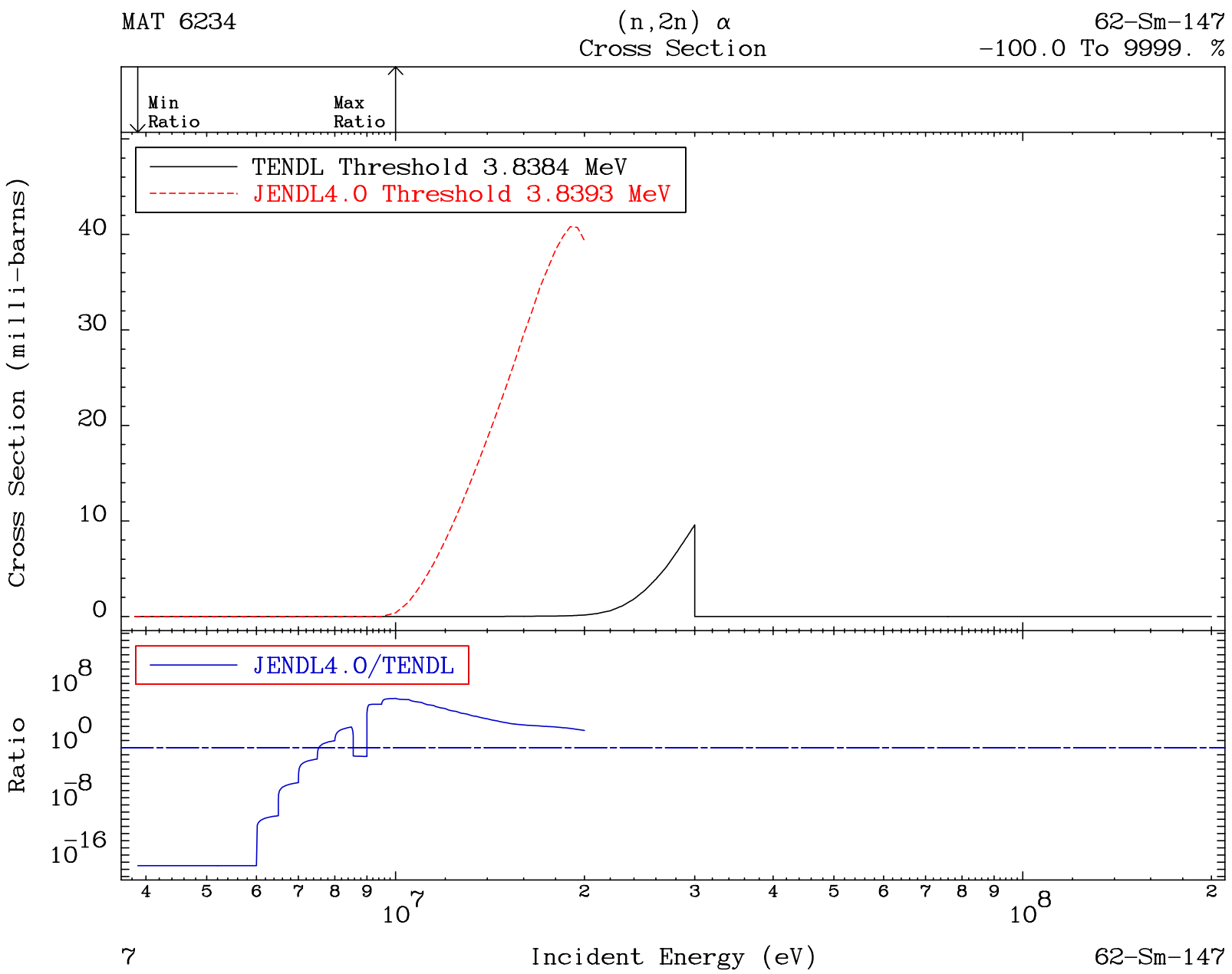

MAT 6234
Elastic
Cross Section
62-Sm-147
-96.68 To 5062. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
2
62-Sm-147

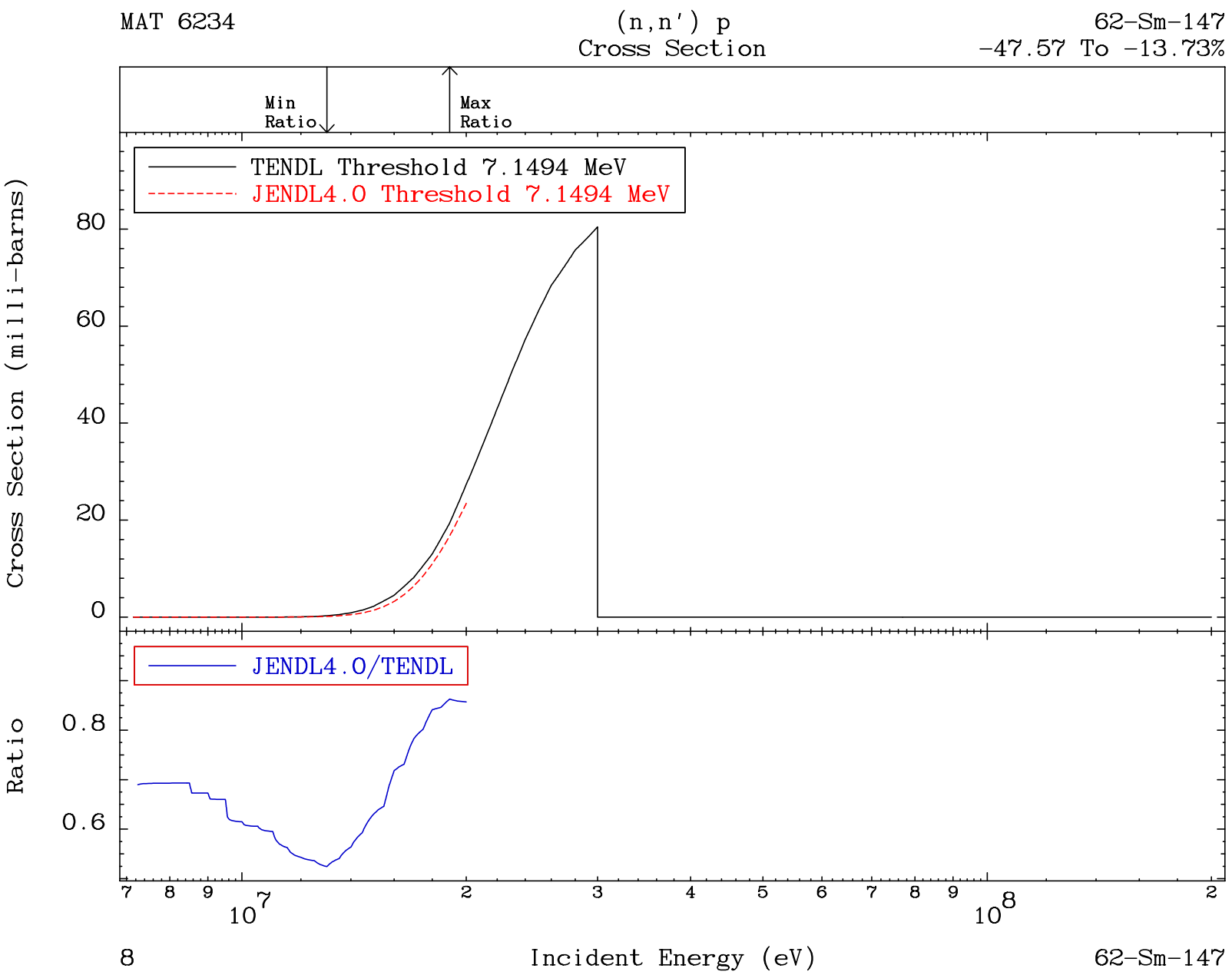

MAT 6234
Inelastic
Cross Section
62-Sm-147
-46.81 To 121.8 %
Max
Ratio
Min
Ratio
TENDL Threshold 122.04 keV
JENDL4.0 Threshold 105.00 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
2.0
1.0
10^5
10^6
10^7
10^8
Incident Energy (eV)
3
62-Sm-147

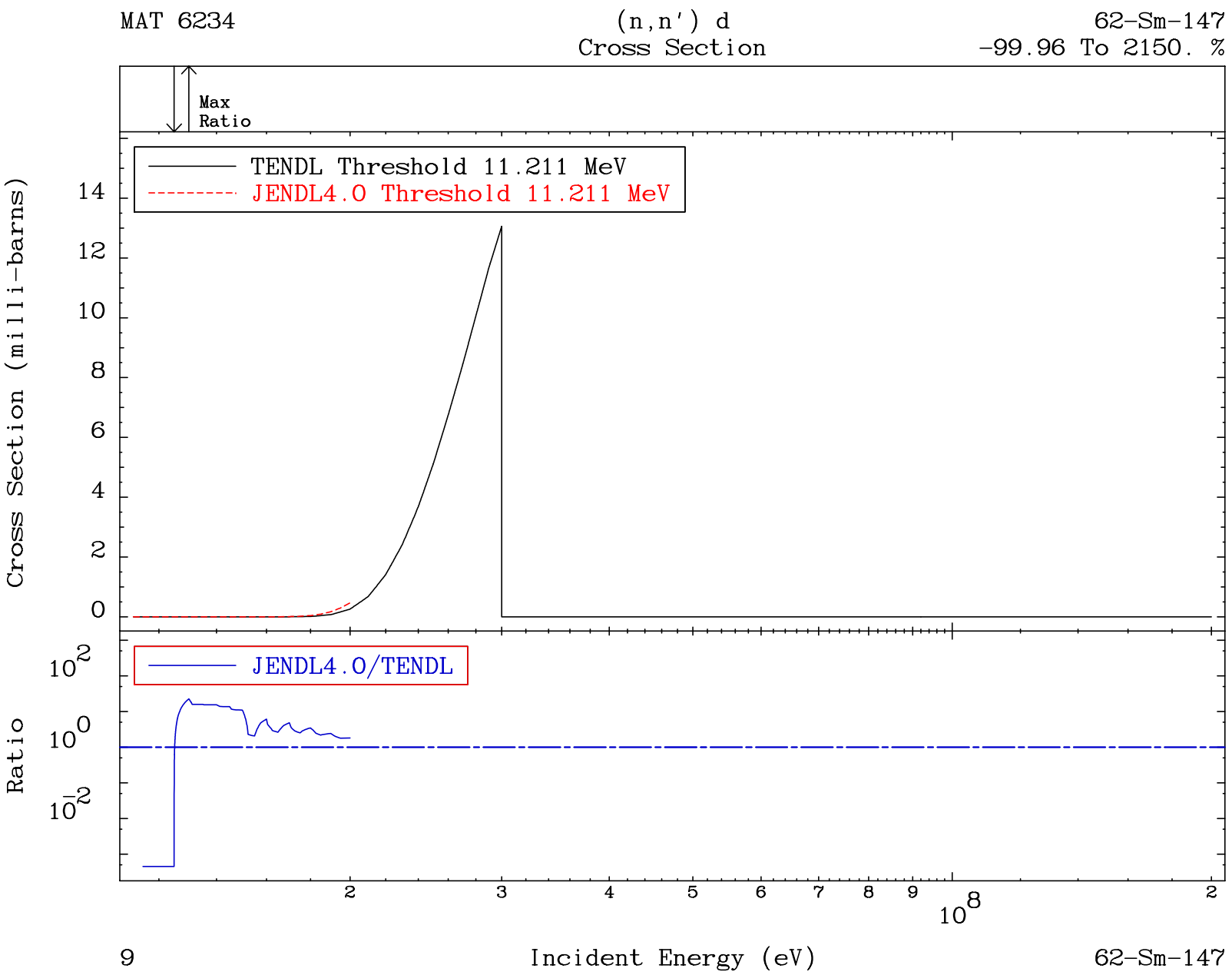

MAT 6234
(n,2n)
Cross Section
62-Sm-147
-6.504 To 134.4 %
Max
Ratio
TENDL Threshold 6.3846 MeV
JENDL4.0 Threshold 6.3846 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
2.4
1.8
1.2
7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
4
Incident Energy (eV)
62-Sm-147

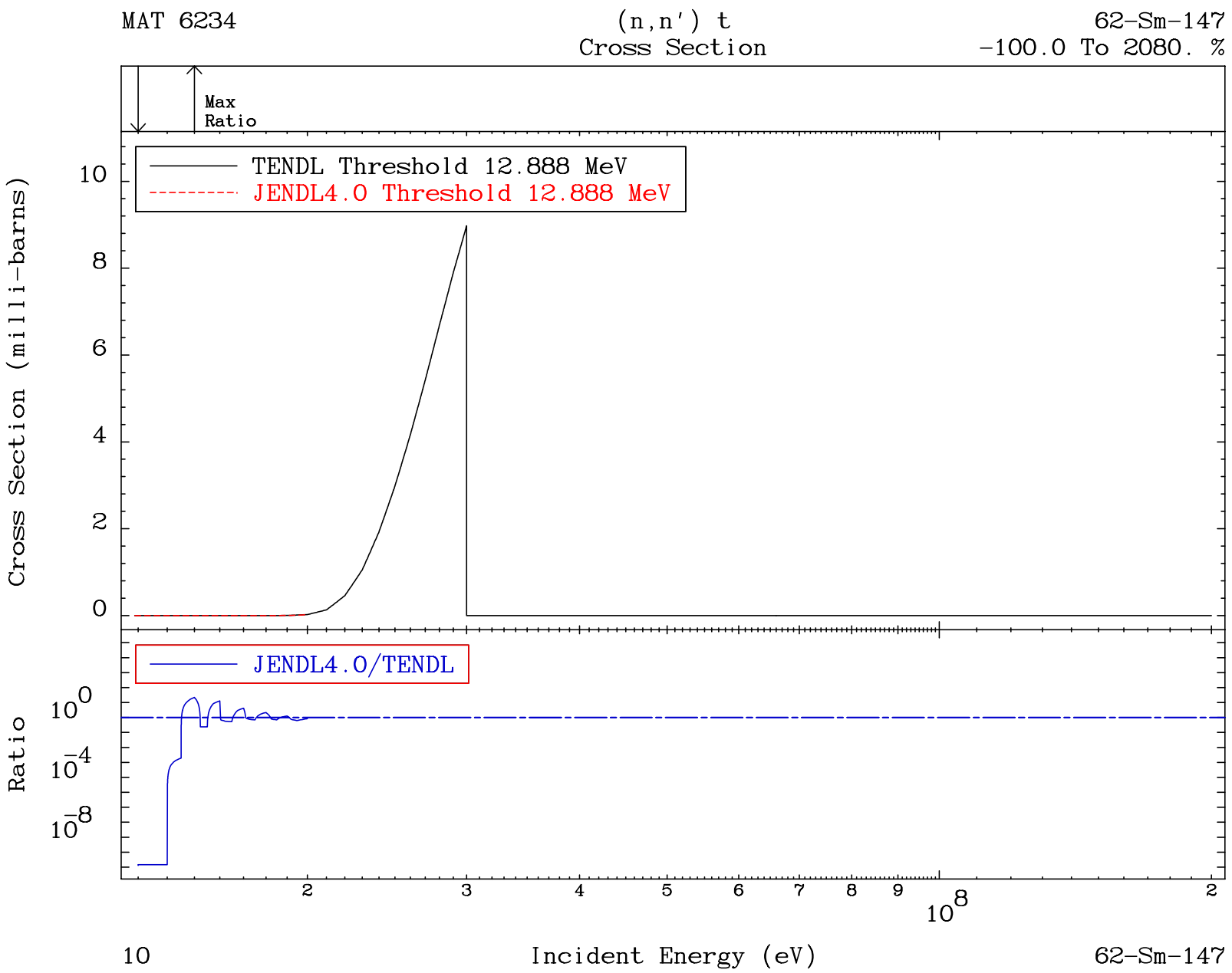

MAT 6234
(n,3n)
Cross Section
62-Sm-147
-67.20 To 532.7 %
Min
Ratio
TENDL Threshold 14.859 MeV
JENDL4.0 Threshold 14.859 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
62-Sm-147

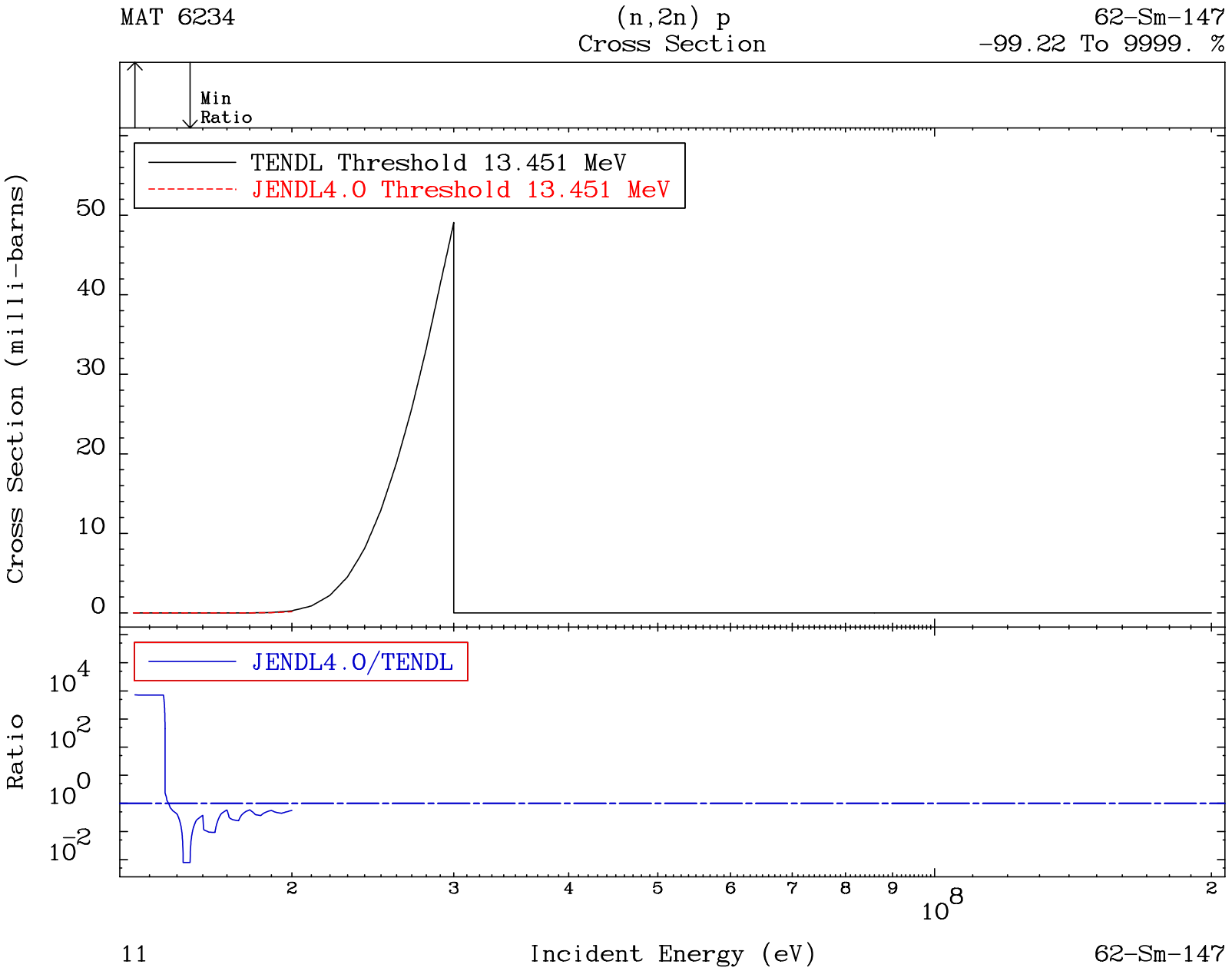

MAT 6234
(n,n') α
Cross Section
62-Sm-147
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.9890 keV
JENDL4.0 Threshold 1.2000 keV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
6
62-Sm-147

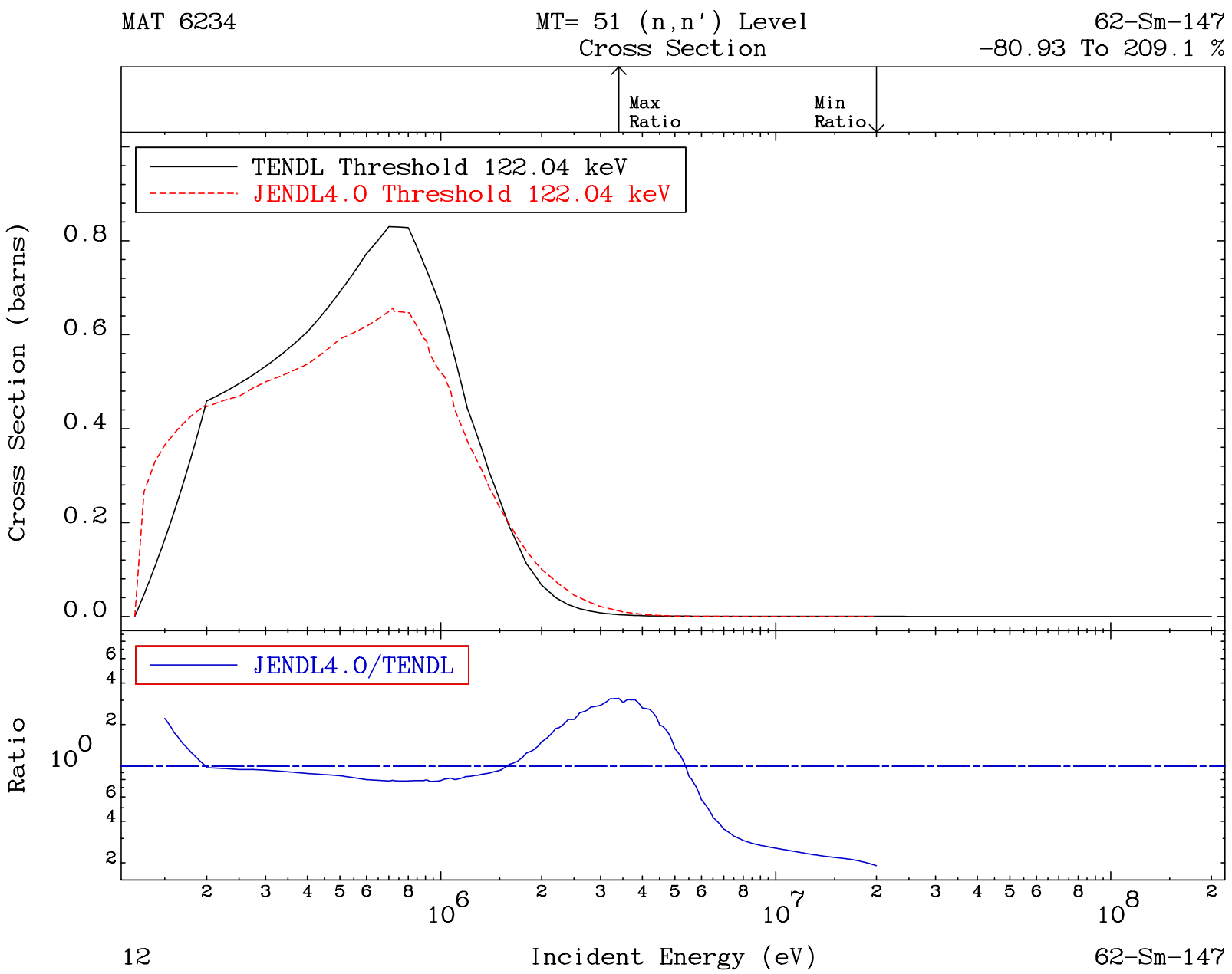

MAT 6234
(n,2n) α
Cross Section
62-Sm-147
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.8384 MeV
JENDL4.0 Threshold 3.8393 MeV
Cross Section (milli-barns)
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^8
10^0
10^-8
10^-16
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
62-Sm-147

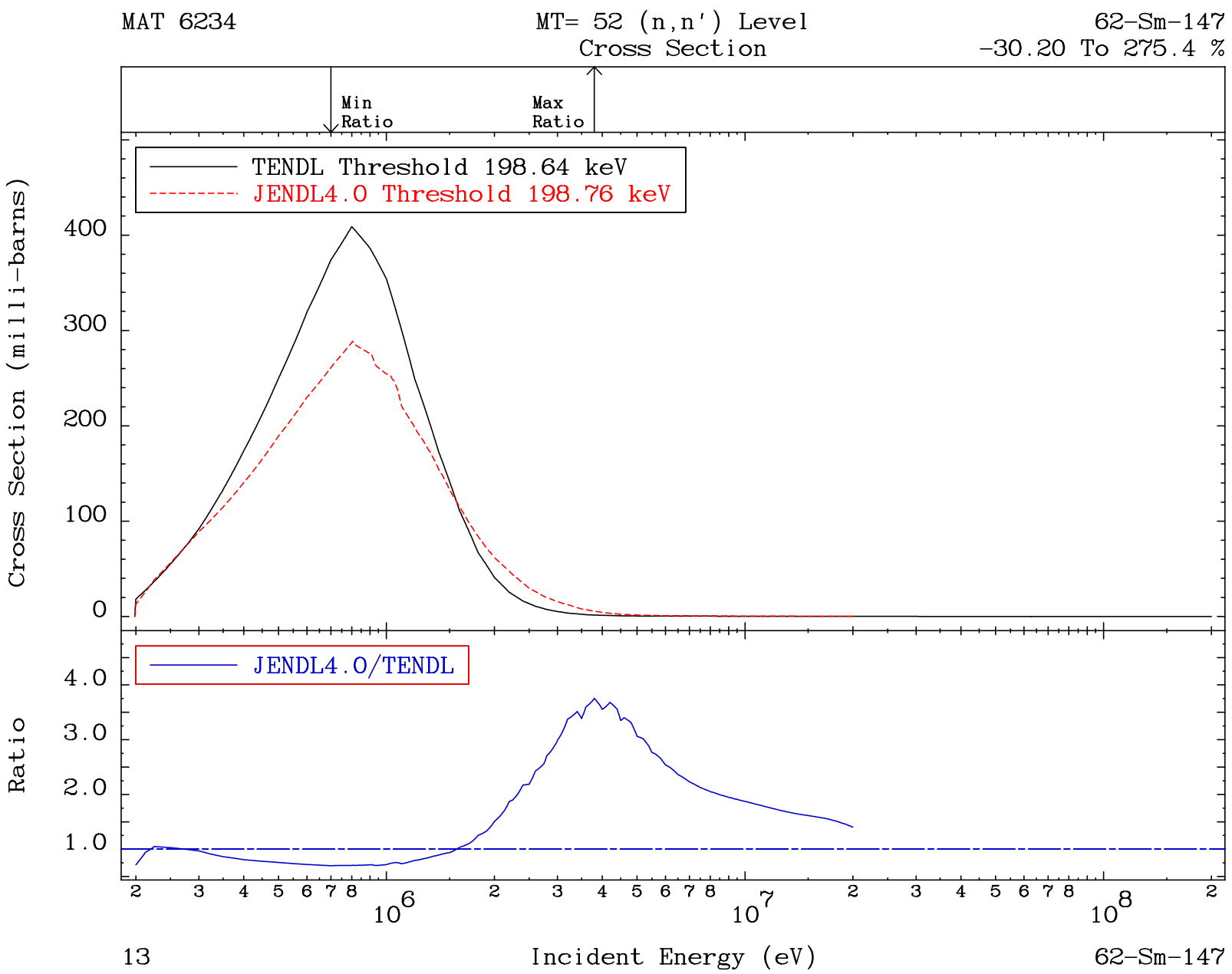

MAT 6234
(n,n') p
Cross Section
62-Sm-147
-47.57 To -13.73%
Min Ratio
Max Ratio
TENDL Threshold 7.1494 MeV
JENDL4.0 Threshold 7.1494 MeV
Cross Section (milli-barns)
0
20
40
60
80
JENDL4.0/TENDL
Ratio
0.6
0.8
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
8
62-Sm-147

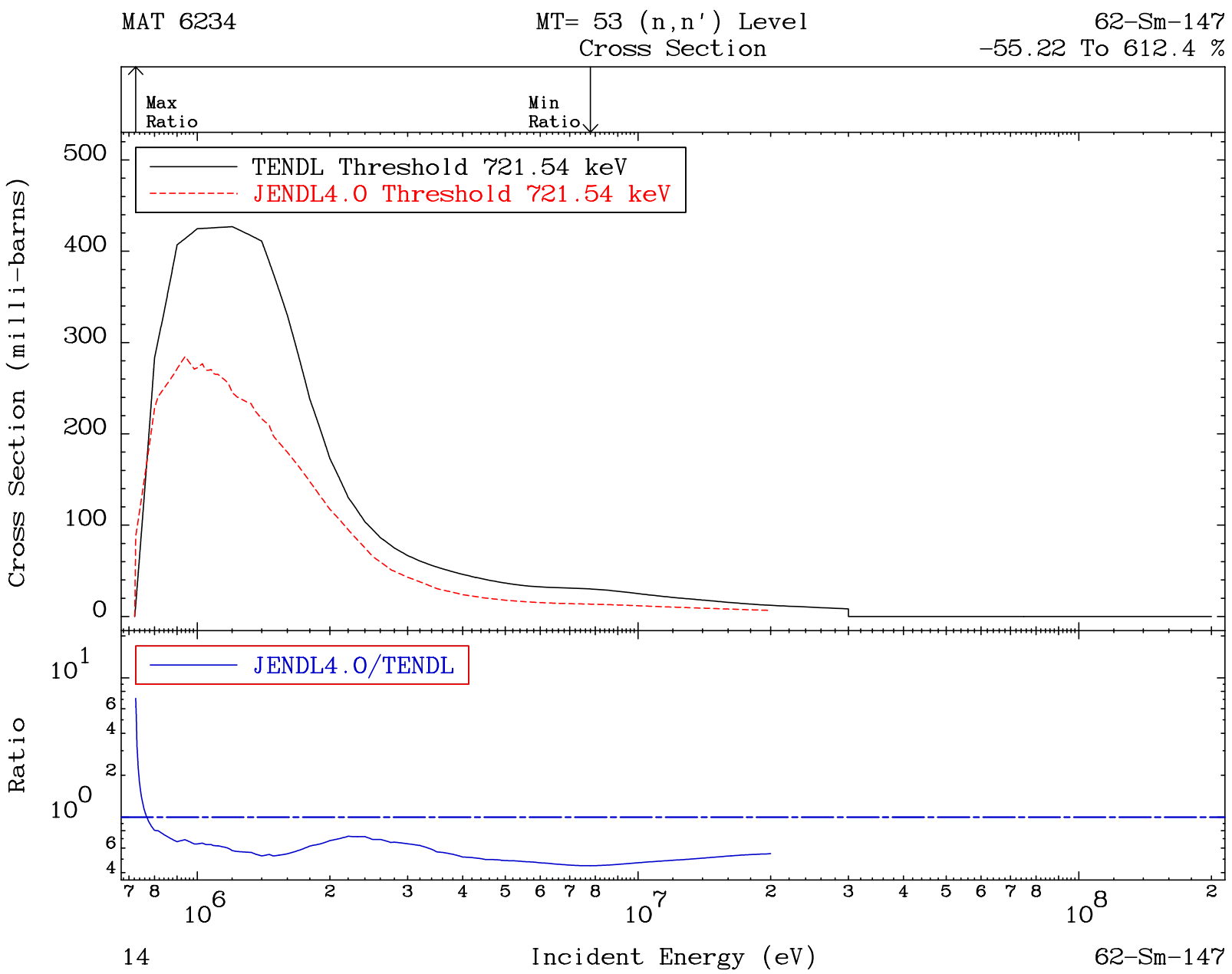

MAT 6234
(n,n') d
Cross Section
62-Sm-147
-99.96 To 2150. %
Max
Ratio
TENDL Threshold 11.211 MeV
JENDL4.0 Threshold 11.211 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
JENDL4.0/TENDL
Ratio
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
62-Sm-147

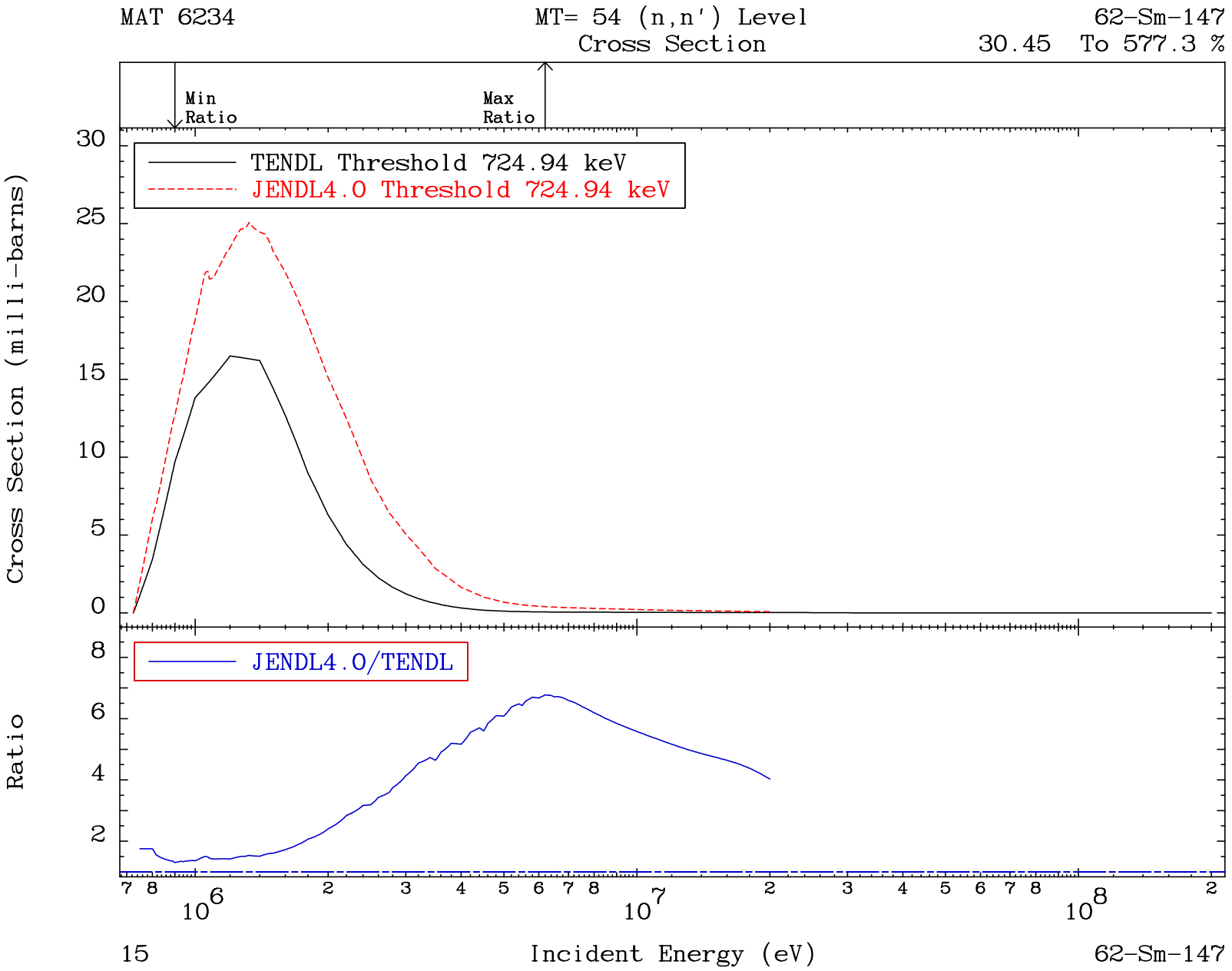

MAT 6234
(n,n') t
Cross Section
62-Sm-147
-100.0 To 2080. %
Max
Ratio
TENDL Threshold 12.888 MeV
JENDL4.0 Threshold 12.888 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
JENDL4.0/TENDL
Ratio
10^0
10^-4
10^-8
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
62-Sm-147

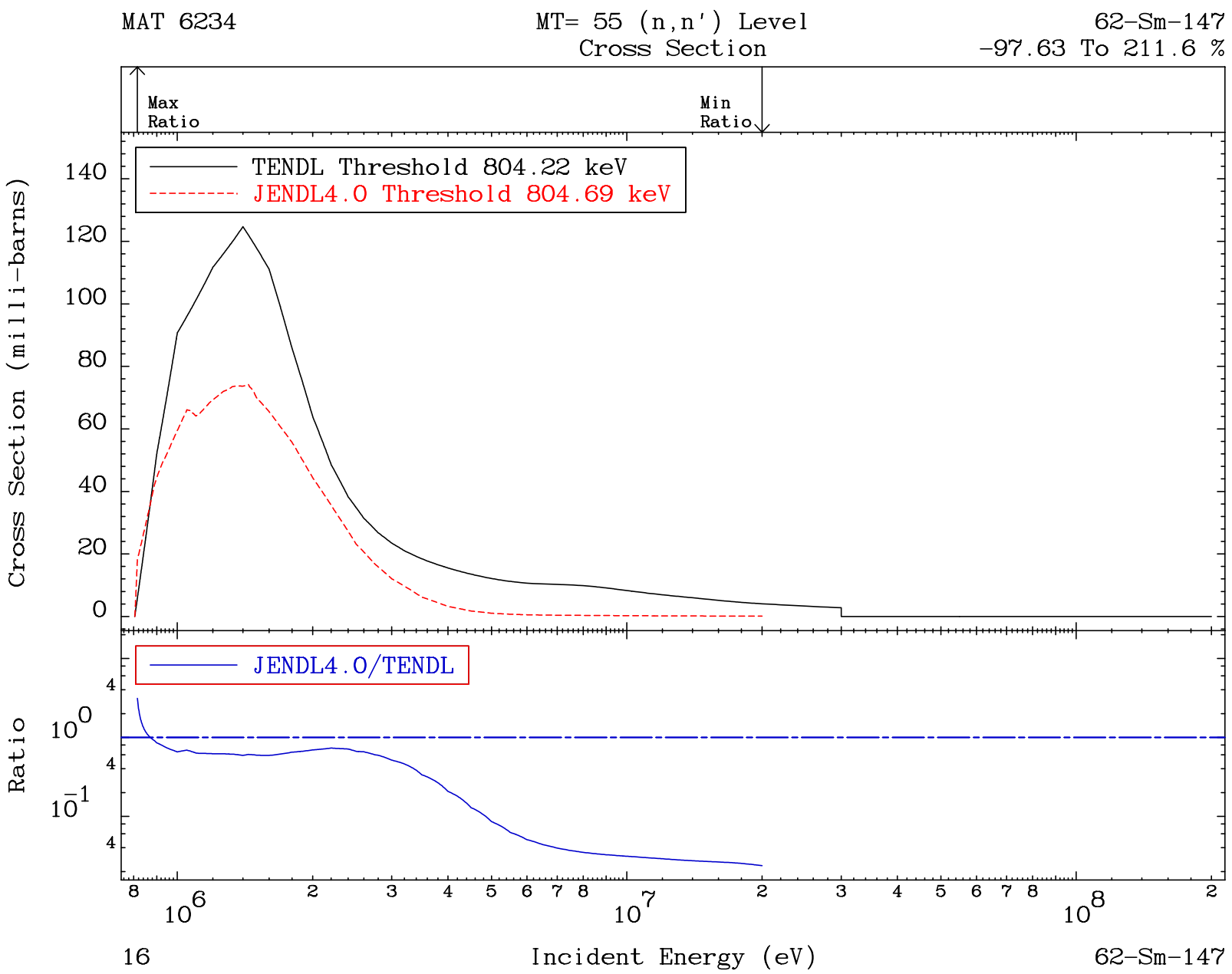

MAT 6234
(n,2n) p
Cross Section
62-Sm-147
-99.22 To 9999. %
Min
Ratio
TENDL Threshold 13.451 MeV
JENDL4.0 Threshold 13.451 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^4
10^2
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
62-Sm-147

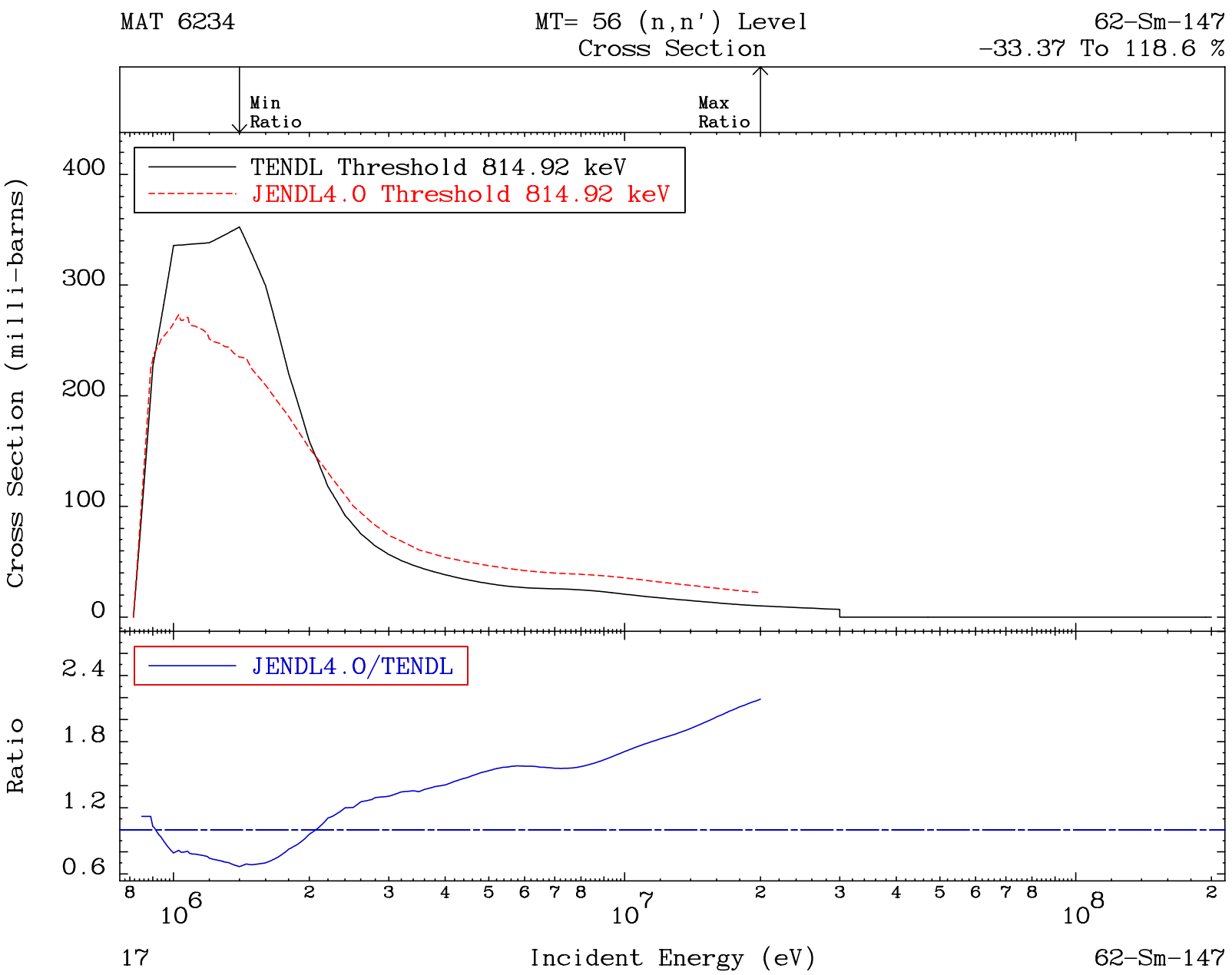

MAT 6234
MT= 51 (n,n') Level
Cross Section
62-Sm-147
-80.93 To 209.1 %
Max
Ratio
Min
Ratio
TENDL Threshold 122.04 keV
JENDL4.0 Threshold 122.04 keV
Cross Section (barns)
0.0
0.2
0.4
0.6
0.8
JENDL4.0/TENDL
Ratio
10^0
10^6
10^7
10^8
12
Incident Energy (eV)
62-Sm-147

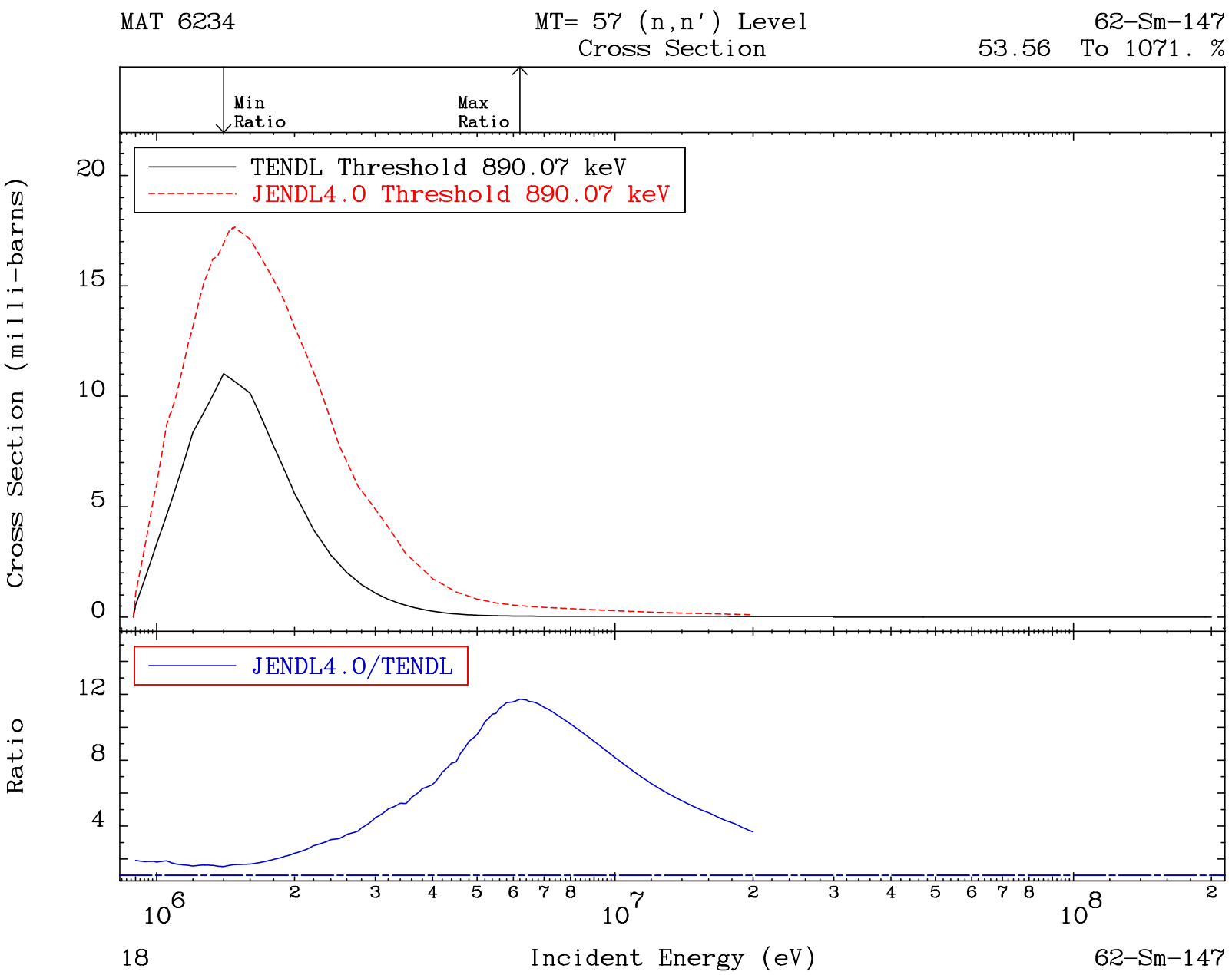

MAT 6234
MT= 52 (n,n') Level
Cross Section
62-Sm-147
-30.20 To 275.4 %
Min
Ratio
Max
Ratio
TENDL Threshold 198.64 keV
JENDL4.0 Threshold 198.76 keV
Cross Section (milli-barns)
400
300
200
100
0
JENDL4.0/TENDL
Ratio
4.0
3.0
2.0
1.0
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
62-Sm-147

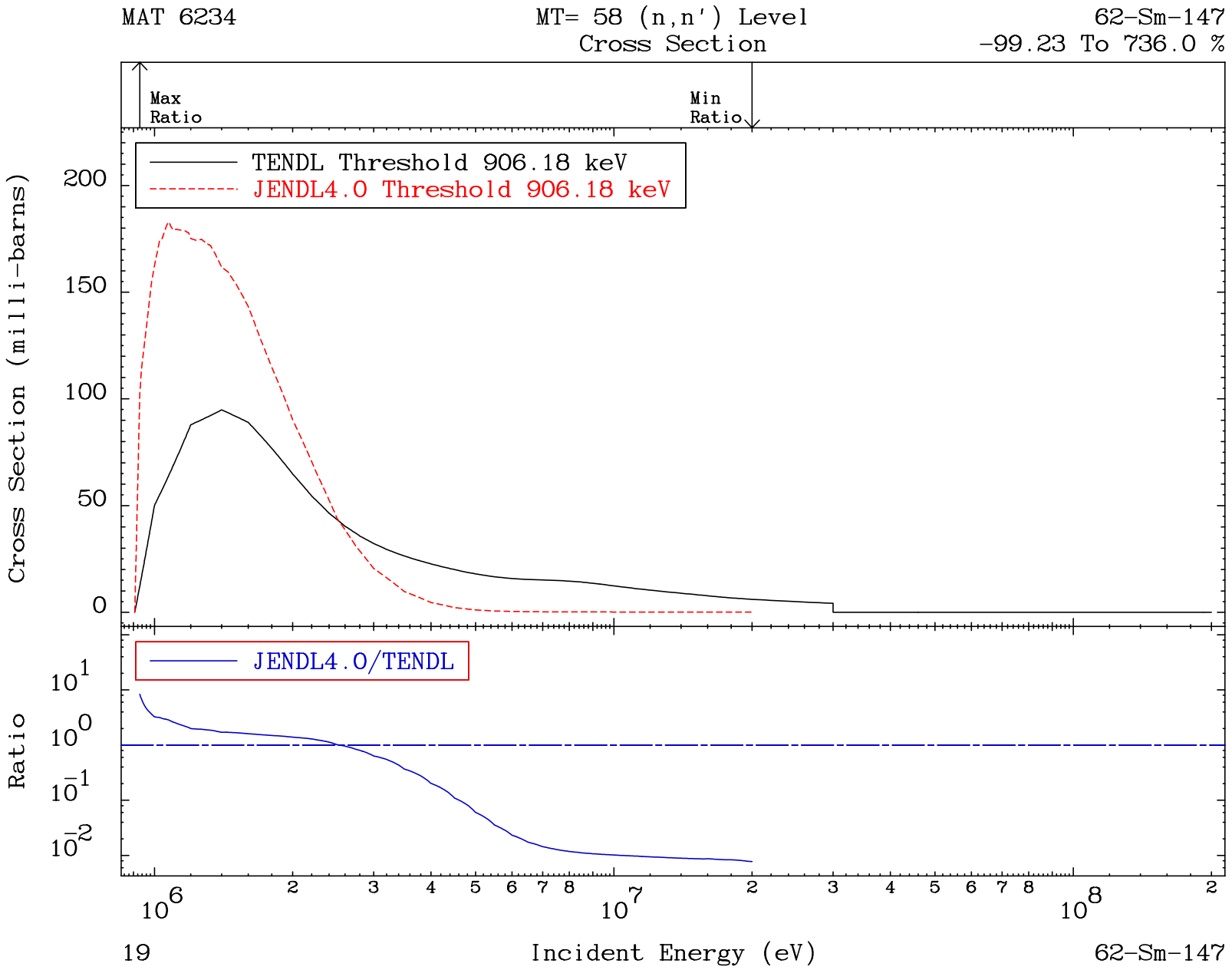

MAT 6234
MT= 53 (n,n') Level Cross Section
62-Sm-147
-55.22 To 612.4 %
Max Ratio
Min Ratio
TENDL Threshold 721.54 keV
JENDL4.0 Threshold 721.54 keV
Cross Section (milli-barns)
500
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^1
10^0
6
4
2
6
4
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
14
Incident Energy (eV)
62-Sm-147

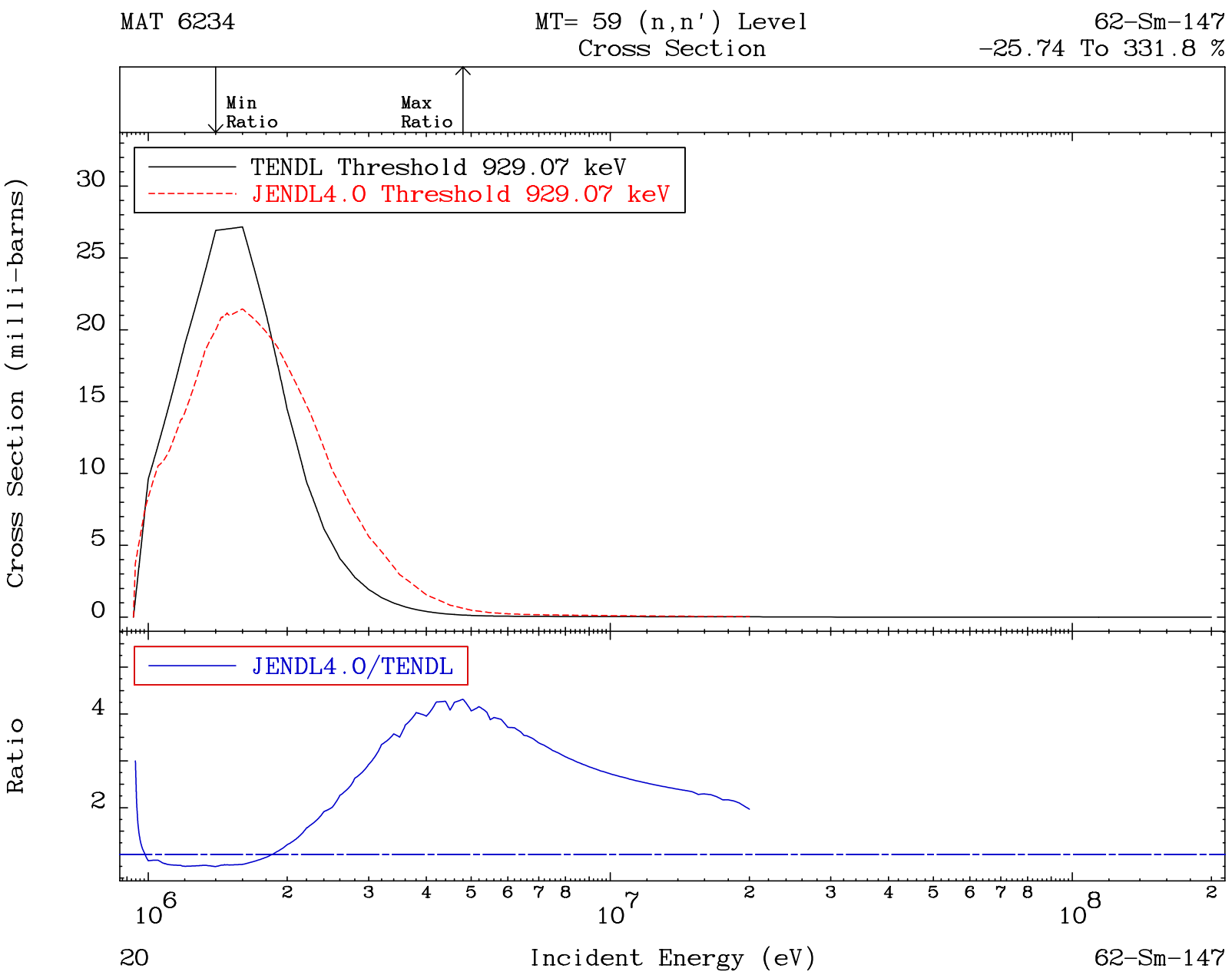

MAT 6234
MT= 54 (n,n') Level
Cross Section
62-Sm-147
30.45 To 577.3 %
Min Ratio
Max Ratio
TENDL Threshold 724.94 keV
JENDL4.0 Threshold 724.94 keV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
15
62-Sm-147

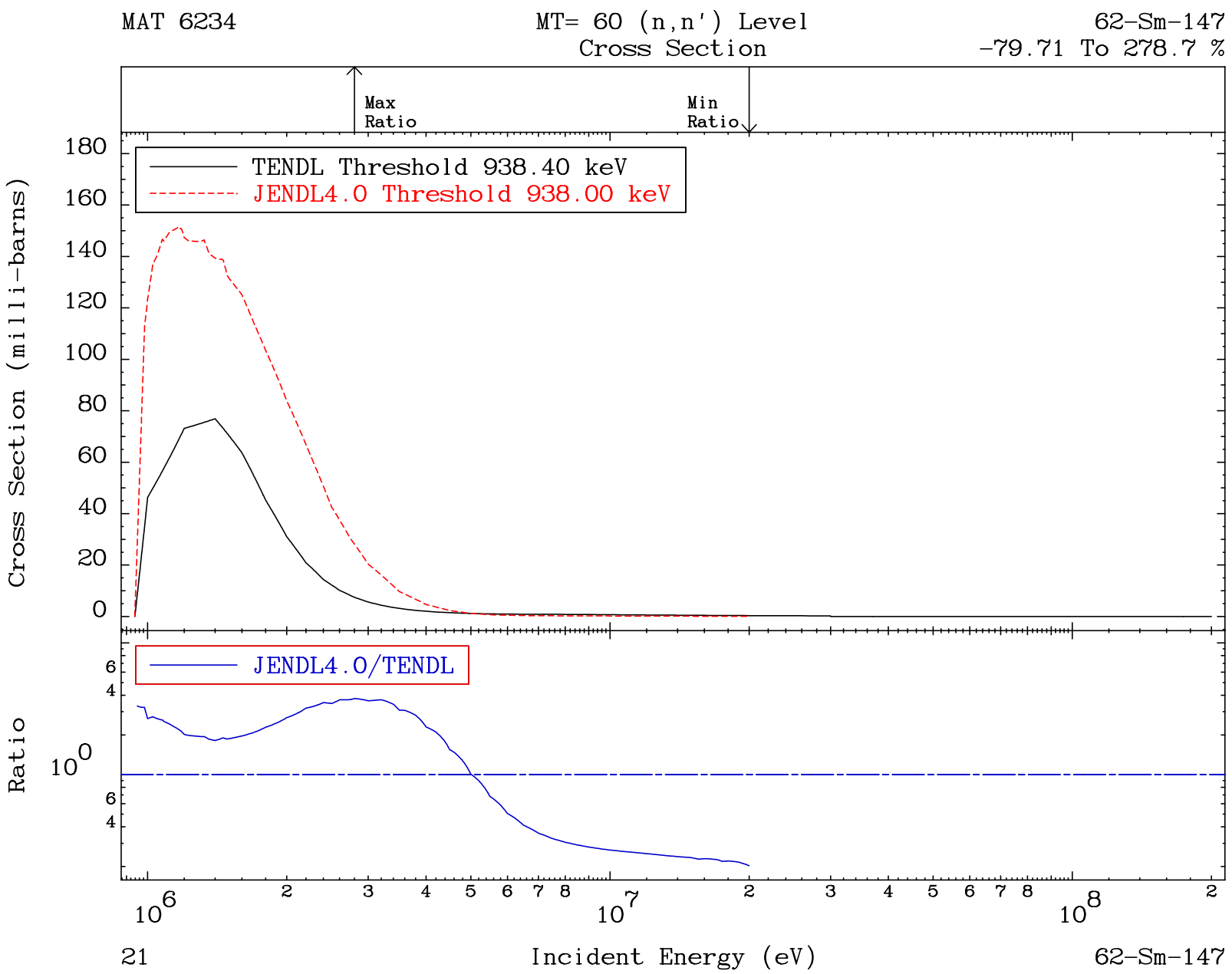

MAT 6234
MT= 55 (n,n') Level Cross Section
62-Sm-147
-97.63 To 211.6 %
Max Ratio
Min Ratio
TENDL Threshold 804.22 keV
JENDL4.0 Threshold 804.69 keV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
16
62-Sm-147

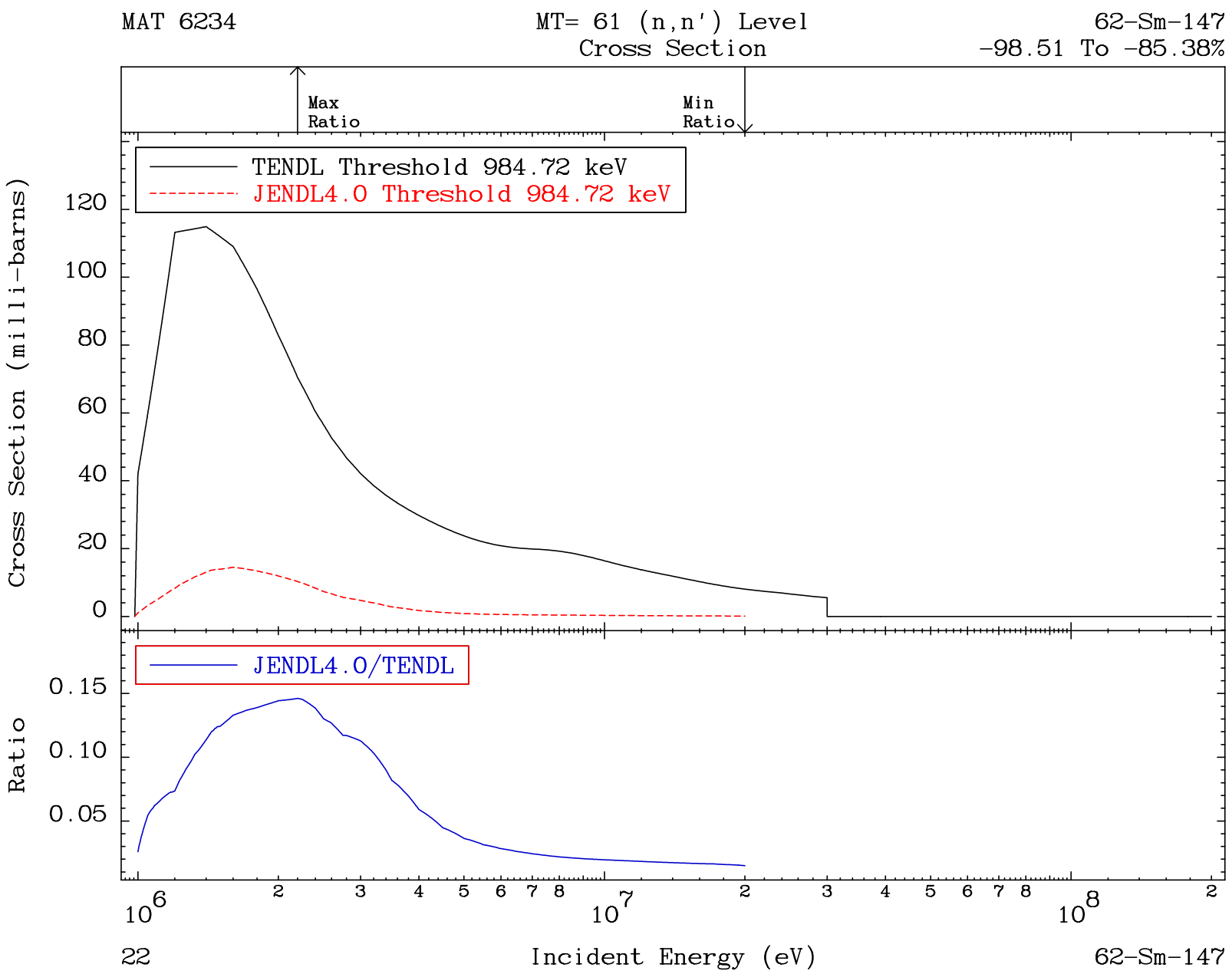

MAT 6234
MT= 56 (n,n') Level
Cross Section
62-Sm-147
-33.37 To 118.6 %
Min
Ratio
Max
Ratio
TENDL Threshold 814.92 keV
JENDL4.0 Threshold 814.92 keV
Cross Section (milli-barns)
400
300
200
100
0
JENDL4.0/TENDL
Ratio
2.4
1.8
1.2
0.6
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
17
Incident Energy (eV)
62-Sm-147

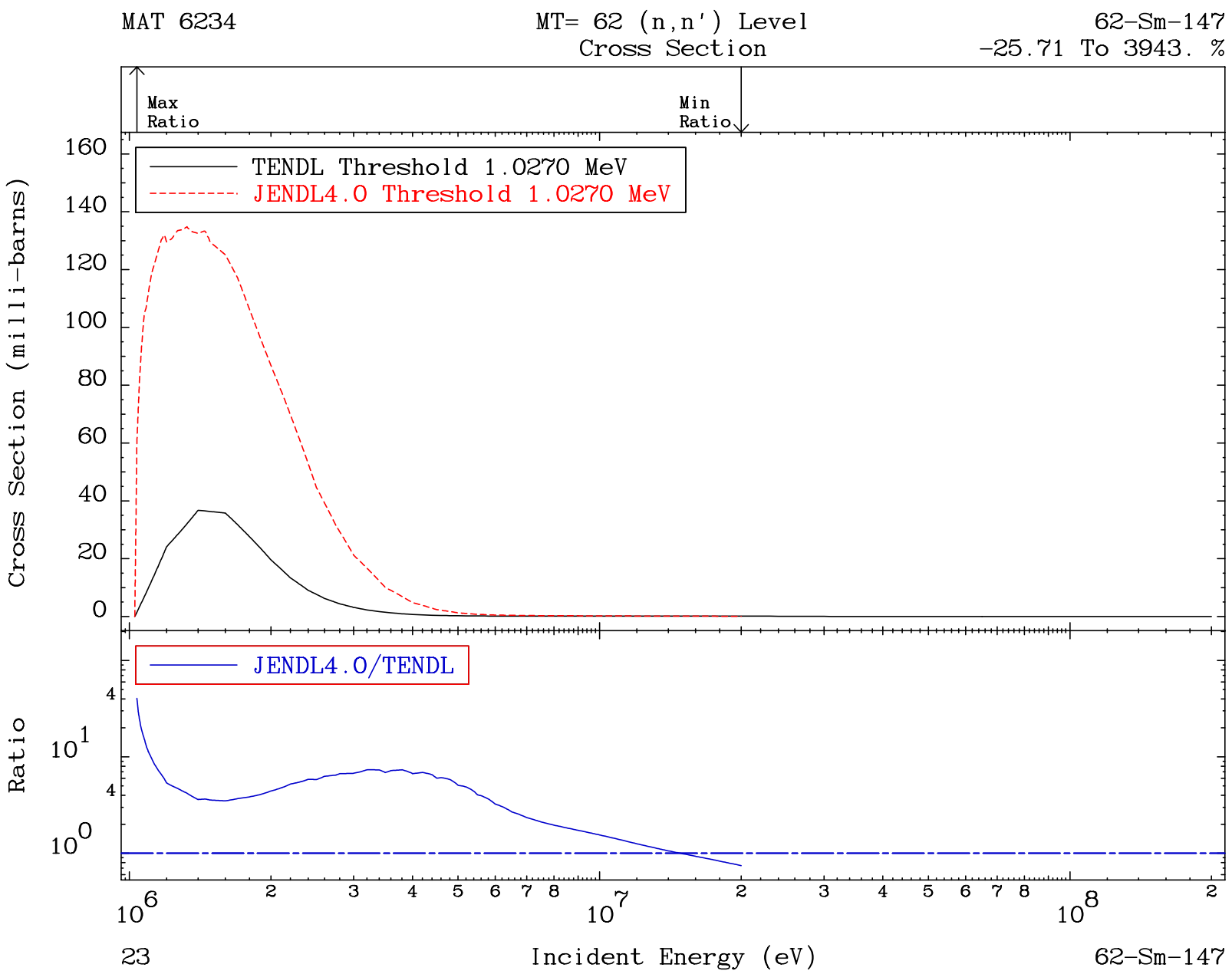

MAT 6234
MT= 57 (n,n') Level
Cross Section
62-Sm-147
53.56 To 1071. %
Min Ratio
Max Ratio
TENDL Threshold 890.07 keV
JENDL4.0 Threshold 890.07 keV
Cross Section (milli-barns)
20
15
10
5
0
JENDL4.0/TENDL
Ratio
12
8
4
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
18
Incident Energy (eV)
62-Sm-147

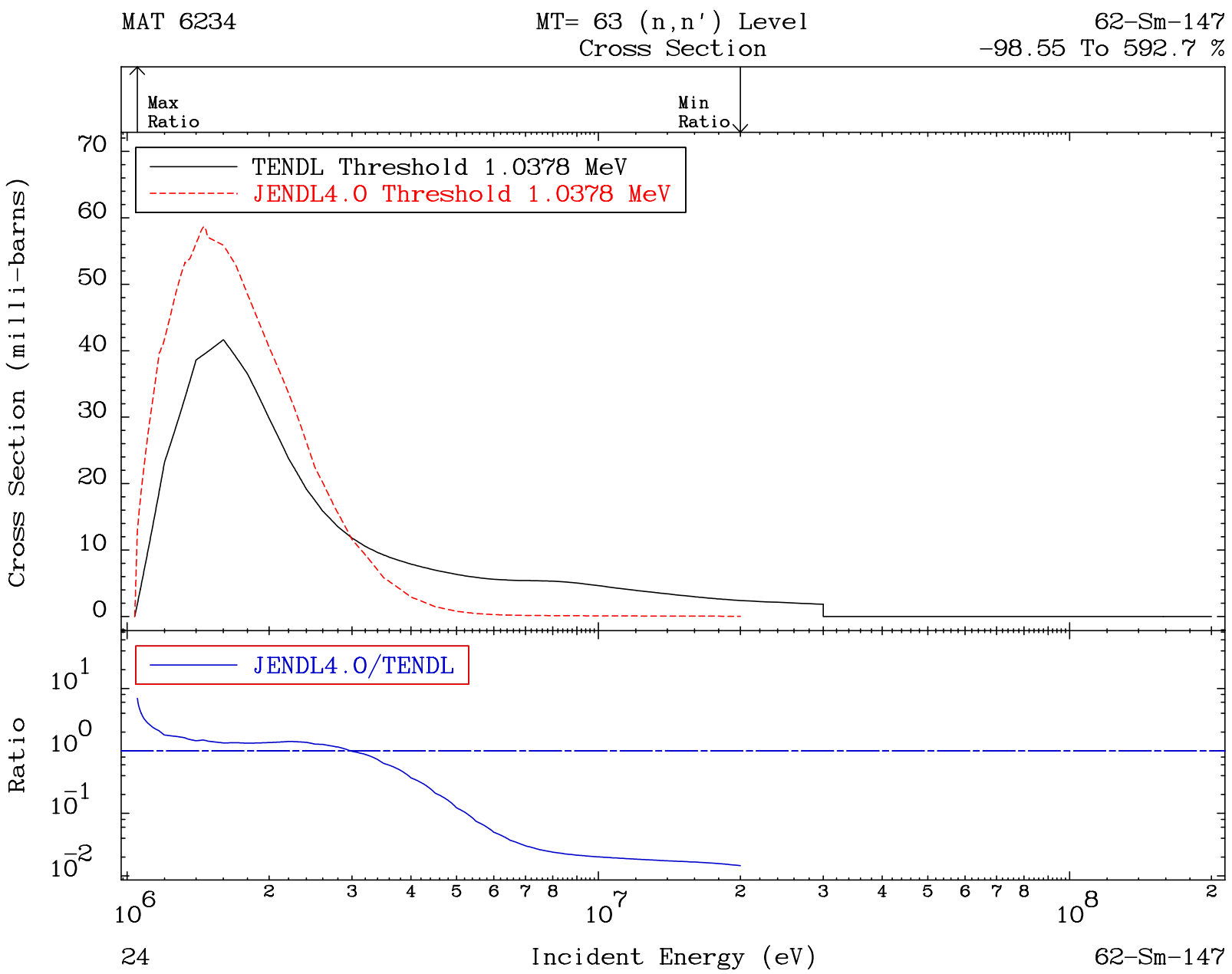

MAT 6234
MT= 58 (n,n') Level
Cross Section
62-Sm-147
-99.23 To 736.0 %
Max
Ratio
Min
Ratio
TENDL Threshold 906.18 keV
JENDL4.0 Threshold 906.18 keV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
10^-2
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
19
Incident Energy (eV)
62-Sm-147

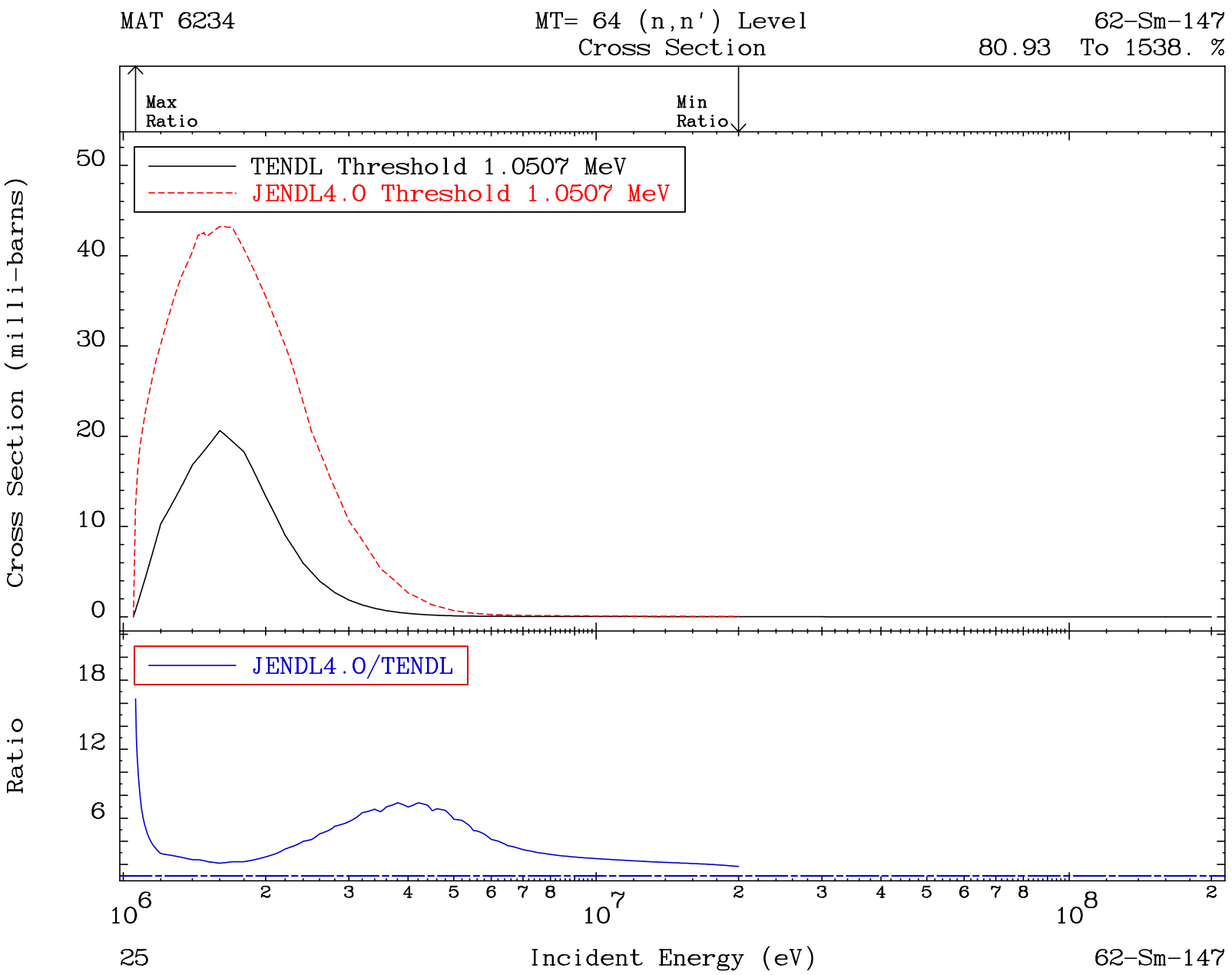

MAT 6234
MT= 59 (n,n') Level
Cross Section
62-Sm-147
-25.74 To 331.8 %
Min
Ratio
Max
Ratio
TENDL Threshold 929.07 keV
JENDL4.0 Threshold 929.07 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JENDL4.0/TENDL
Ratio
4
2
10^6
10^7
10^8
20
Incident Energy (eV)
62-Sm-147

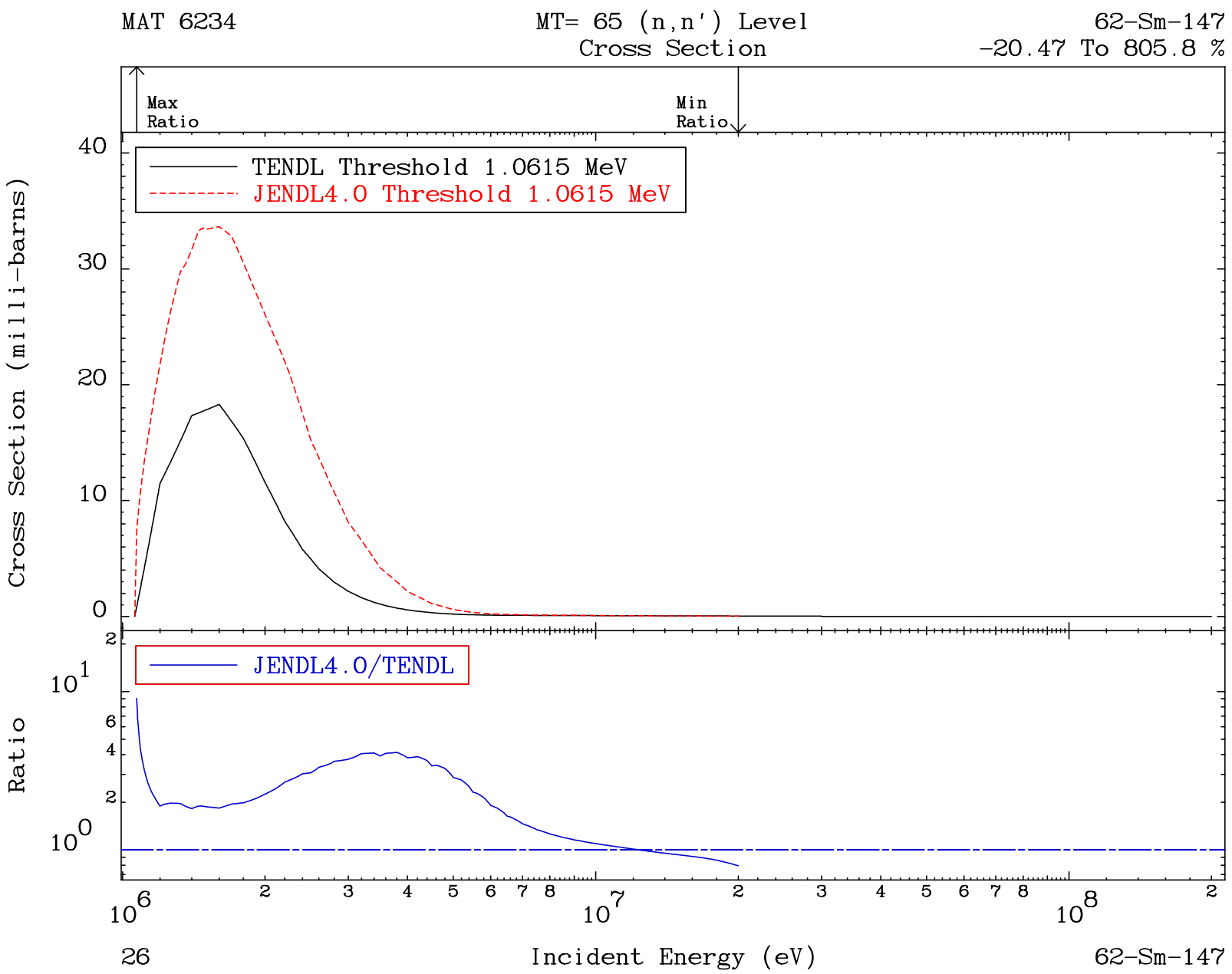

MAT 6234
MT= 60 (n,n') Level
Cross Section
62-Sm-147
-79.71 To 278.7 %
Max
Ratio
Min
Ratio
TENDL Threshold 938.40 keV
JENDL4.0 Threshold 938.00 keV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
6
4
10^0
6
4
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
21
Incident Energy (eV)
62-Sm-147

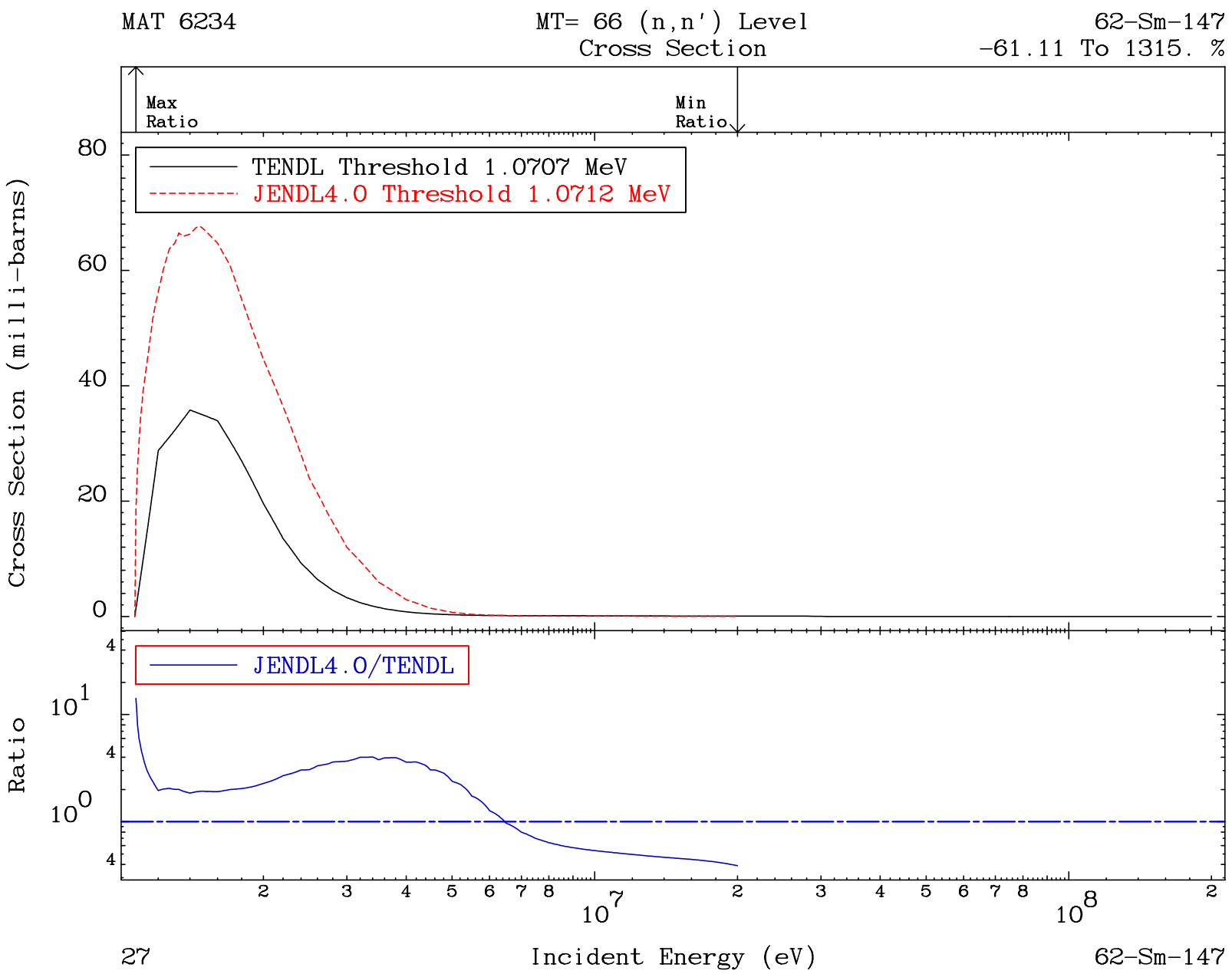

MAT 6234
MT= 61 (n,n') Level
Cross Section
62-Sm-147
-98.51 To -85.38%
Max
Ratio
Min
Ratio
TENDL Threshold 984.72 keV
JENDL4.0 Threshold 984.72 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
0.15
0.10
0.05
10^6
10^7
10^8
Incident Energy (eV)
22
62-Sm-147

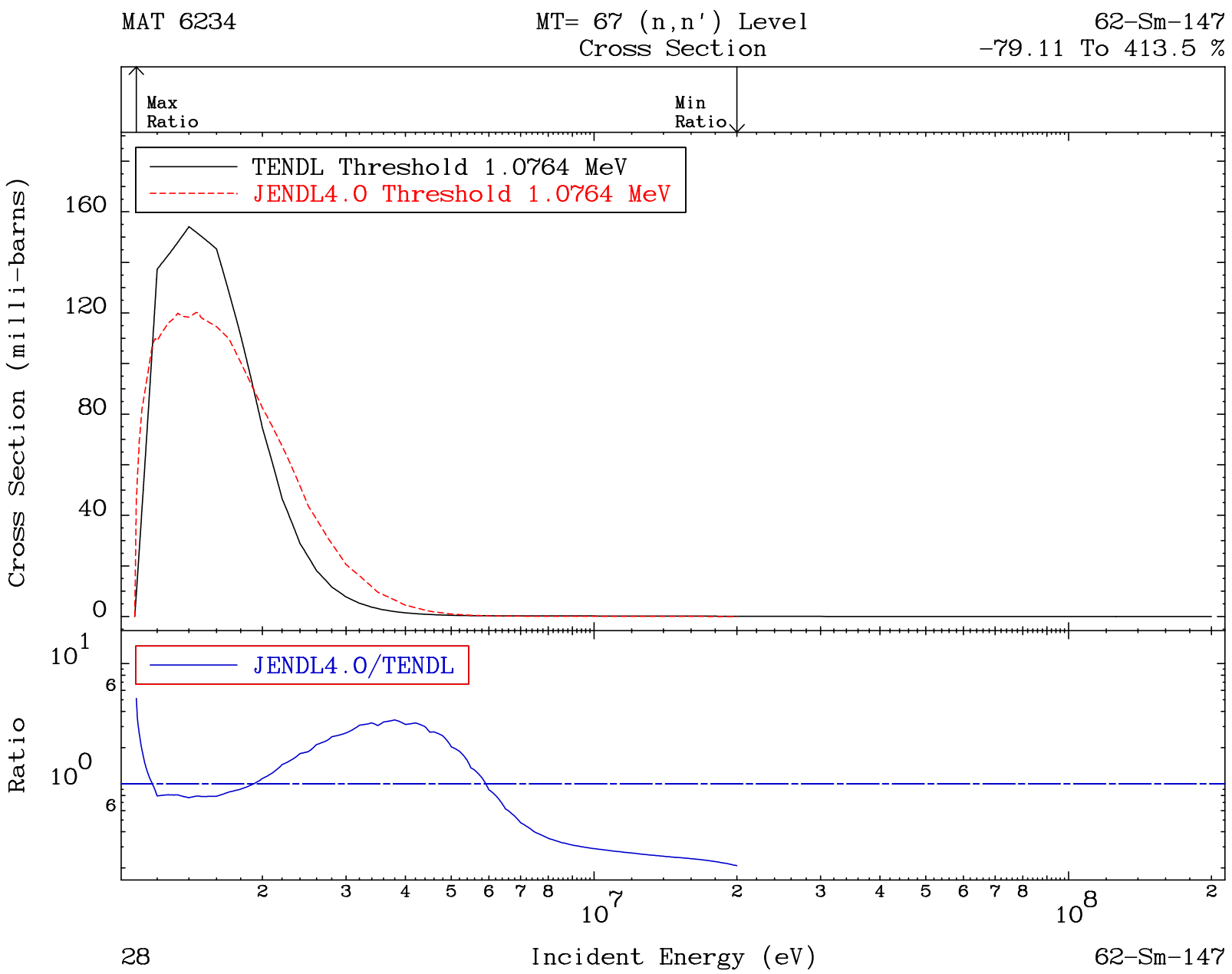

MAT 6234
MT= 62 (n,n') Level
Cross Section
62-Sm-147
-25.71 To 3943. %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0270 MeV
JENDL4.0 Threshold 1.0270 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
4
10^1
4
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
23
Incident Energy (eV)
62-Sm-147

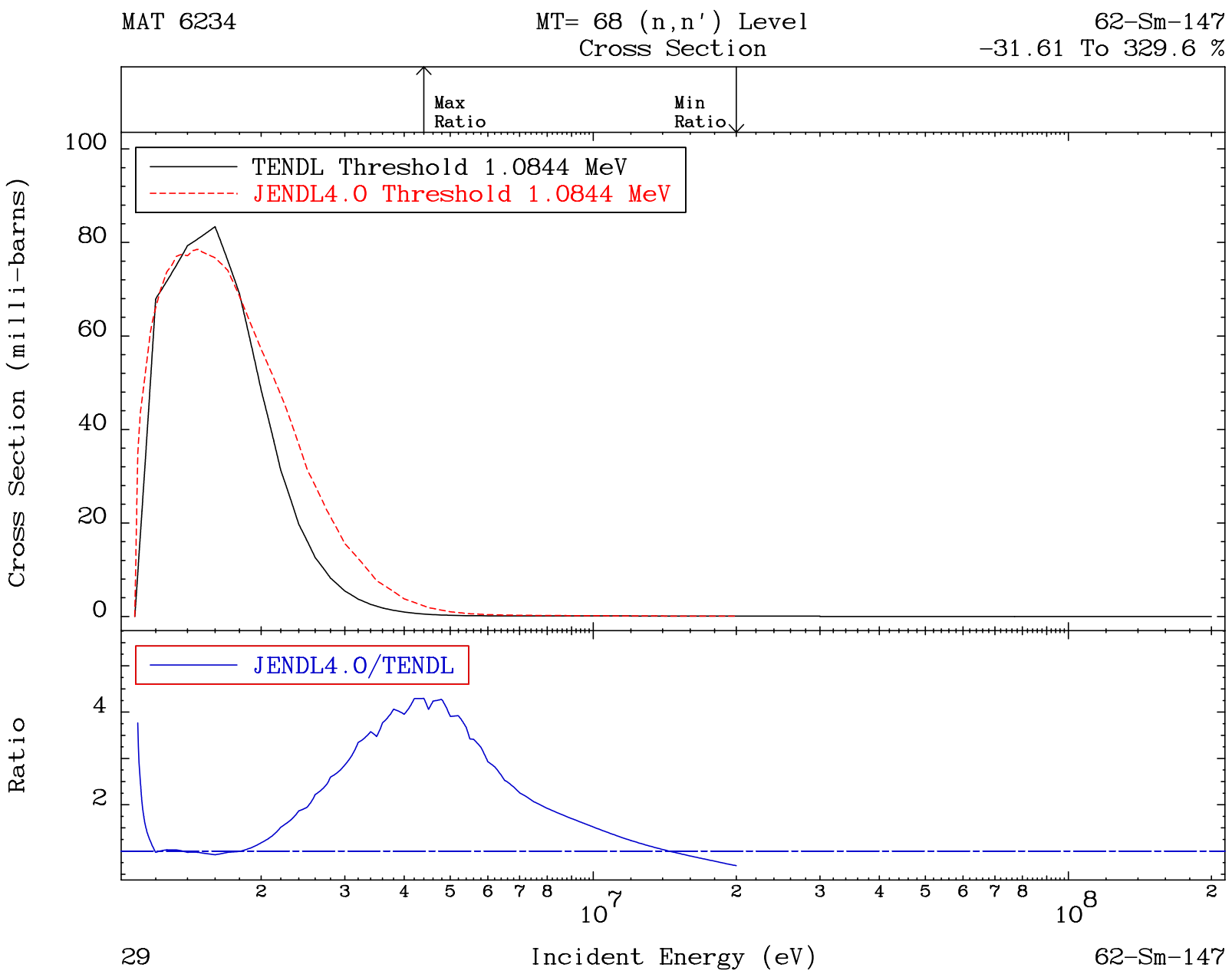

MAT 6234
MT= 63 (n,n') Level
Cross Section
62-Sm-147
-98.55 To 592.7 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0378 MeV
JENDL4.0 Threshold 1.0378 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
10^-2
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
62-Sm-147

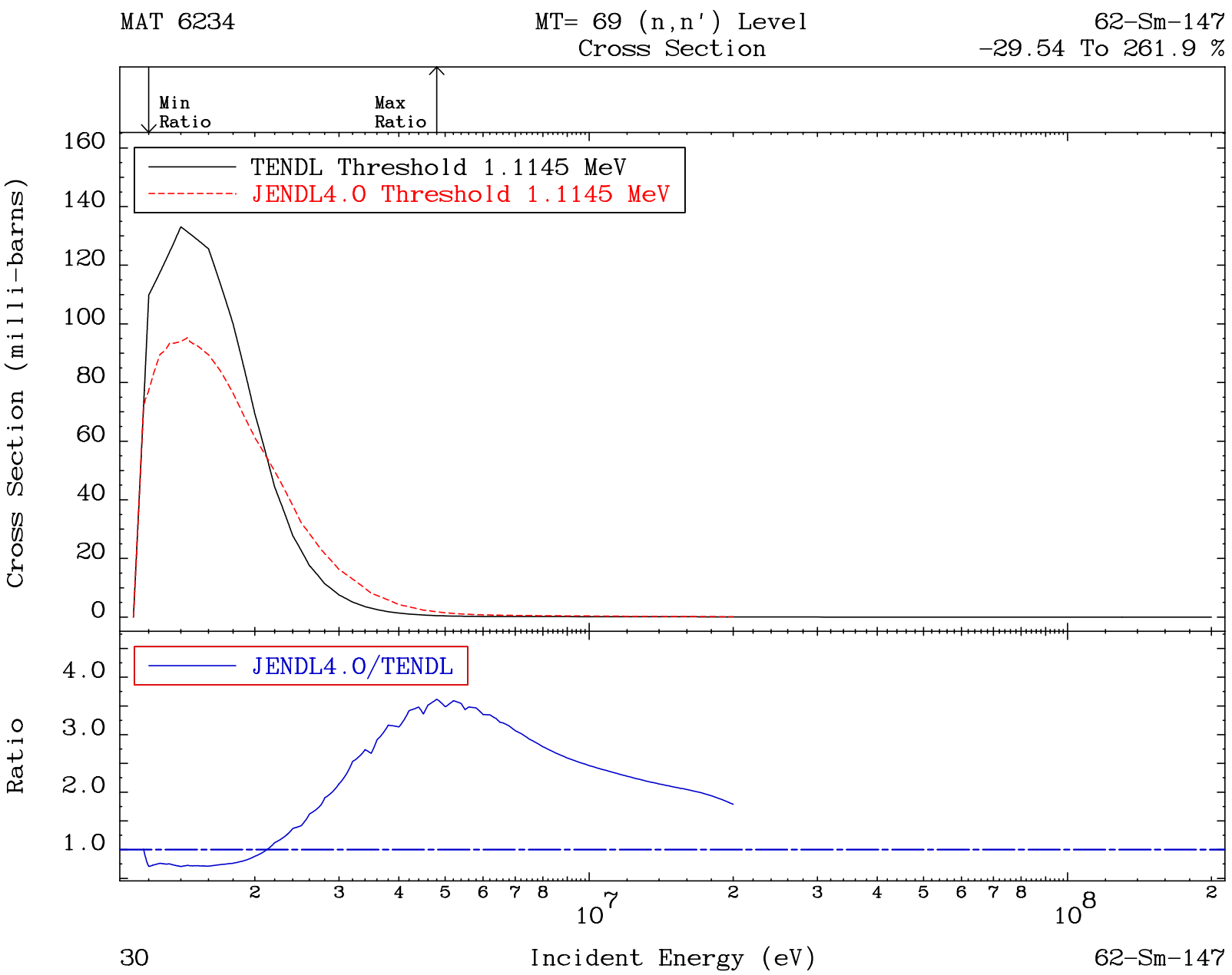

MAT 6234
MT= 64 (n,n') Level
Cross Section
62-Sm-147
80.93 To 1538. %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0507 MeV
JENDL4.0 Threshold 1.0507 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
18
12
6
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
25
Incident Energy (eV)
62-Sm-147

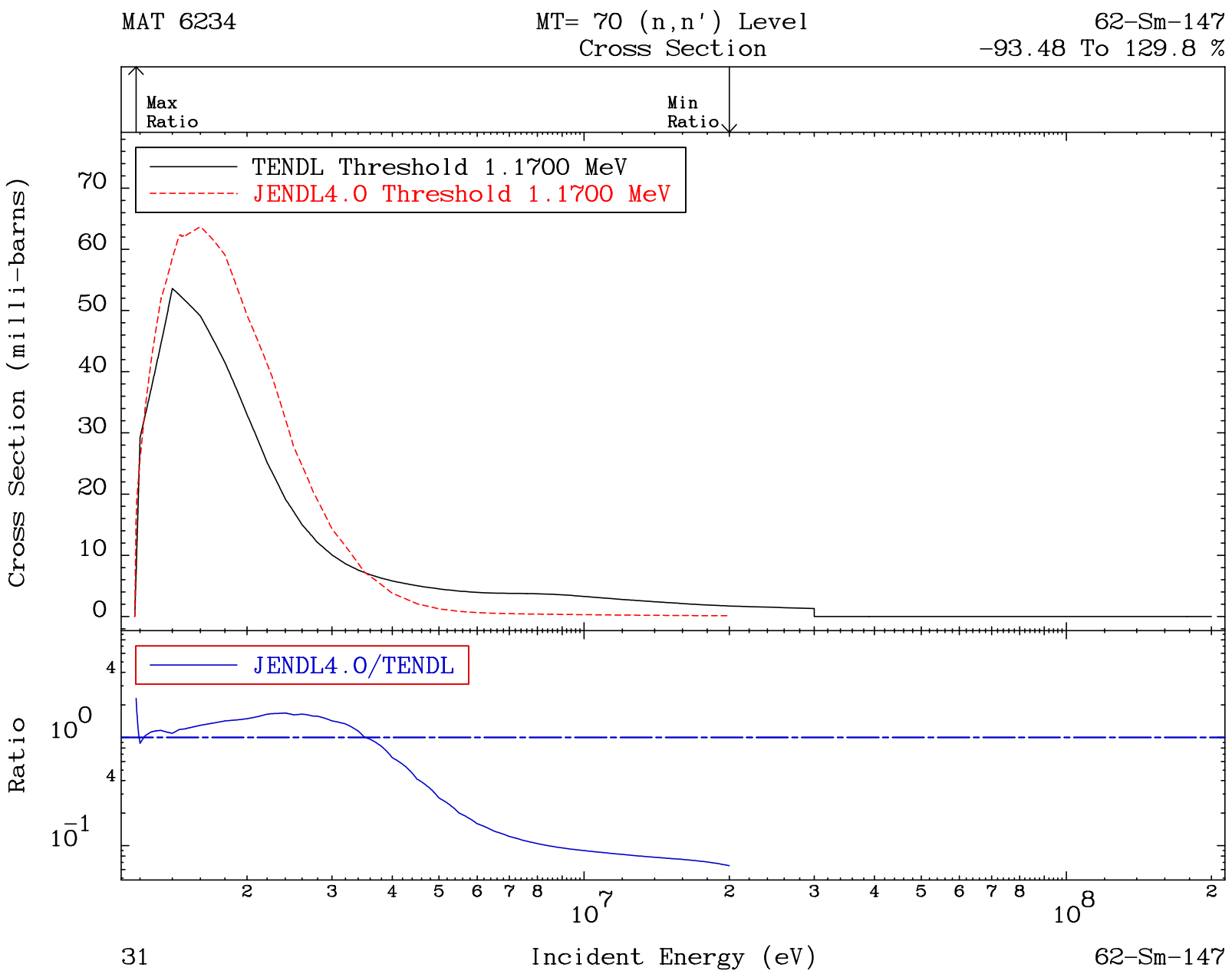

MAT 6234
MT= 65 (n,n') Level
Cross Section
62-Sm-147
-20.47 To 805.8 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0615 MeV
JENDL4.0 Threshold 1.0615 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
26
62-Sm-147

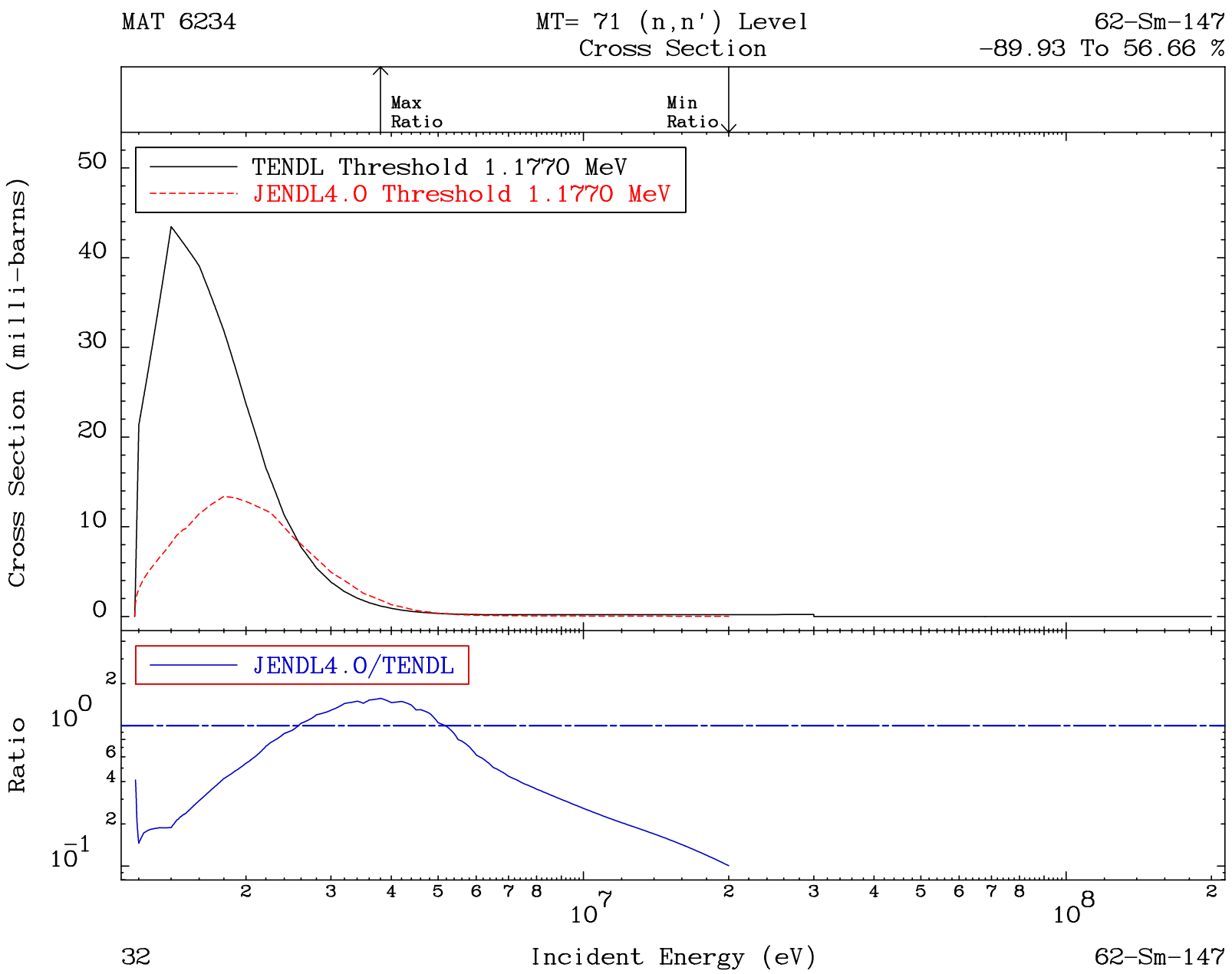

MAT 6234
MT= 66 (n,n') Level
Cross Section
62-Sm-147
-61.11 To 1315. %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0707 MeV
JENDL4.0 Threshold 1.0712 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
27
62-Sm-147

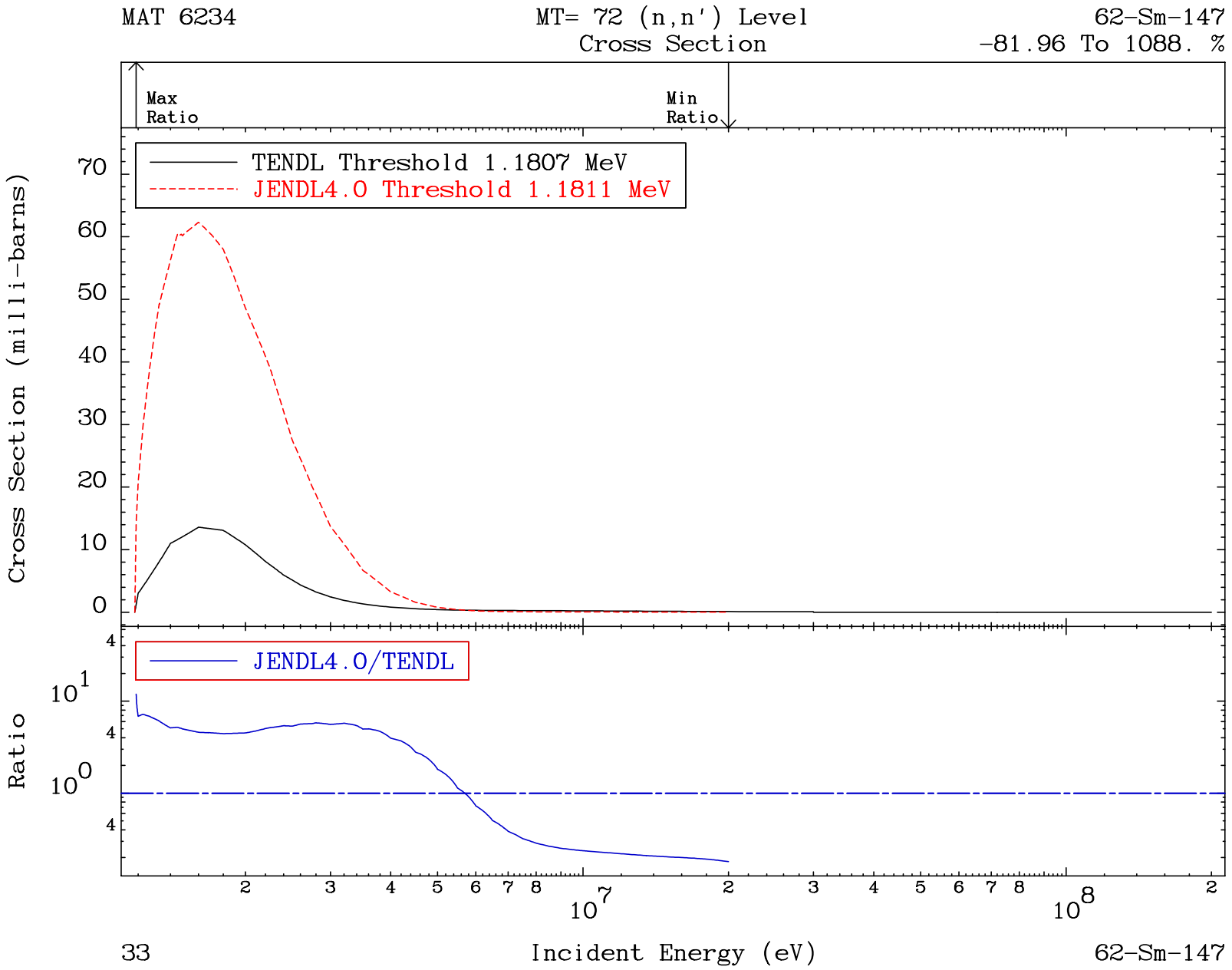

MAT 6234
MT= 67 (n,n') Level
Cross Section
62-Sm-147
-79.11 To 413.5 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0764 MeV
JENDL4.0 Threshold 1.0764 MeV
Cross Section (milli-barns)
160
120
80
40
0
JENDL4.0/TENDL
Ratio
10^1
10^0
6
6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
62-Sm-147

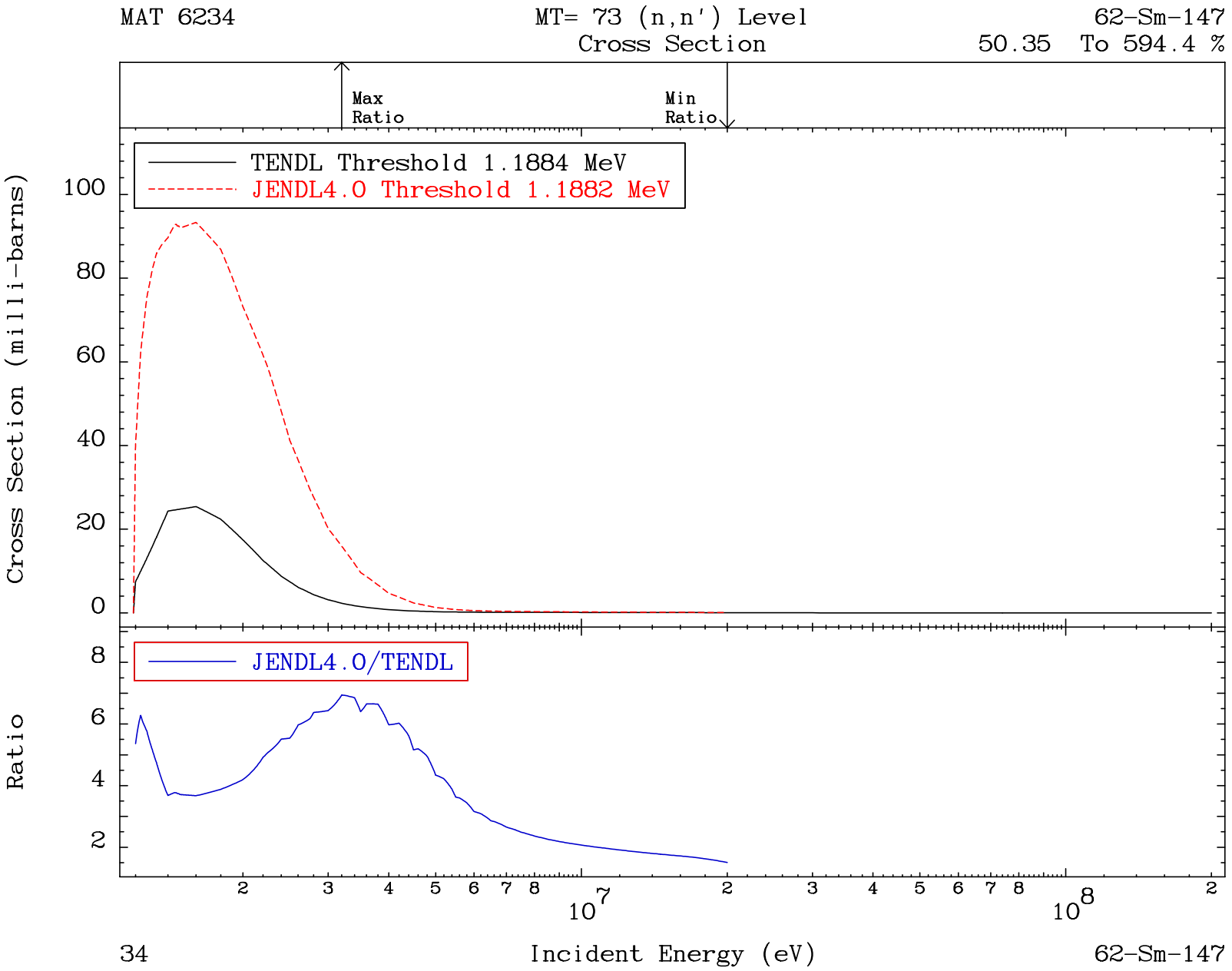

MAT 6234
MT= 68 (n,n') Level
Cross Section
62-Sm-147
-31.61 To 329.6 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0844 MeV
JENDL4.0 Threshold 1.0844 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
4
2
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
29
Incident Energy (eV)
62-Sm-147

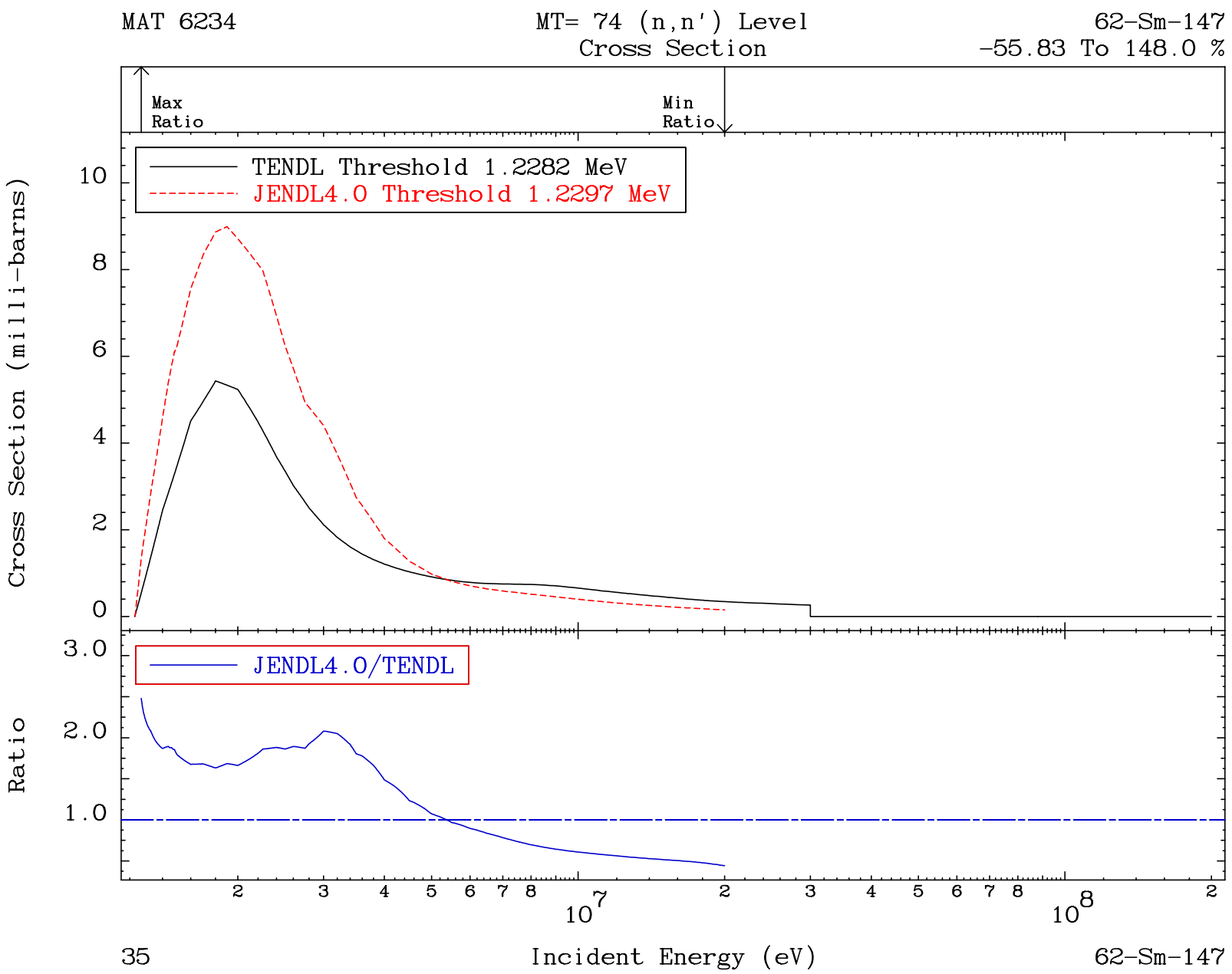

MAT 6234
MT= 69 (n,n') Level
Cross Section
62-Sm-147
-29.54 To 261.9 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.1145 MeV
JENDL4.0 Threshold 1.1145 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
4.0
3.0
2.0
1.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
30
Incident Energy (eV)
62-Sm-147

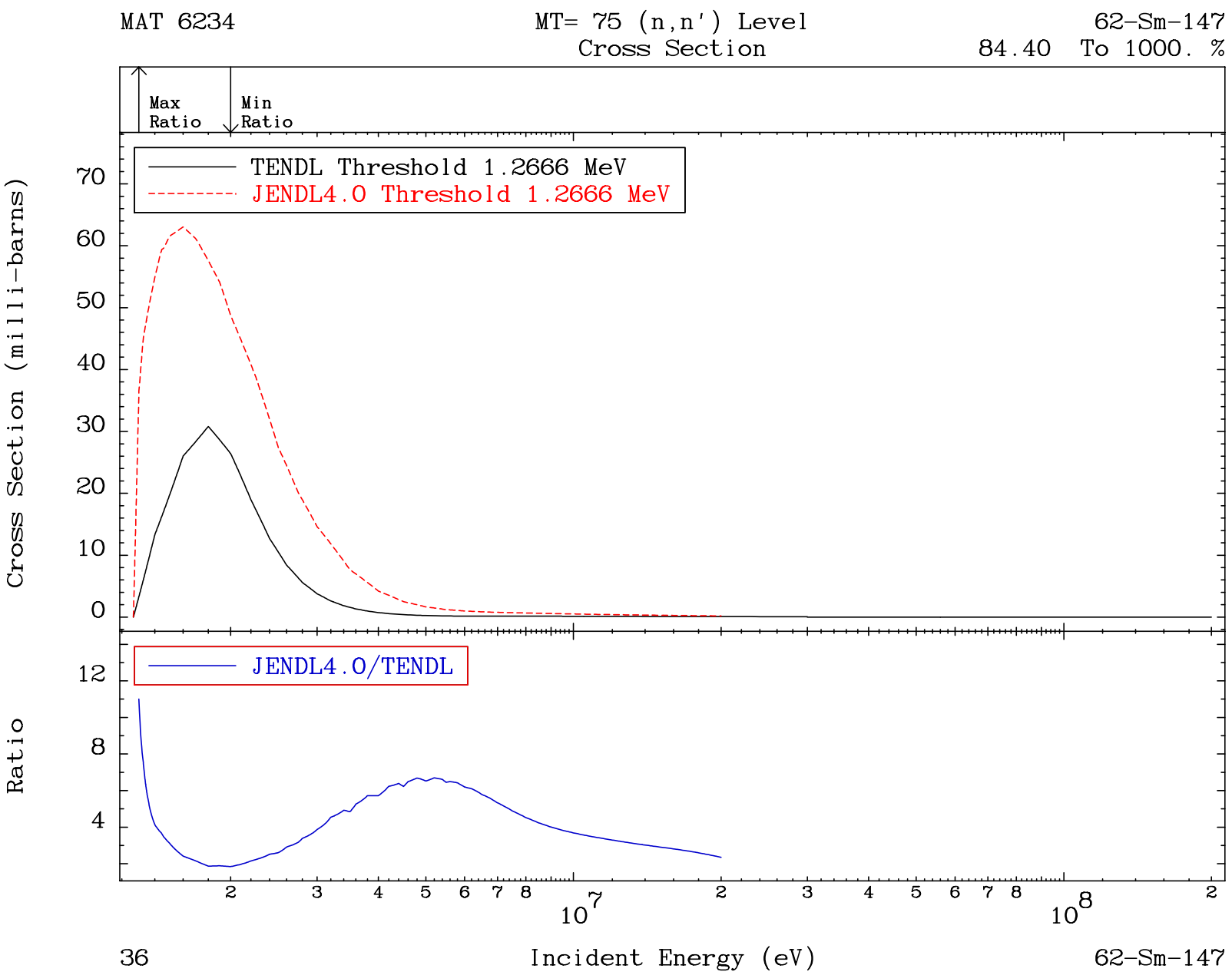

MAT 6234
MT= 70 (n,n') Level
Cross Section
62-Sm-147
-93.48 To 129.8 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.1700 MeV
JENDL4.0 Threshold 1.1700 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
4
10^0
4
10^{-1}
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
31
Incident Energy (eV)
62-Sm-147

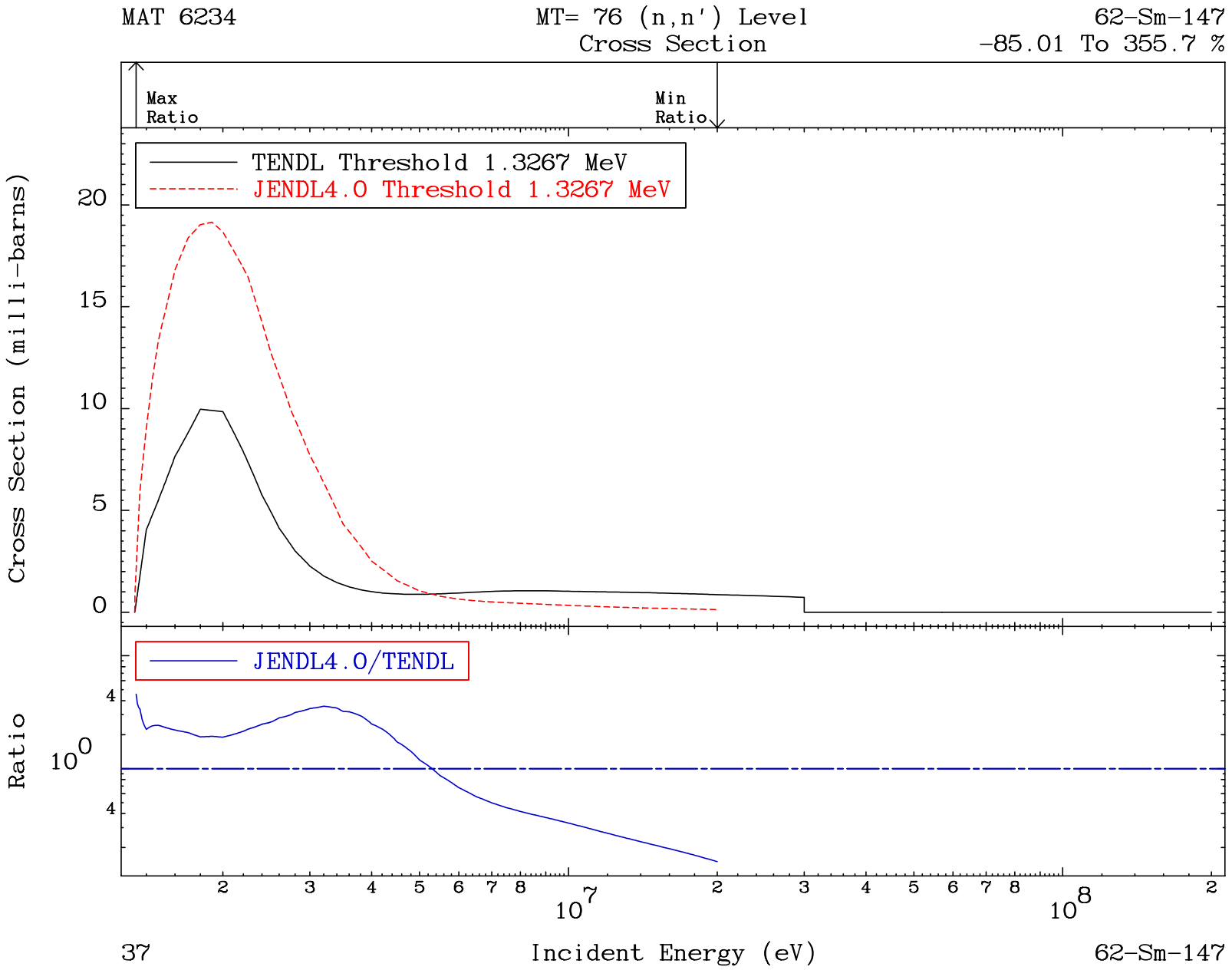

MAT 6234
MT= 71 (n,n') Level
Cross Section
62-Sm-147
-89.93 To 56.66 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.1770 MeV
JENDL4.0 Threshold 1.1770 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
2
10^0
6
4
2
10^-1
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
32
Incident Energy (eV)
62-Sm-147

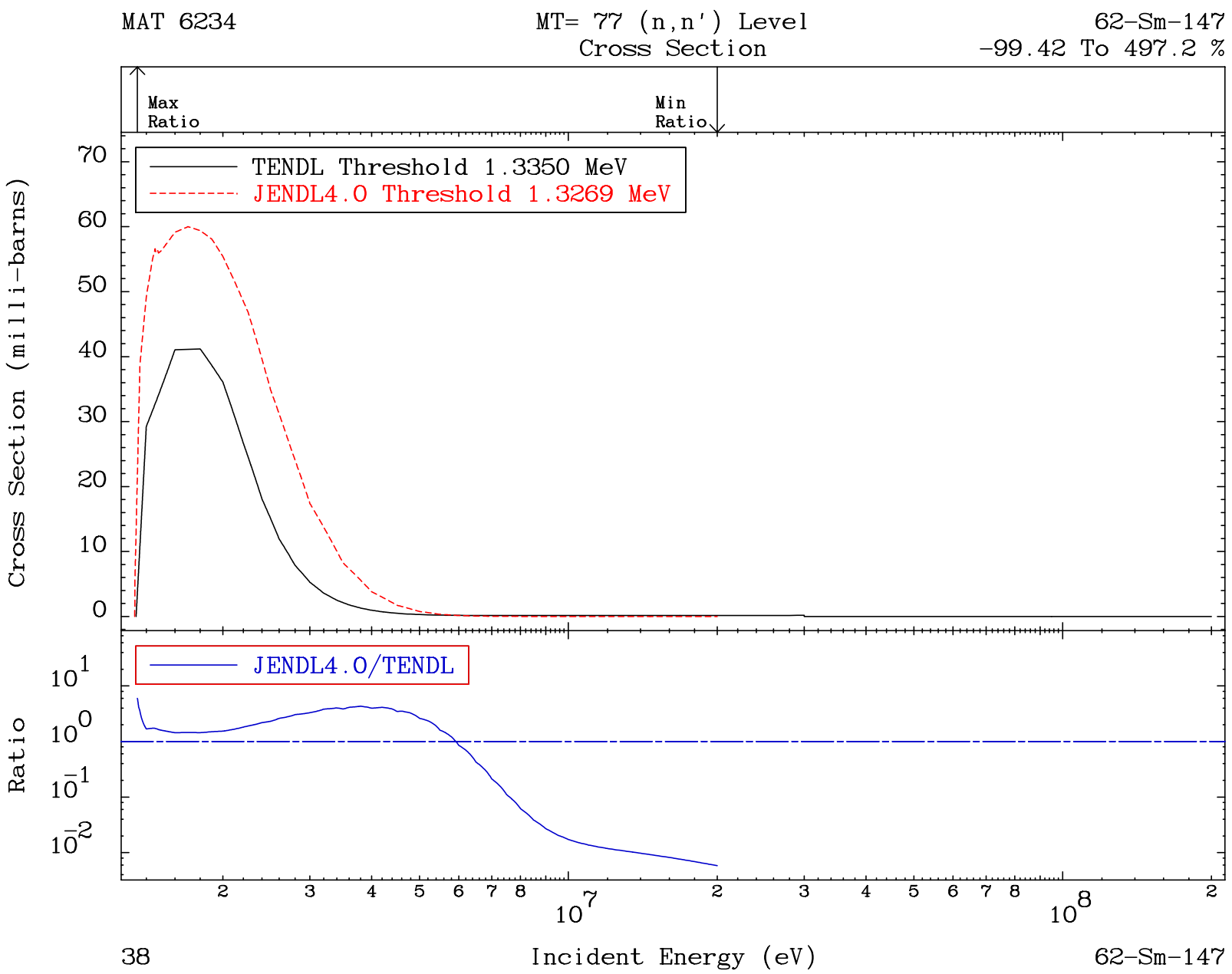

MAT 6234
MT= 72 (n,n') Level
Cross Section
62-Sm-147
-81.96 To 1088. %
Max
Ratio
Min
Ratio
TENDL Threshold 1.1807 MeV
JENDL4.0 Threshold 1.1811 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^1
10^0
4
2
3
4
5
6
7
8
10^7
10^8
33
Incident Energy (eV)
62-Sm-147

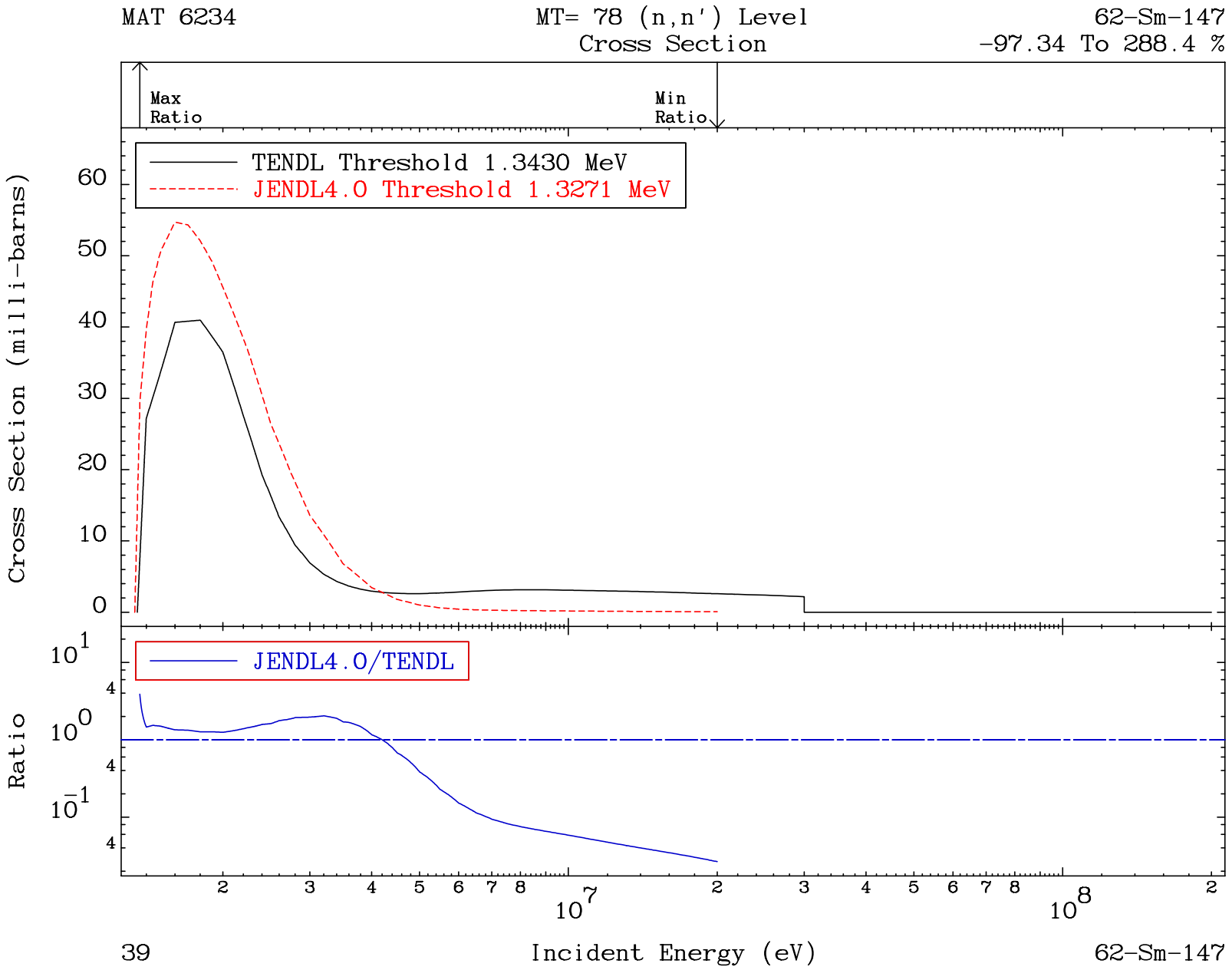

MAT 6234
MT= 73 (n,n') Level
Cross Section
62-Sm-147
50.35 To 594.4 %
Max Ratio
Min Ratio
TENDL Threshold 1.1884 MeV
JENDL4.0 Threshold 1.1882 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
8
6
4
2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
34
Incident Energy (eV)
62-Sm-147

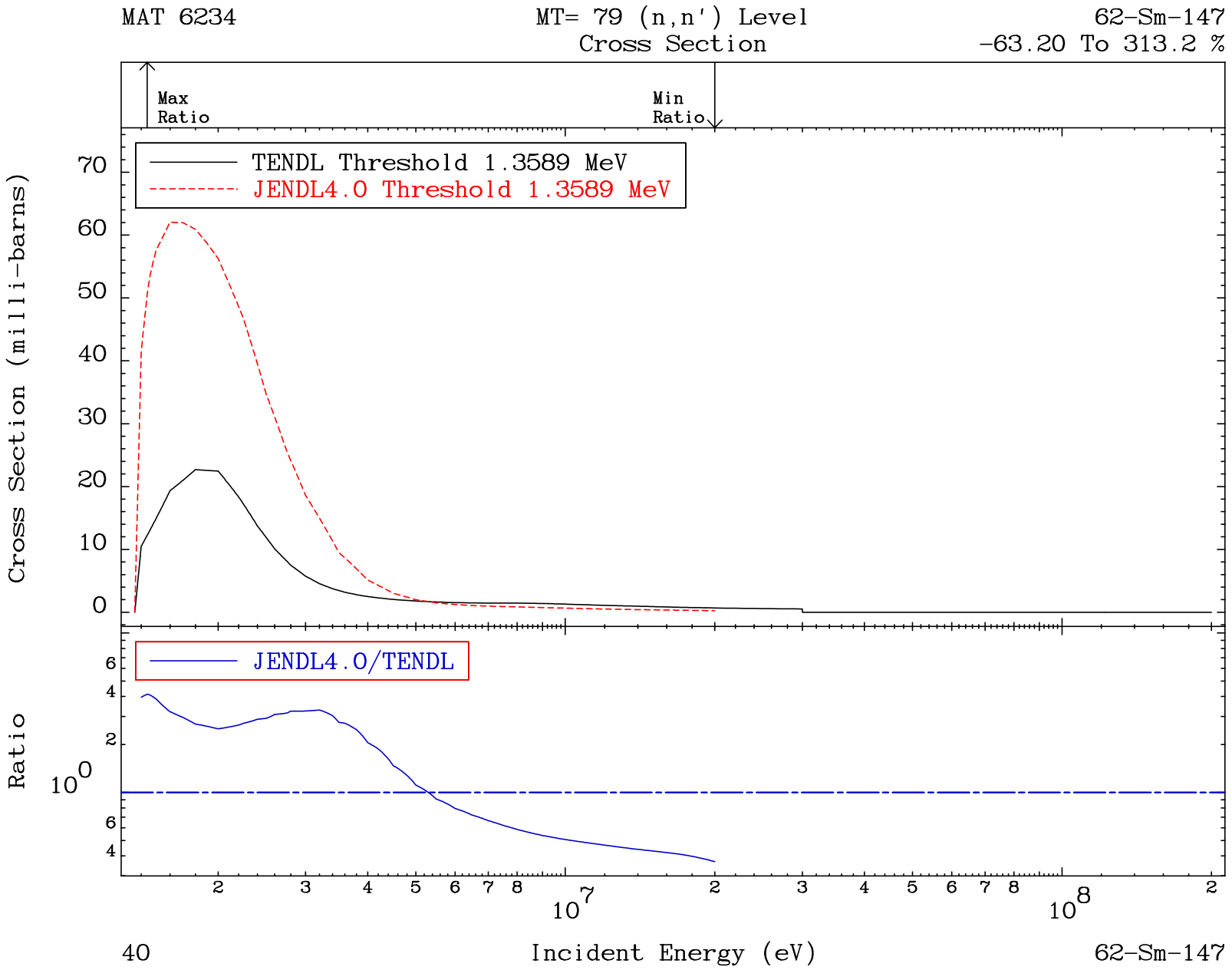

MAT 6234
MT= 74 (n,n') Level
Cross Section
62-Sm-147
-55.83 To 148.0 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.2282 MeV
JENDL4.0 Threshold 1.2297 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
JENDL4.0/TENDL
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
35
Incident Energy (eV)
62-Sm-147

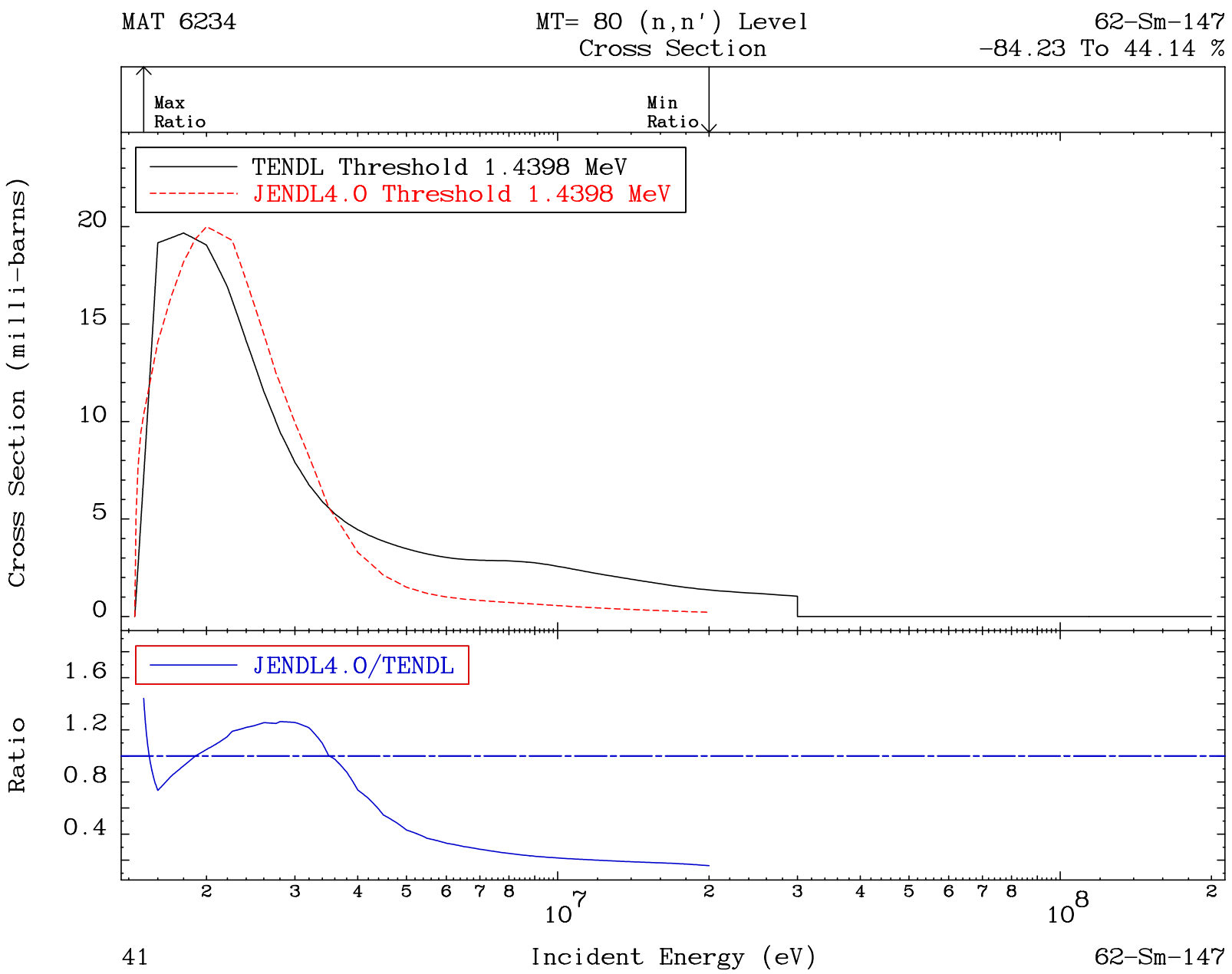

MAT 6234
MT= 75 (n,n') Level
Cross Section
62-Sm-147
84.40 To 1000. %
Max Ratio
Min Ratio
TENDL Threshold 1.2666 MeV
JENDL4.0 Threshold 1.2666 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
36
62-Sm-147

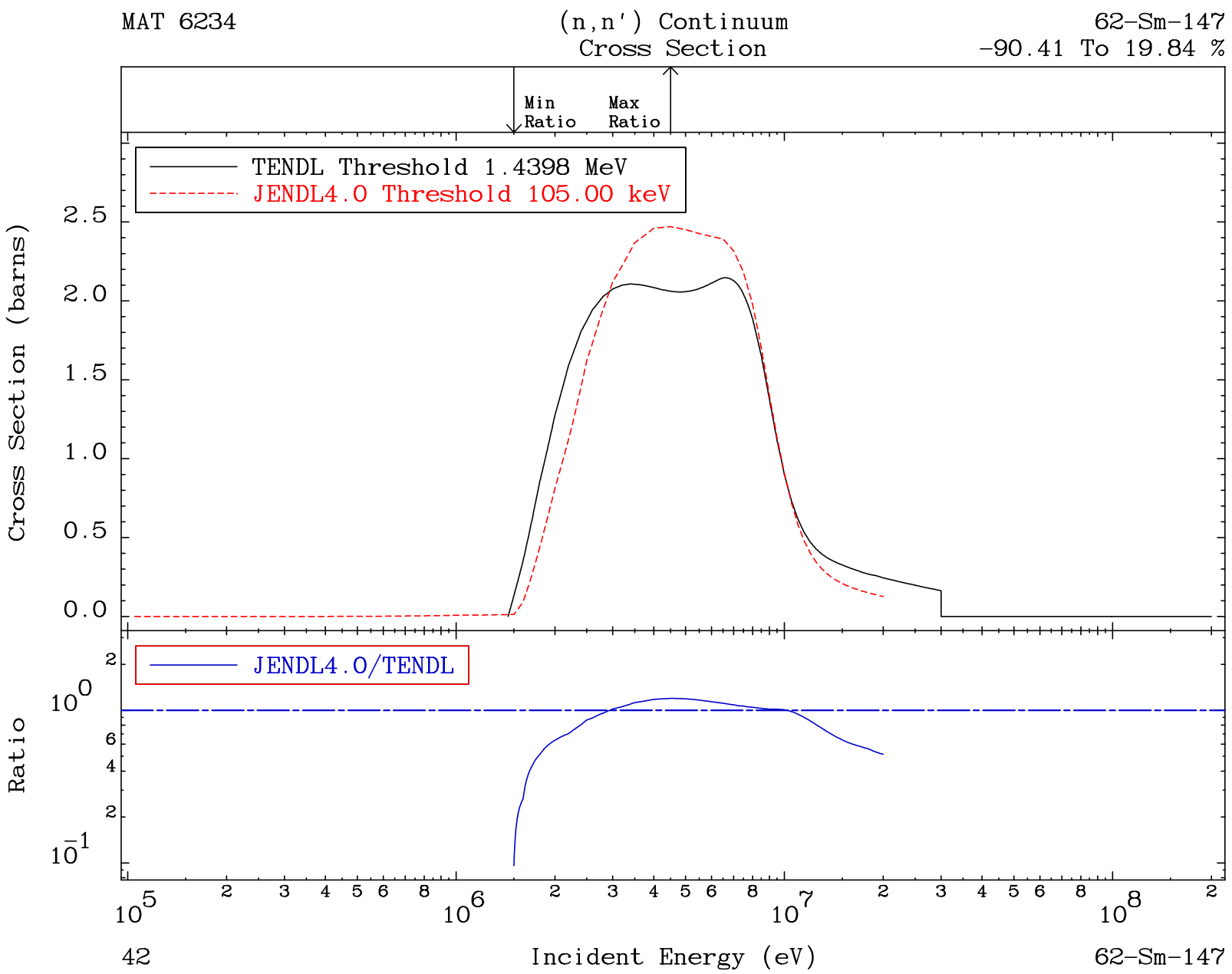

MAT 6234
MT= 76 (n,n') Level
Cross Section
62-Sm-147
-85.01 To 355.7 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.3267 MeV
JENDL4.0 Threshold 1.3267 MeV
Cross Section (milli-barns)
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^0
4
4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
37
Incident Energy (eV)
62-Sm-147

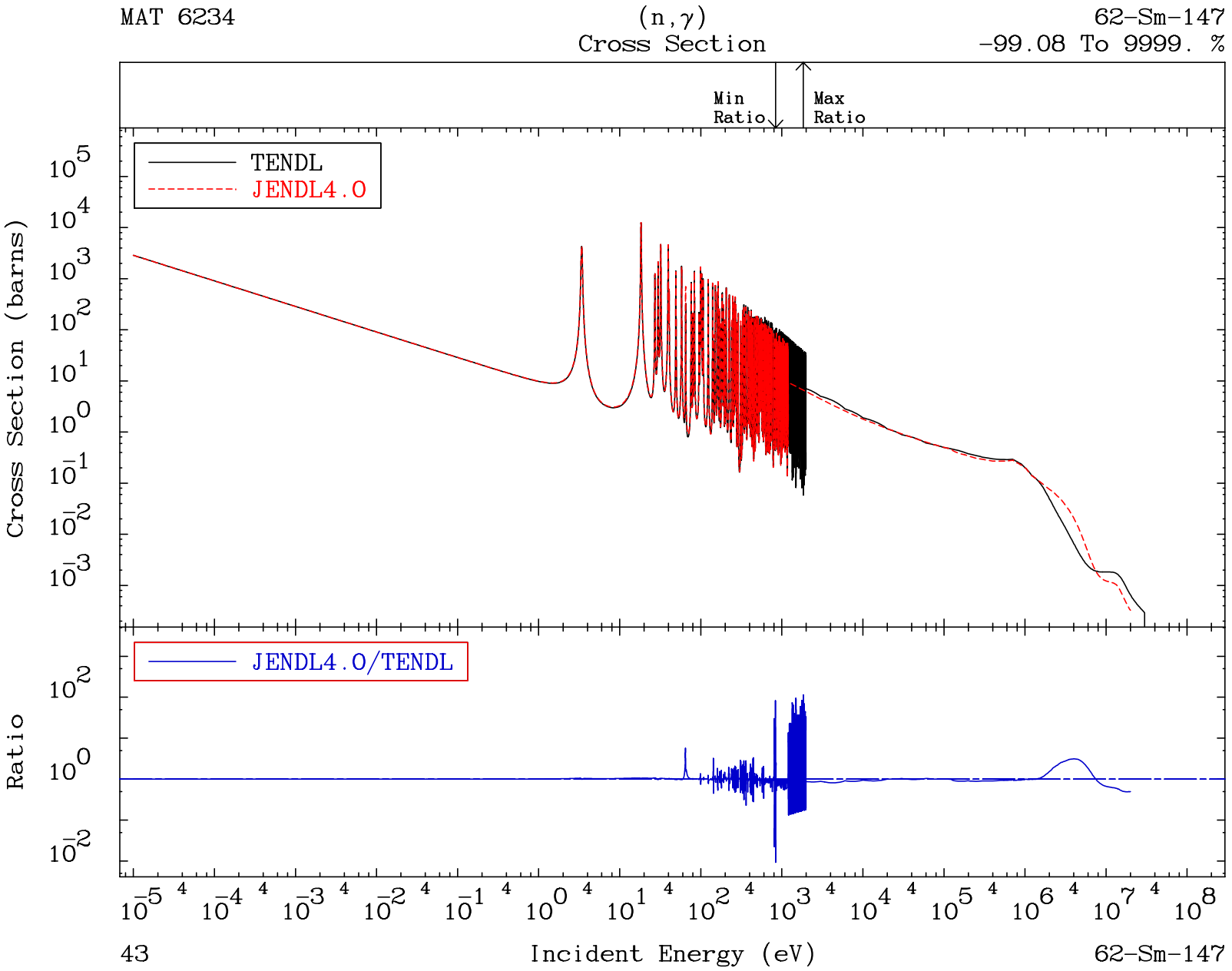

MAT 6234
MT= 77 (n,n') Level
Cross Section
62-Sm-147
-99.42 To 497.2 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.3350 MeV
JENDL4.0 Threshold 1.3269 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
10^-2
2
3
4
5
6
7
8
10^7
10^8
38
Incident Energy (eV)
62-Sm-147

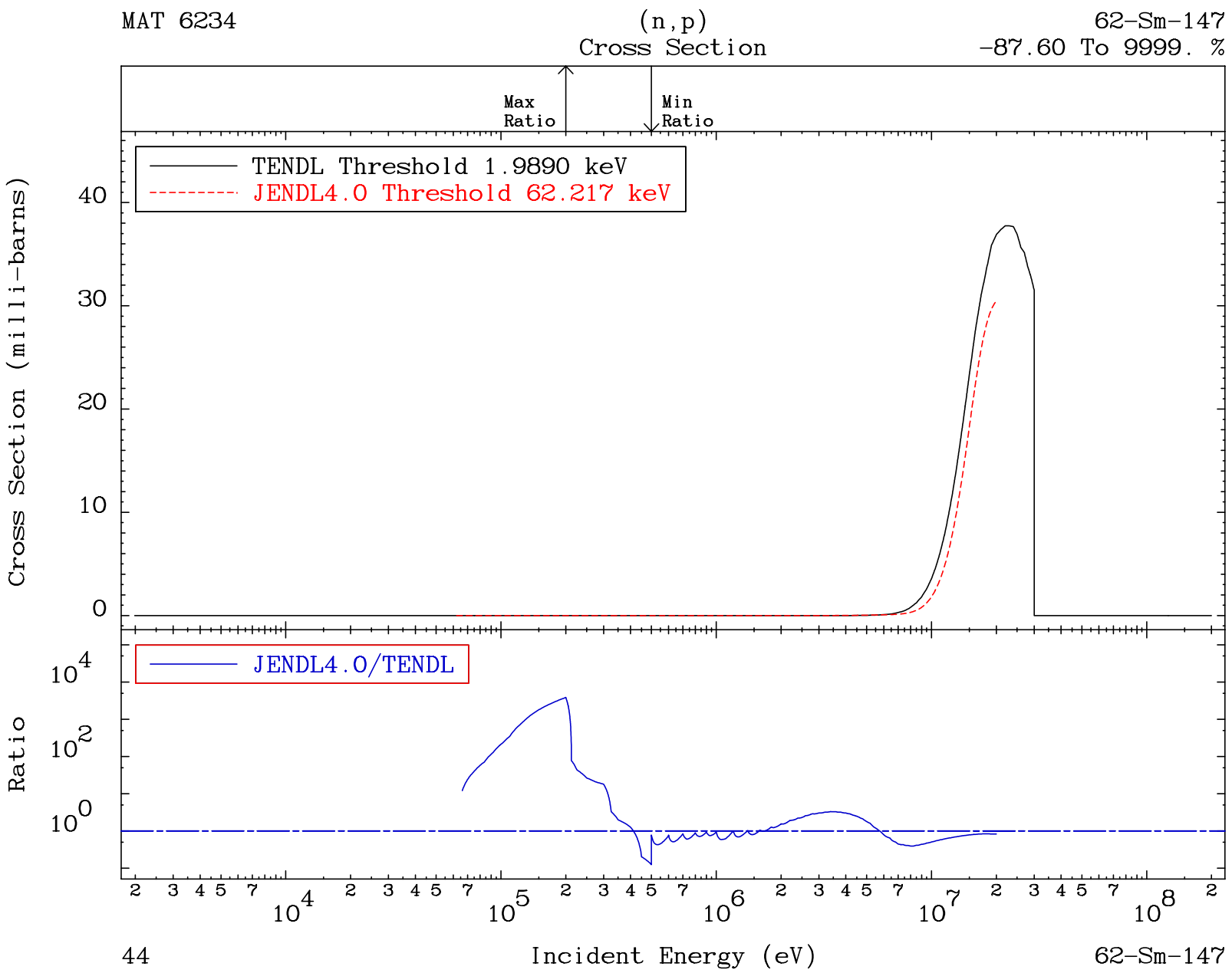

MAT 6234
MT= 78 (n,n') Level
Cross Section
62-Sm-147
-97.34 To 288.4 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.3430 MeV
JENDL4.0 Threshold 1.3271 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^1
10^0
10^-1
2
3
4
5
6
7
8
10^7
10^8
39
Incident Energy (eV)
62-Sm-147

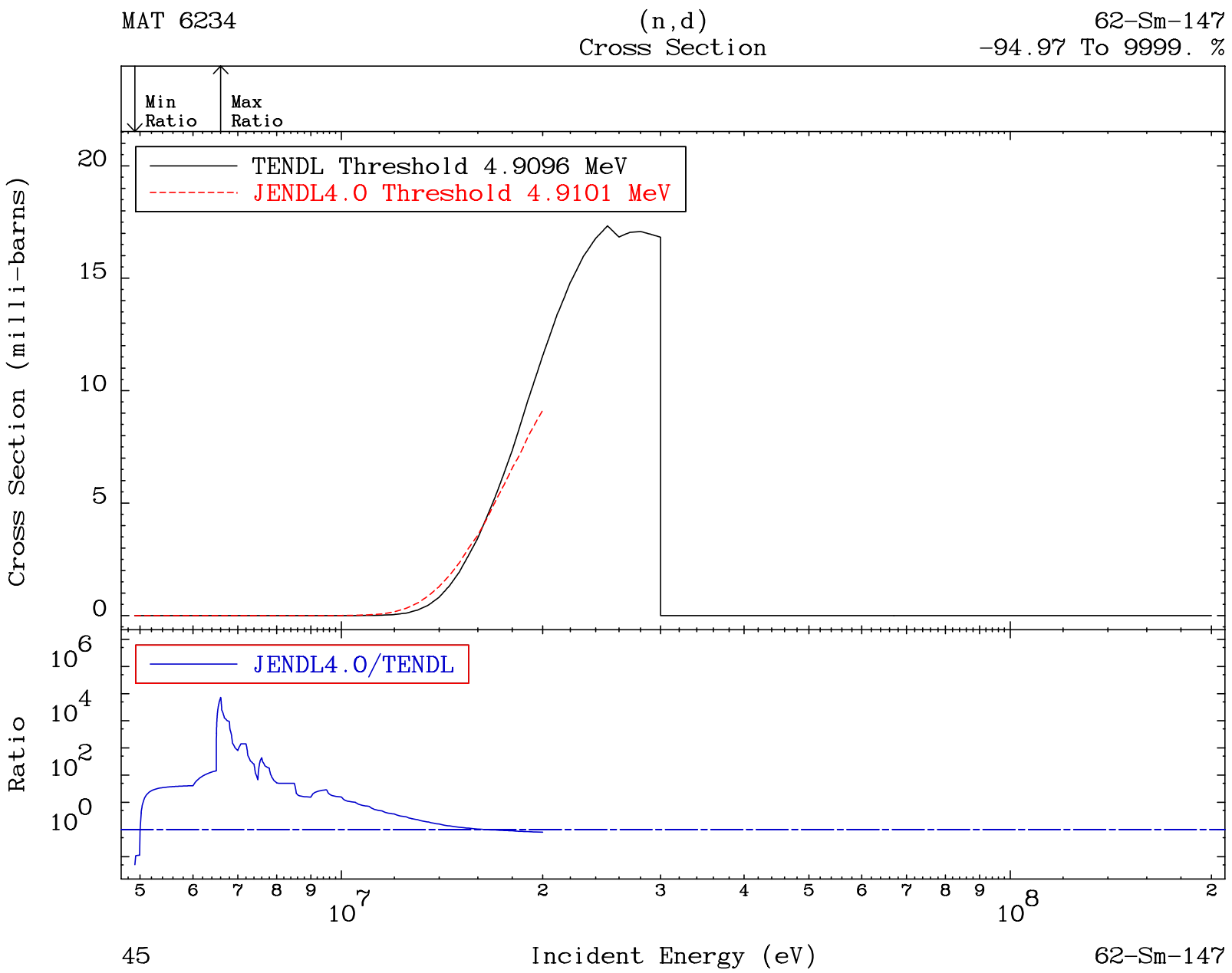

MAT 6234
MT= 79 (n,n') Level
Cross Section
62-Sm-147
-63.20 To 313.2 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.3589 MeV
JENDL4.0 Threshold 1.3589 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
6
4
2
10^0
6
4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
40
Incident Energy (eV)
62-Sm-147

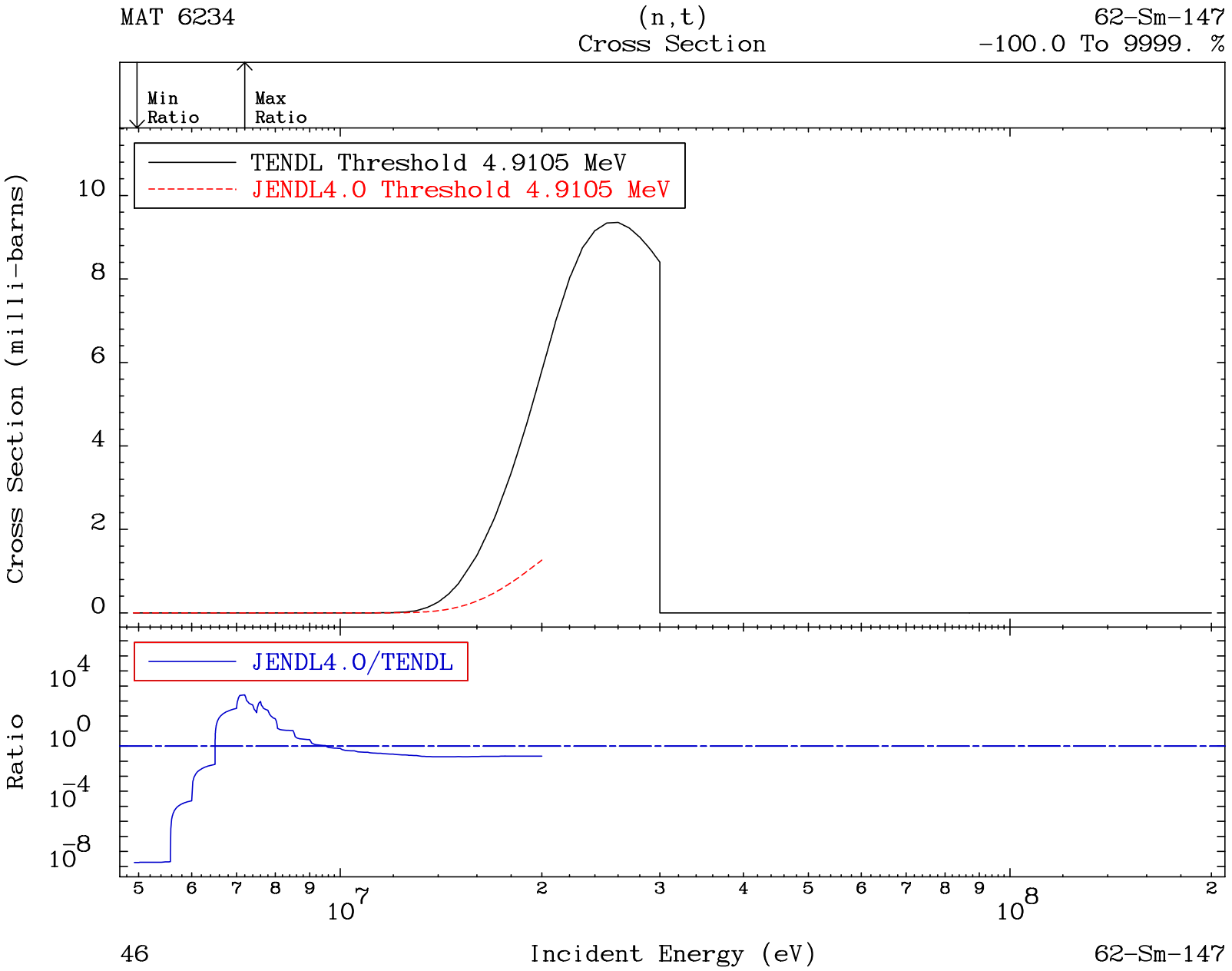

MAT 6234
MT= 80 (n,n') Level
Cross Section
62-Sm-147
-84.23 To 44.14 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.4398 MeV
JENDL4.0 Threshold 1.4398 MeV
Cross Section (milli-barns)
20
15
10
5
0
JENDL4.0/TENDL
Ratio
1.6
1.2
0.8
0.4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
41
Incident Energy (eV)
62-Sm-147

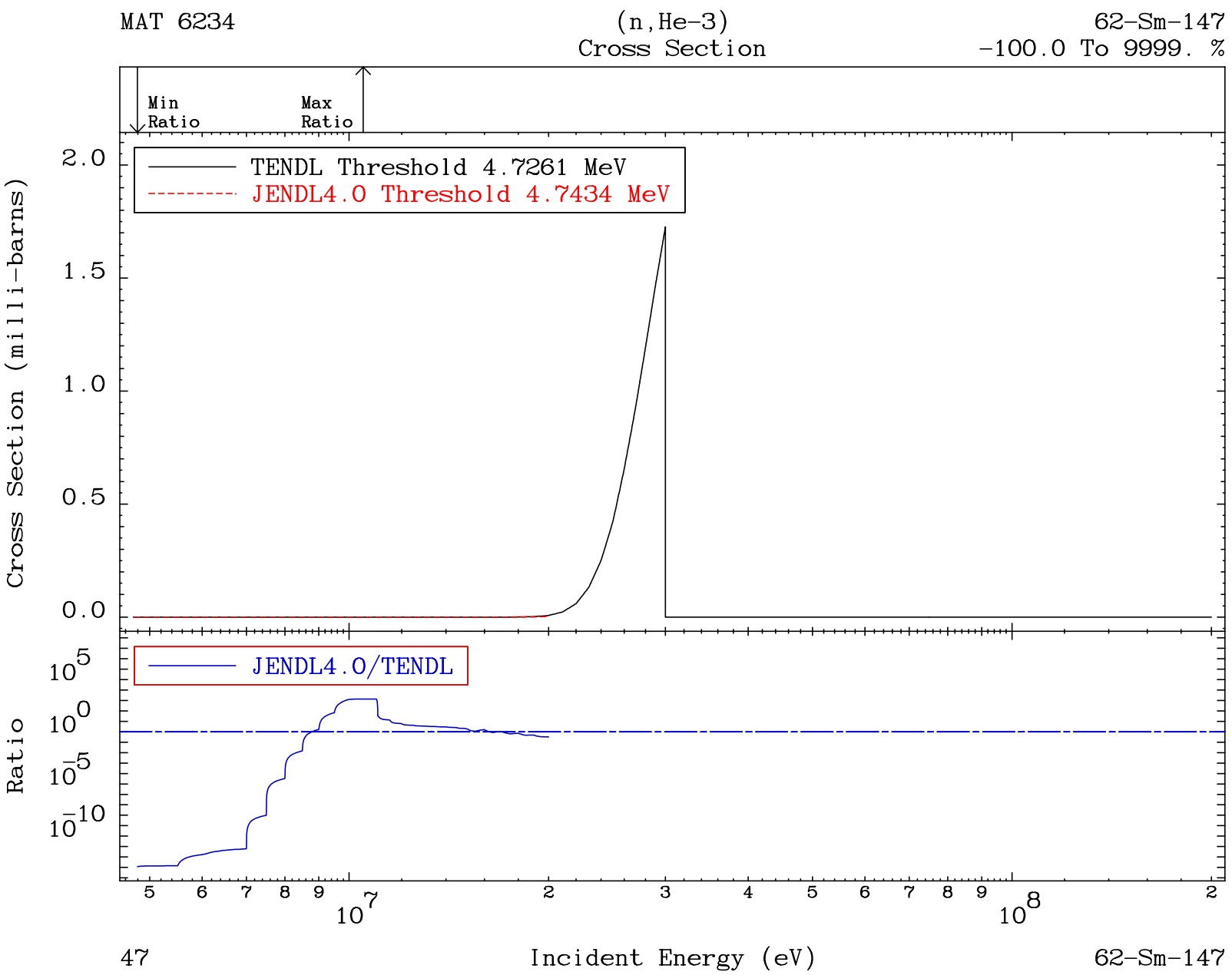

MAT 6234
(n,n') Continuum
Cross Section
62-Sm-147
-90.41 To 19.84 %
Min Ratio
Max Ratio
TENDL Threshold 1.4398 MeV
JENDL4.0 Threshold 105.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^{0}
10^{-1}
10^{5}
10^{6}
10^{7}
10^{8}
Incident Energy (eV)
42
62-Sm-147

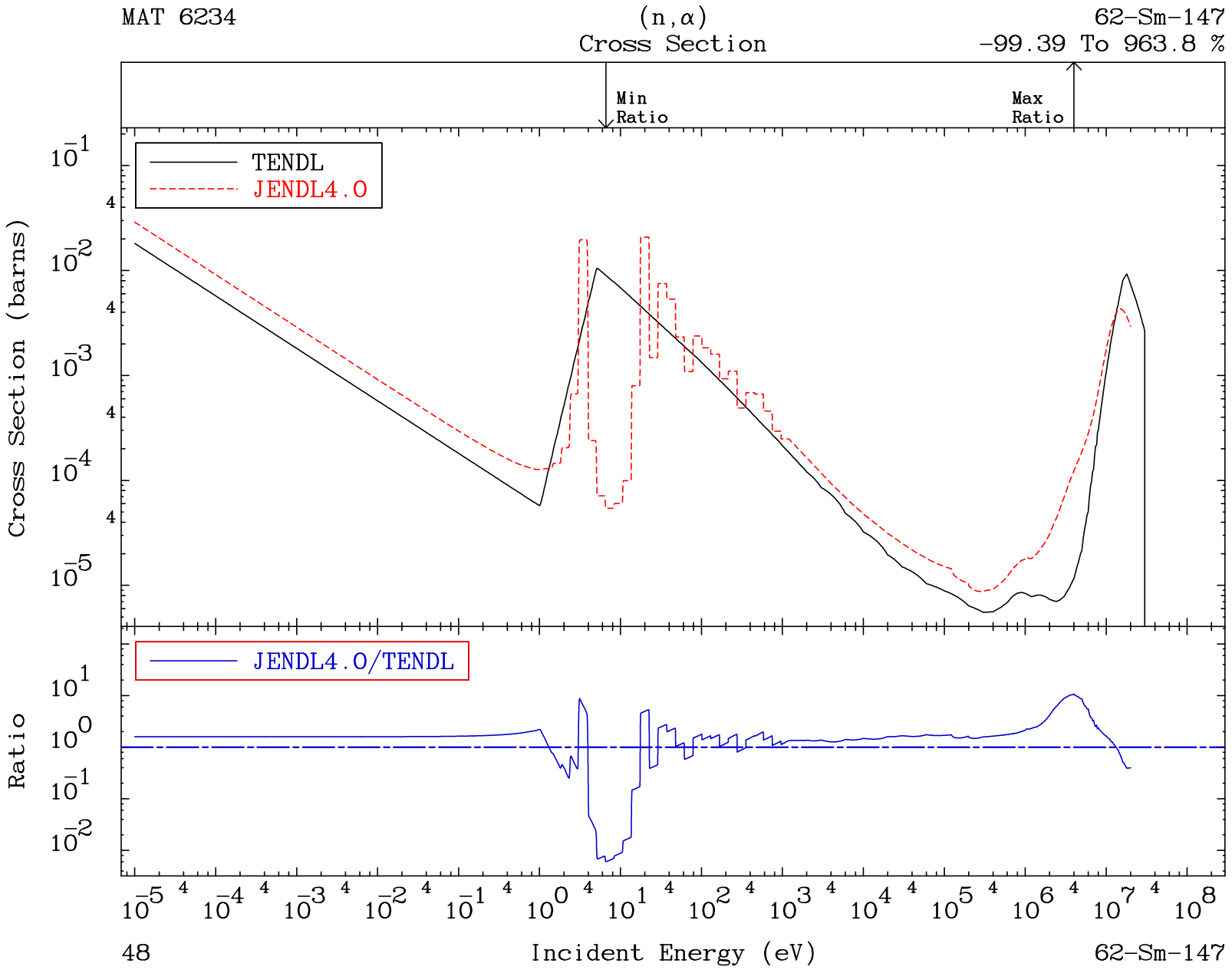

MAT 6234
(n,γ)
Cross Section
62-Sm-147
-99.08 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
43
62-Sm-147

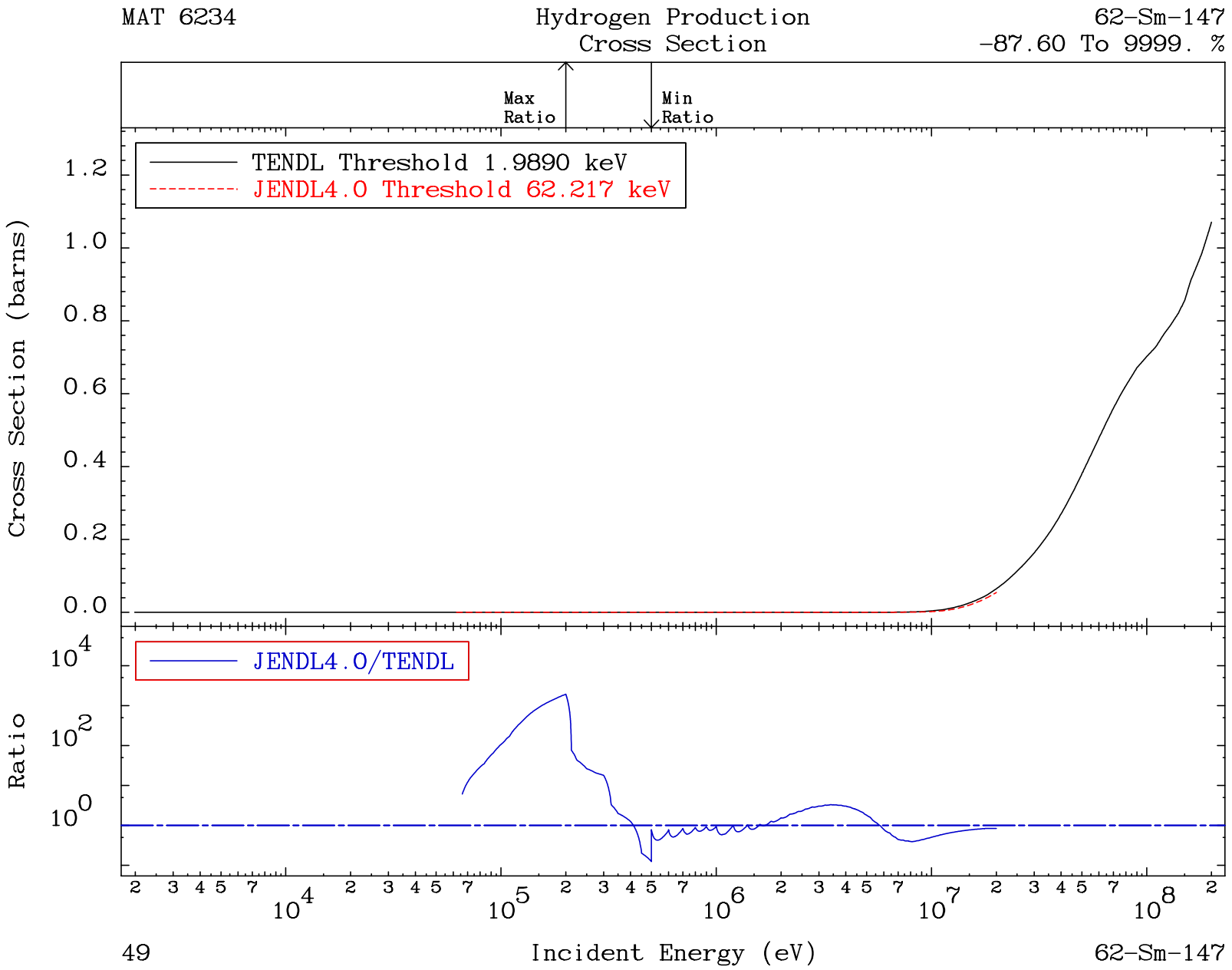

MAT 6234
(n,p)
Cross Section
62-Sm-147
-87.60 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.9890 keV
JENDL4.0 Threshold 62.217 keV
Cross Section (milli-barns)
0
10
20
30
40
JENDL4.0/TENDL
Ratio
10^0
10^2
10^4
2 3 4 5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
44
Incident Energy (eV)
62-Sm-147

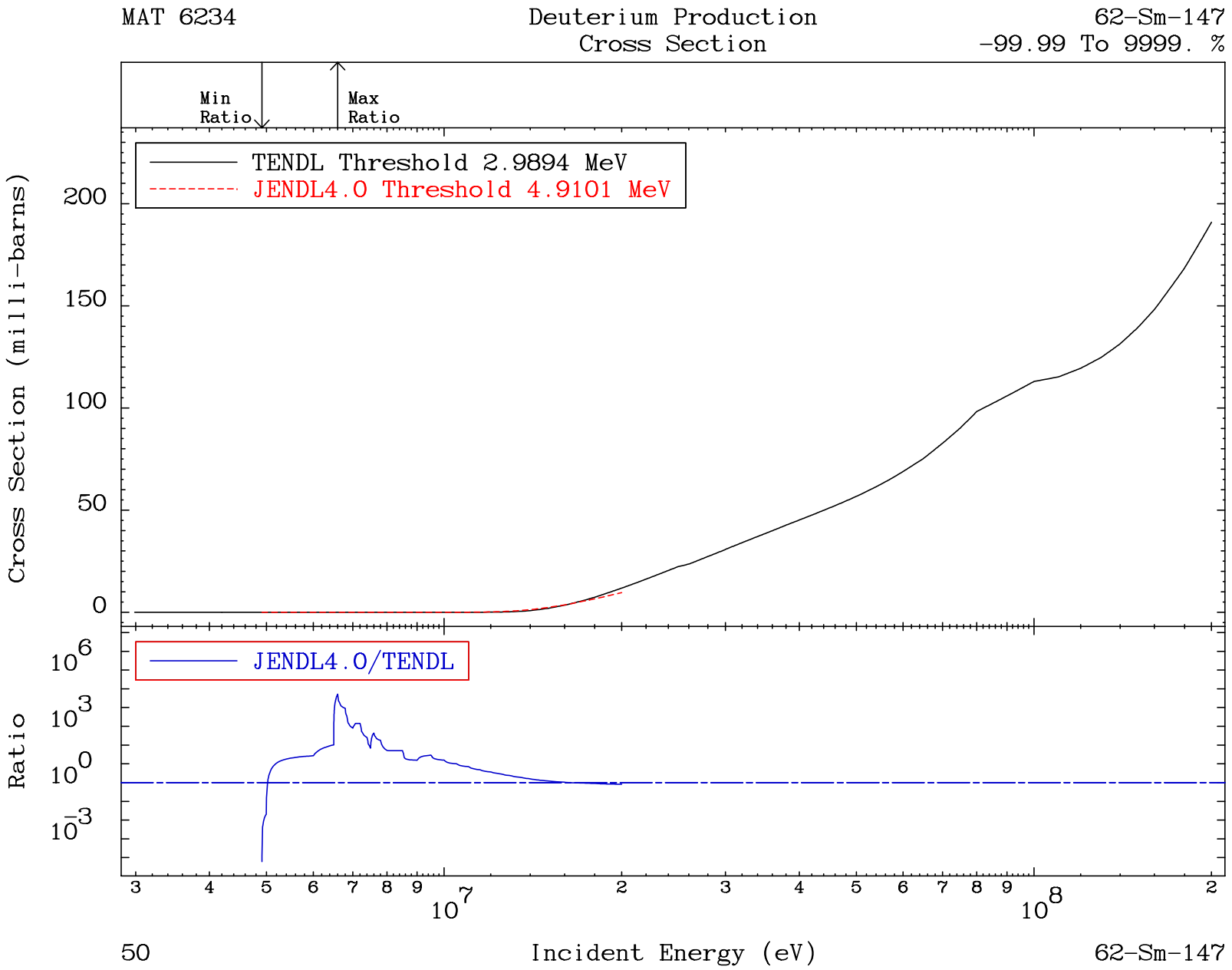

MAT 6234
(n,d)
Cross Section
62-Sm-147
-94.97 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.9096 MeV
JENDL4.0 Threshold 4.9101 MeV
Cross Section (milli-barns)
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^6
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
62-Sm-147

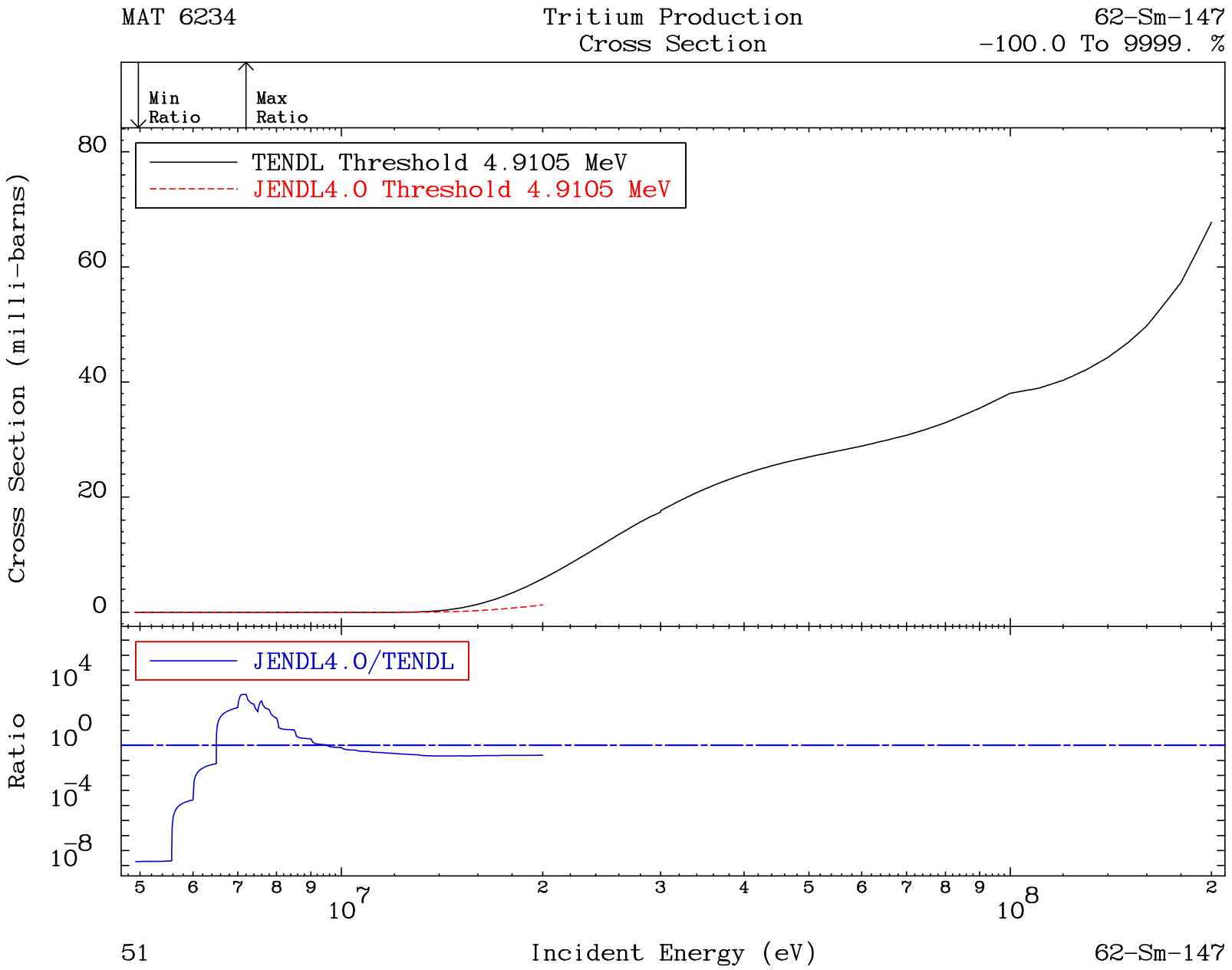

MAT 6234
(n,t)
Cross Section
62-Sm-147
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.9105 MeV
JENDL4.0 Threshold 4.9105 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
46
62-Sm-147

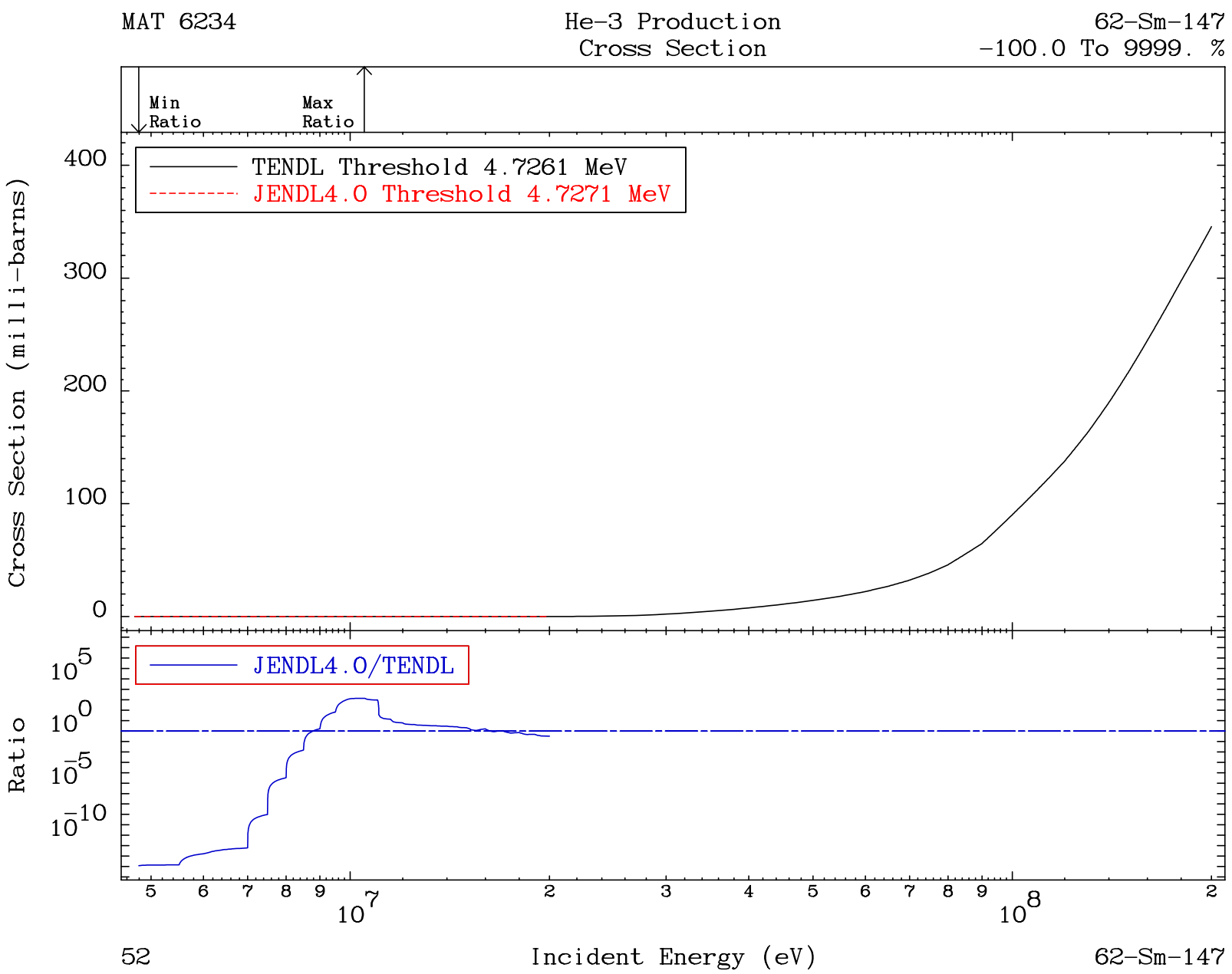

MAT 6234
(n,He-3)
Cross Section
62-Sm-147
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.7261 MeV
JENDL4.0 Threshold 4.7434 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^5
10^0
10^-5
10^-10
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
62-Sm-147

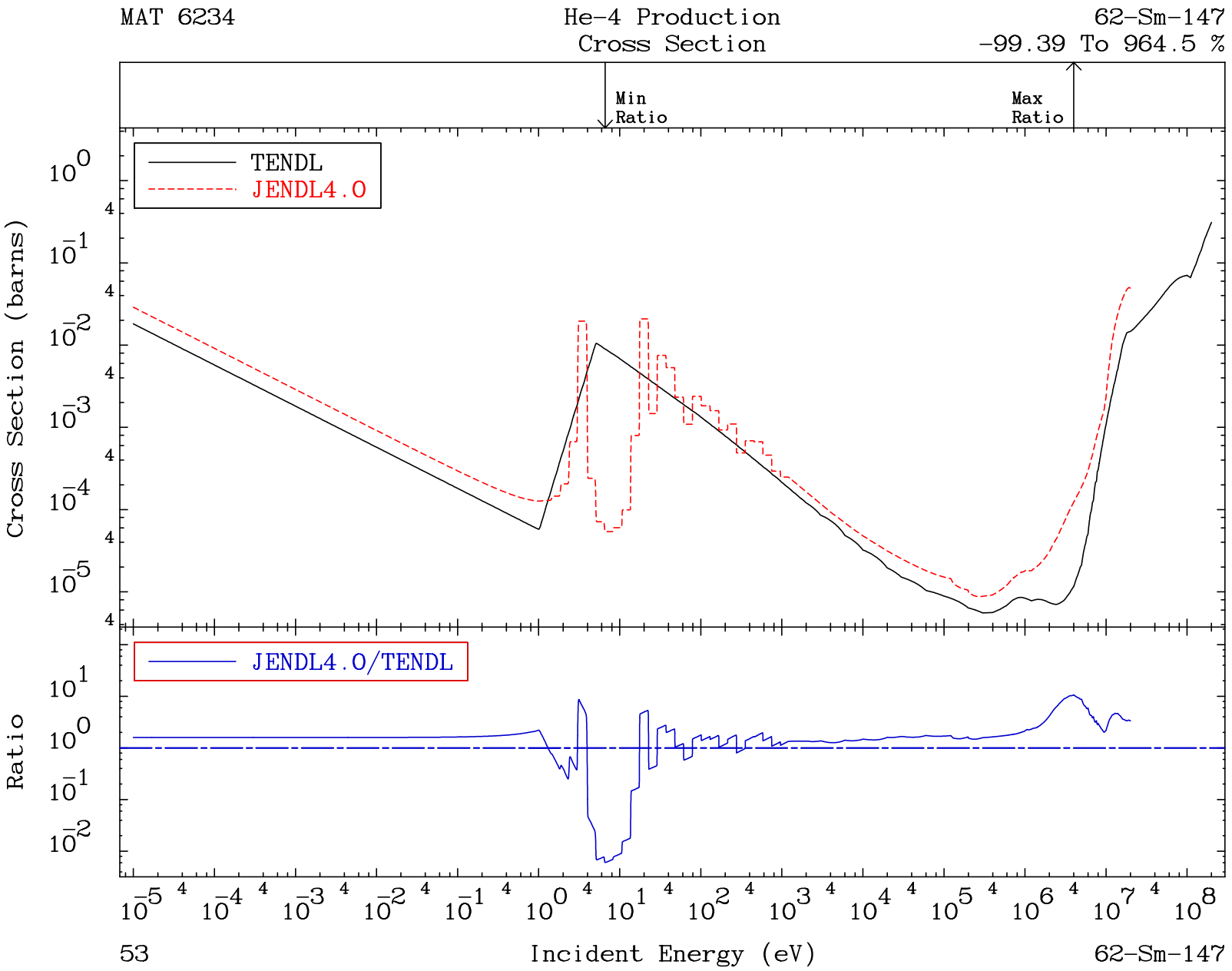

MAT 6234
(n,α)
Cross Section
62-Sm-147
-99.39 To 963.8 %
Min
Ratio
Max
Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
48
Incident Energy (eV)
62-Sm-147

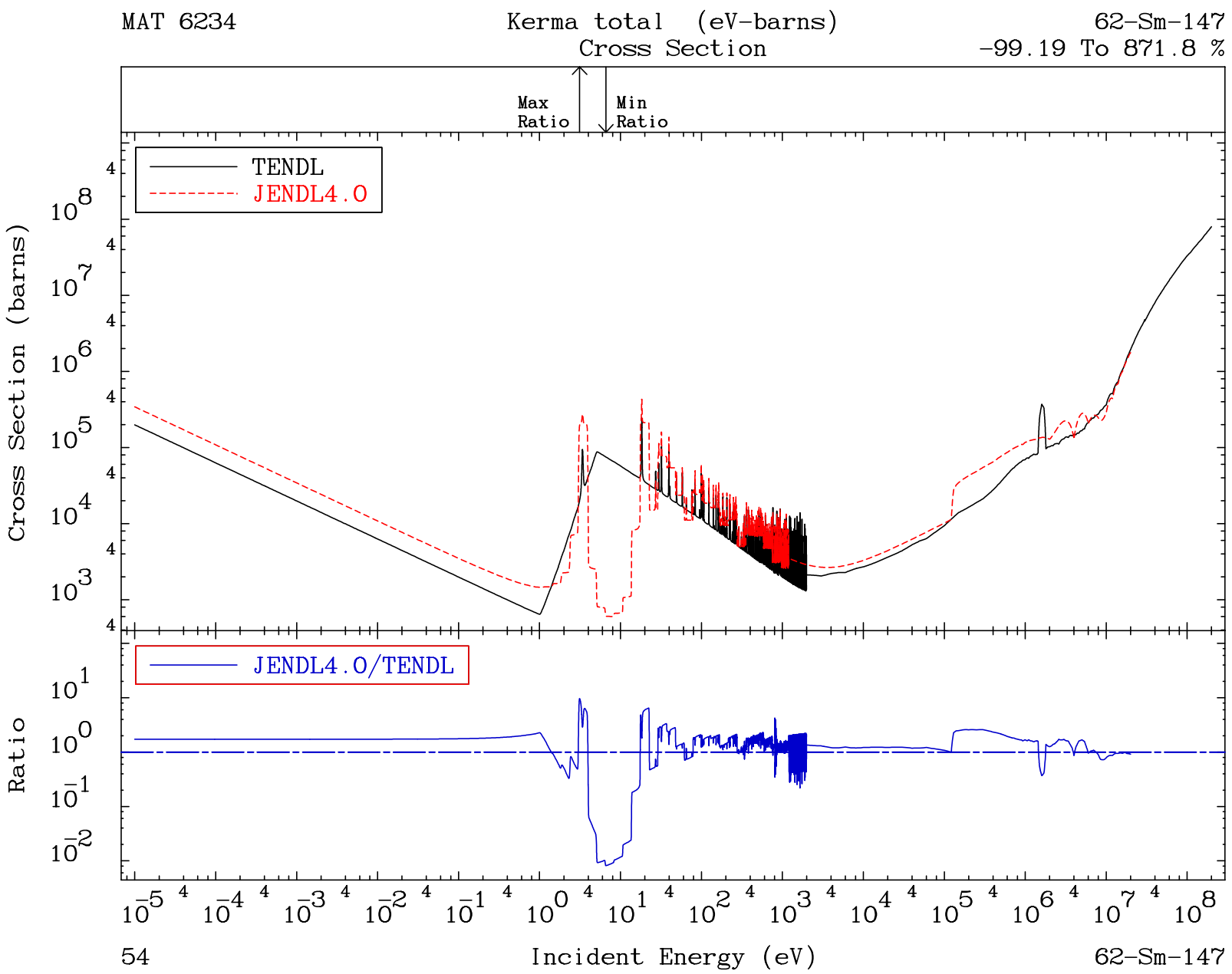

MAT 6234
Hydrogen Production
Cross Section
62-Sm-147
-87.60 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.9890 keV
JENDL4.0 Threshold 62.217 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
10^4
10^2
10^0
2 3 4 5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
49
Incident Energy (eV)
62-Sm-147

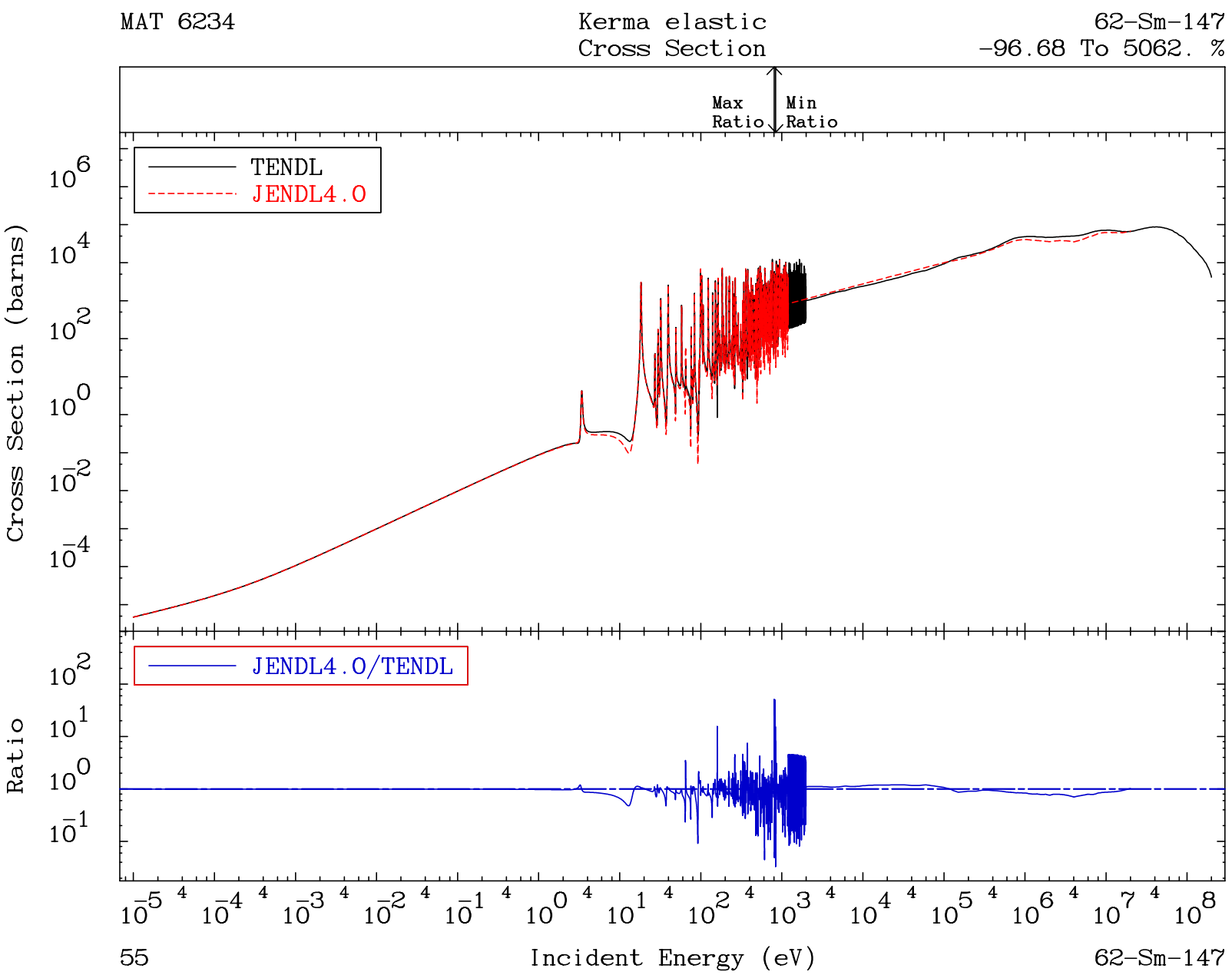

MAT 6234
Deuterium Production
Cross Section
62-Sm-147
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.9894 MeV
JENDL4.0 Threshold 4.9101 MeV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^6
10^3
10^0
10^-3
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
50
Incident Energy (eV)
62-Sm-147

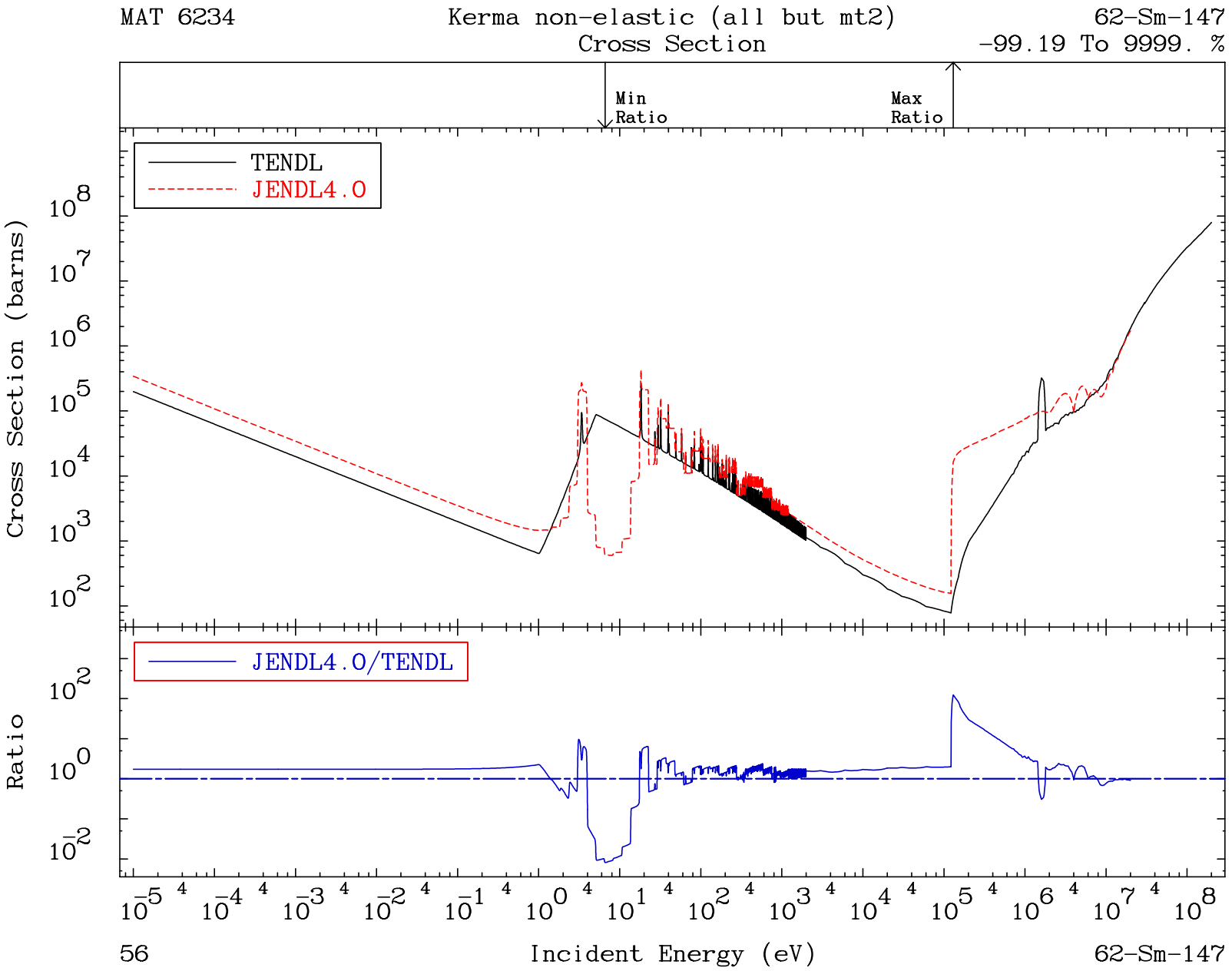

MAT 6234
Tritium Production
Cross Section
62-Sm-147
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.9105 MeV
JENDL4.0 Threshold 4.9105 MeV
Cross Section (milli-barns)
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^4
10^0
10^-4
10^-8
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
62-Sm-147

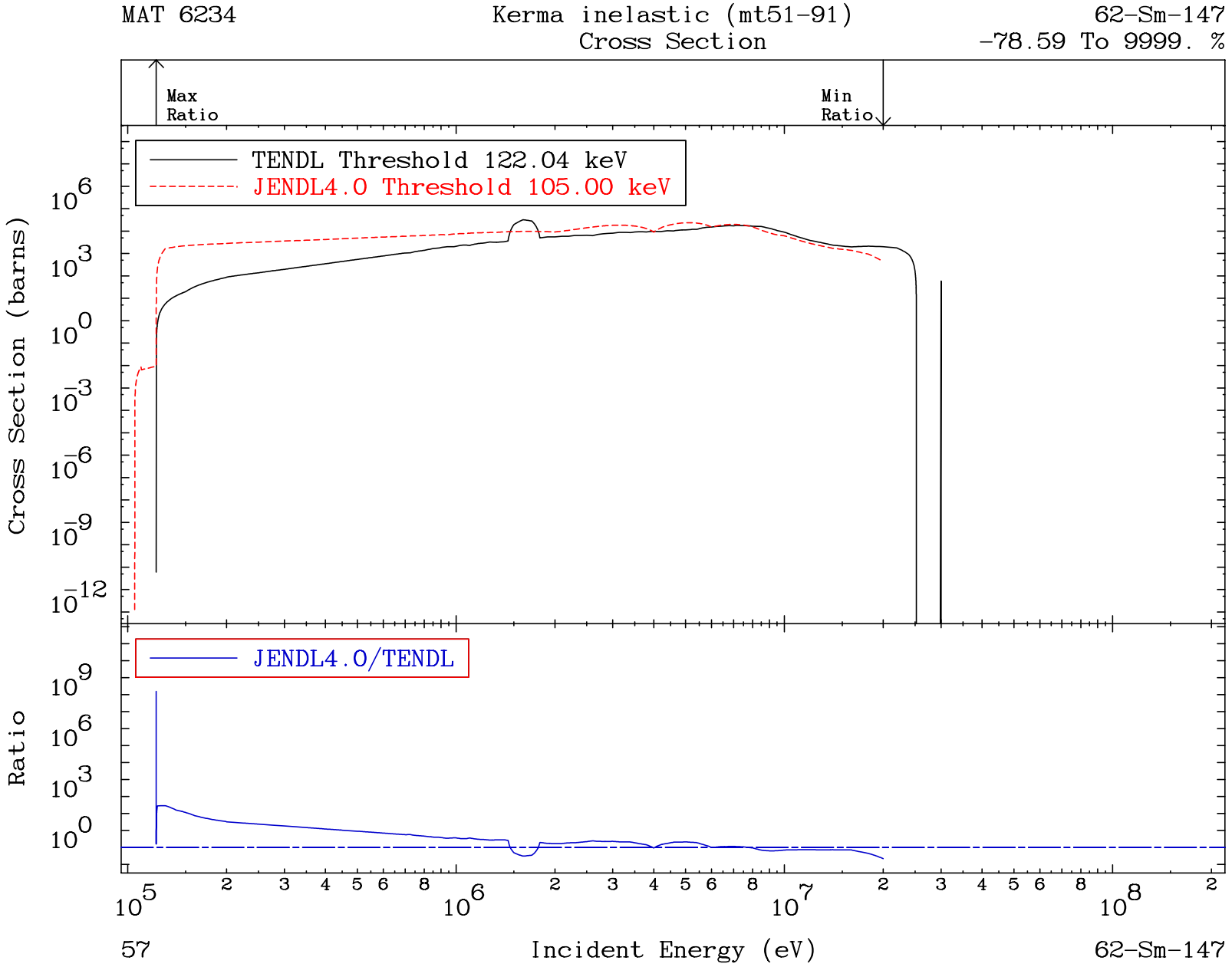

MAT 6234
He-3 Production
Cross Section
62-Sm-147
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.7261 MeV
JENDL4.0 Threshold 4.7271 MeV
Cross Section (milli-barns)
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^5
10^0
10^-5
10^-10
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
52
Incident Energy (eV)
62-Sm-147

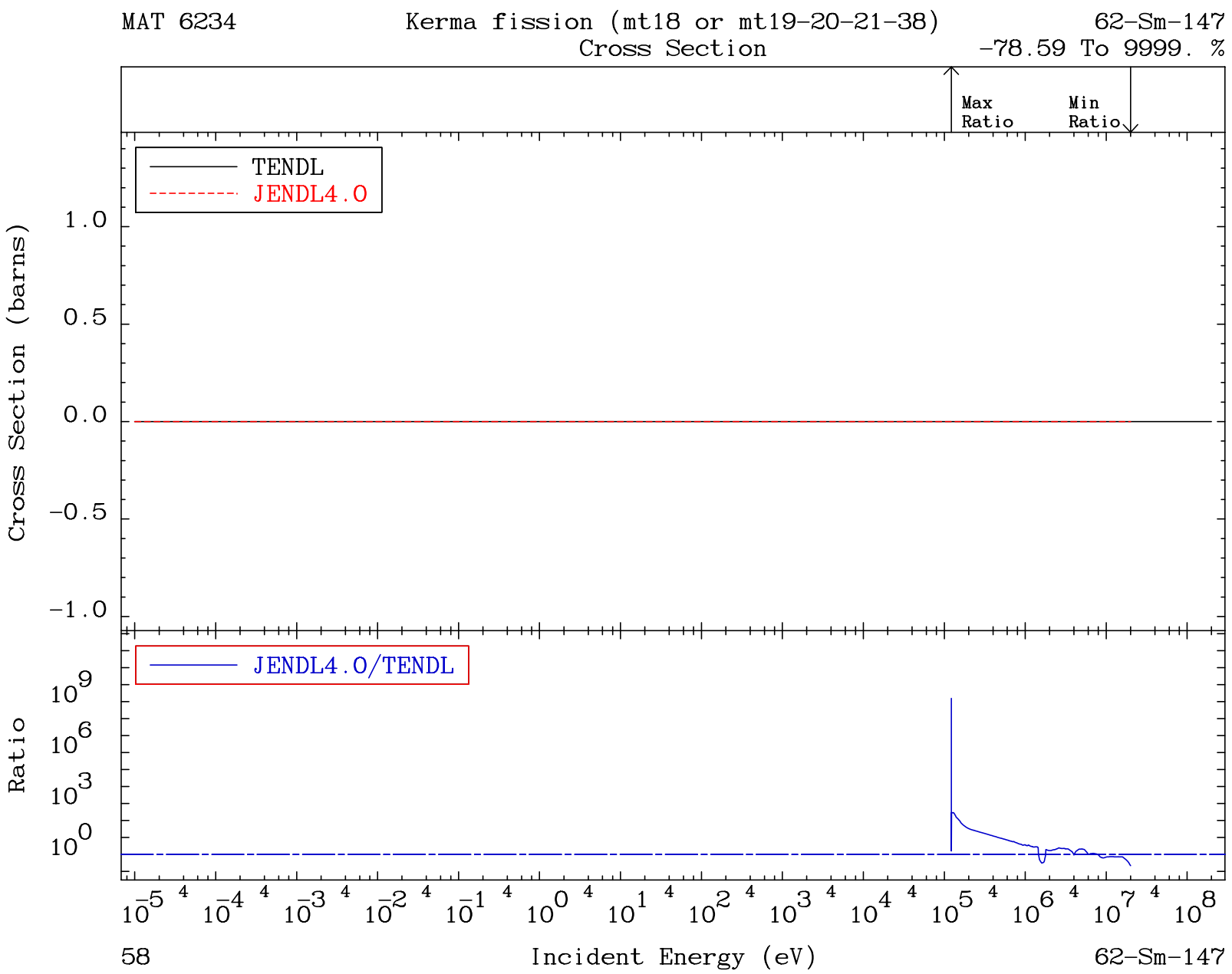

MAT 6234
He-4 Production
Cross Section
62-Sm-147
-99.39 To 964.5 %
Min
Ratio
Max
Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
53
62-Sm-147

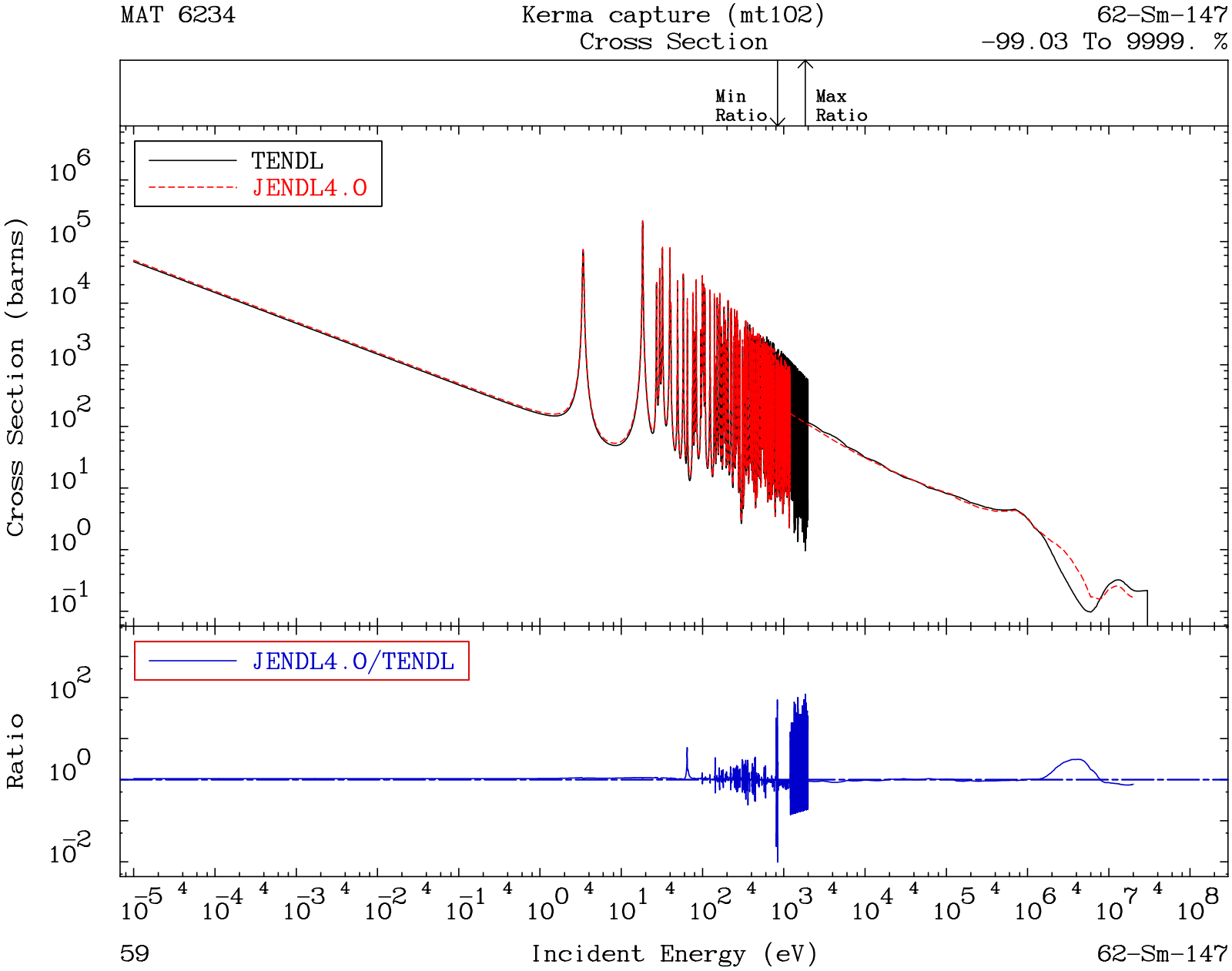

MAT 6234
Kerma total (eV-barns)
Cross Section
62-Sm-147
-99.19 To 871.8 %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
54
62-Sm-147

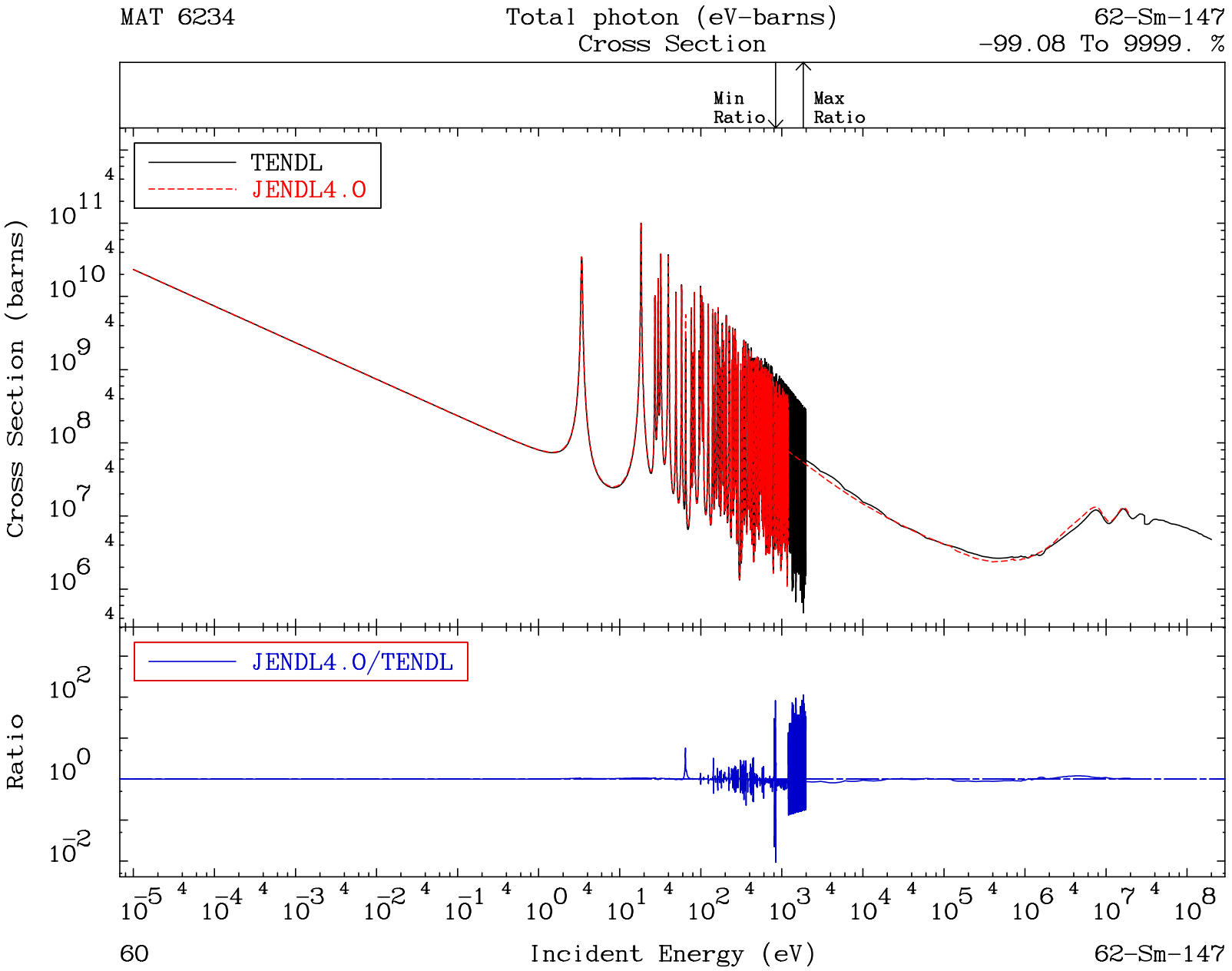

MAT 6234
Kerma elastic
Cross Section
62-Sm-147
-96.68 To 5062. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
55
62-Sm-147

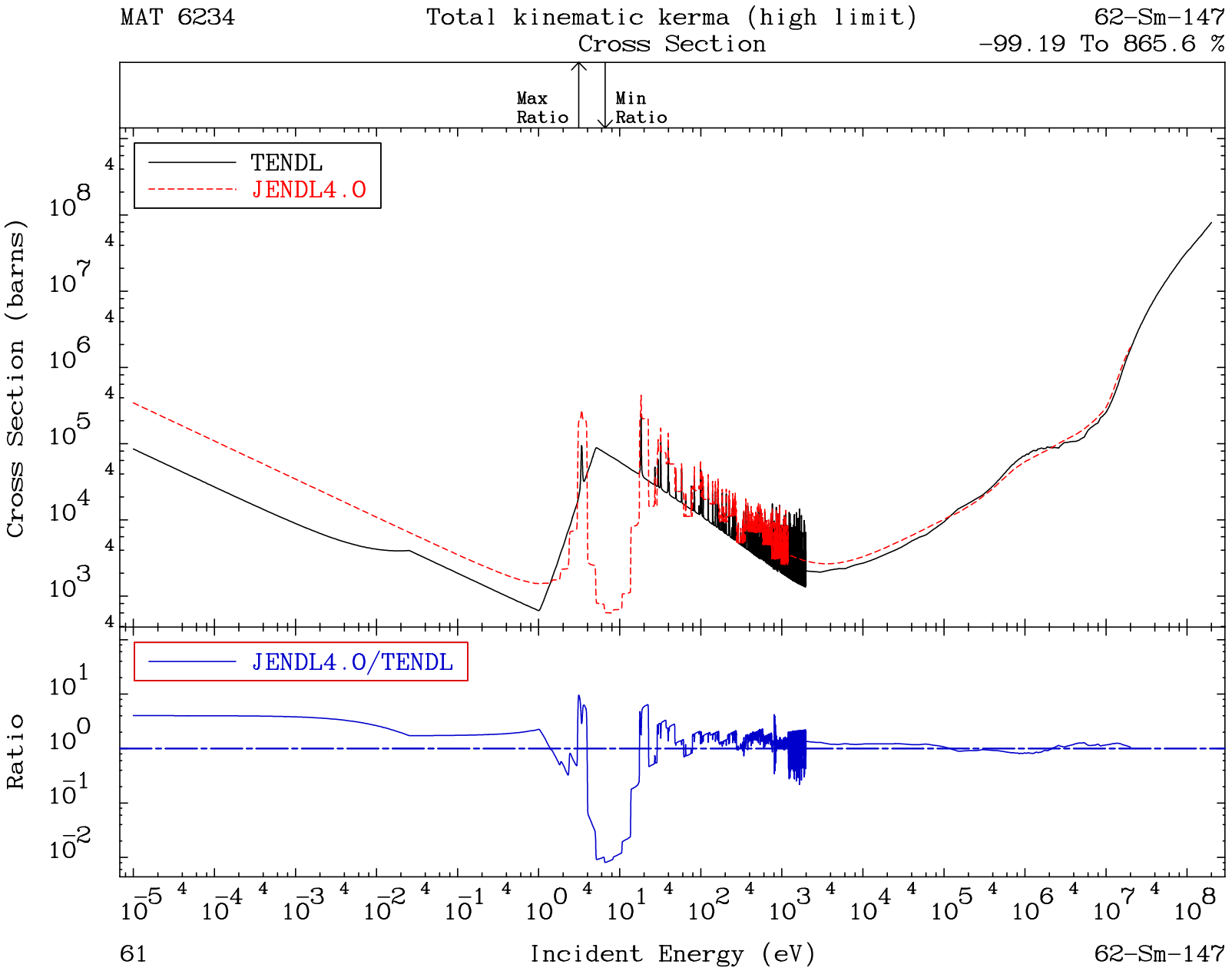

MAT 6234
Kerma non-elastic (all but mt2)
Cross Section
62-Sm-147
-99.19 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
56
62-Sm-147

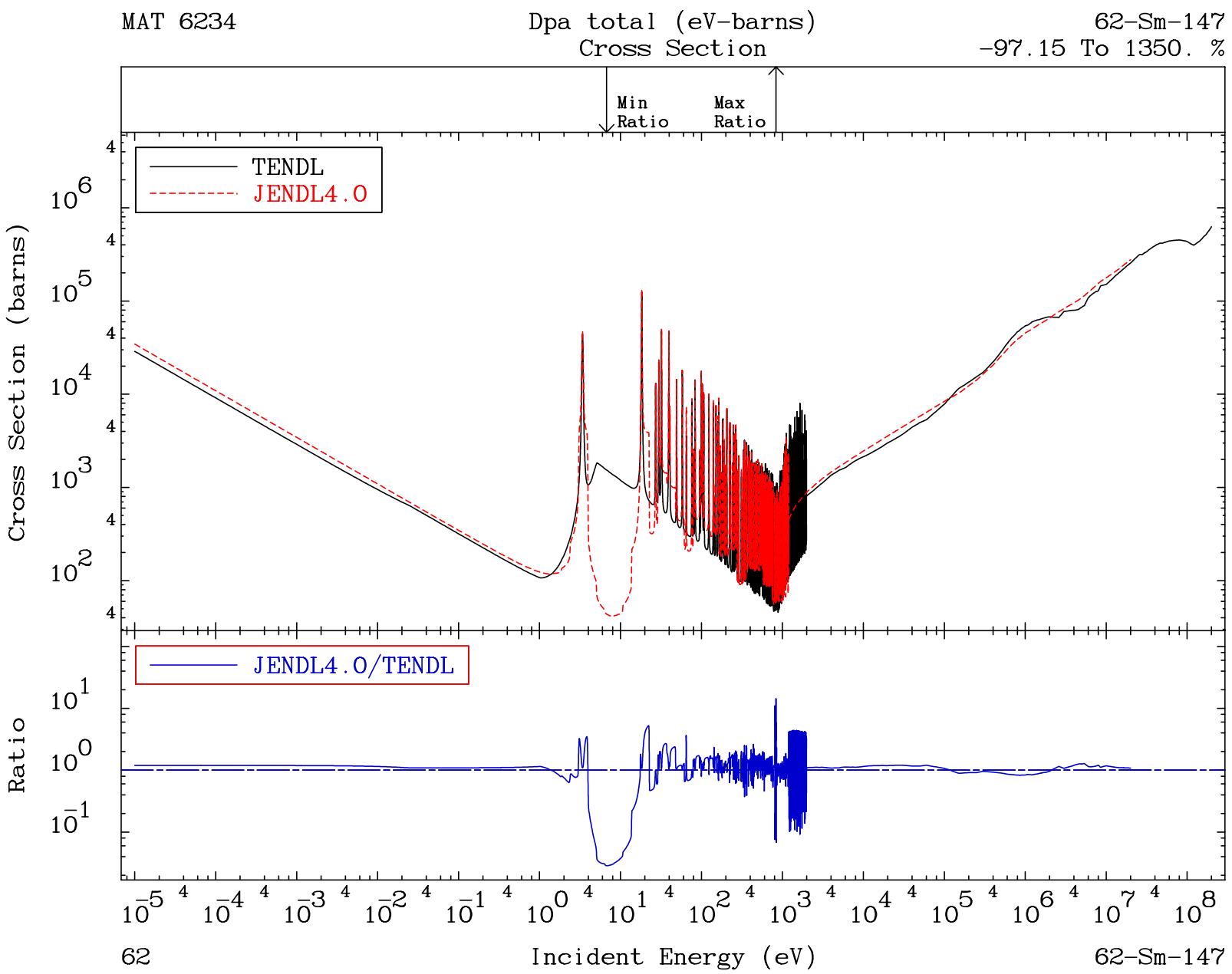

MAT 6234
Kerma inelastic (mt51-91)
Cross Section
62-Sm-147
-78.59 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 122.04 keV
JENDL4.0 Threshold 105.00 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
57
62-Sm-147

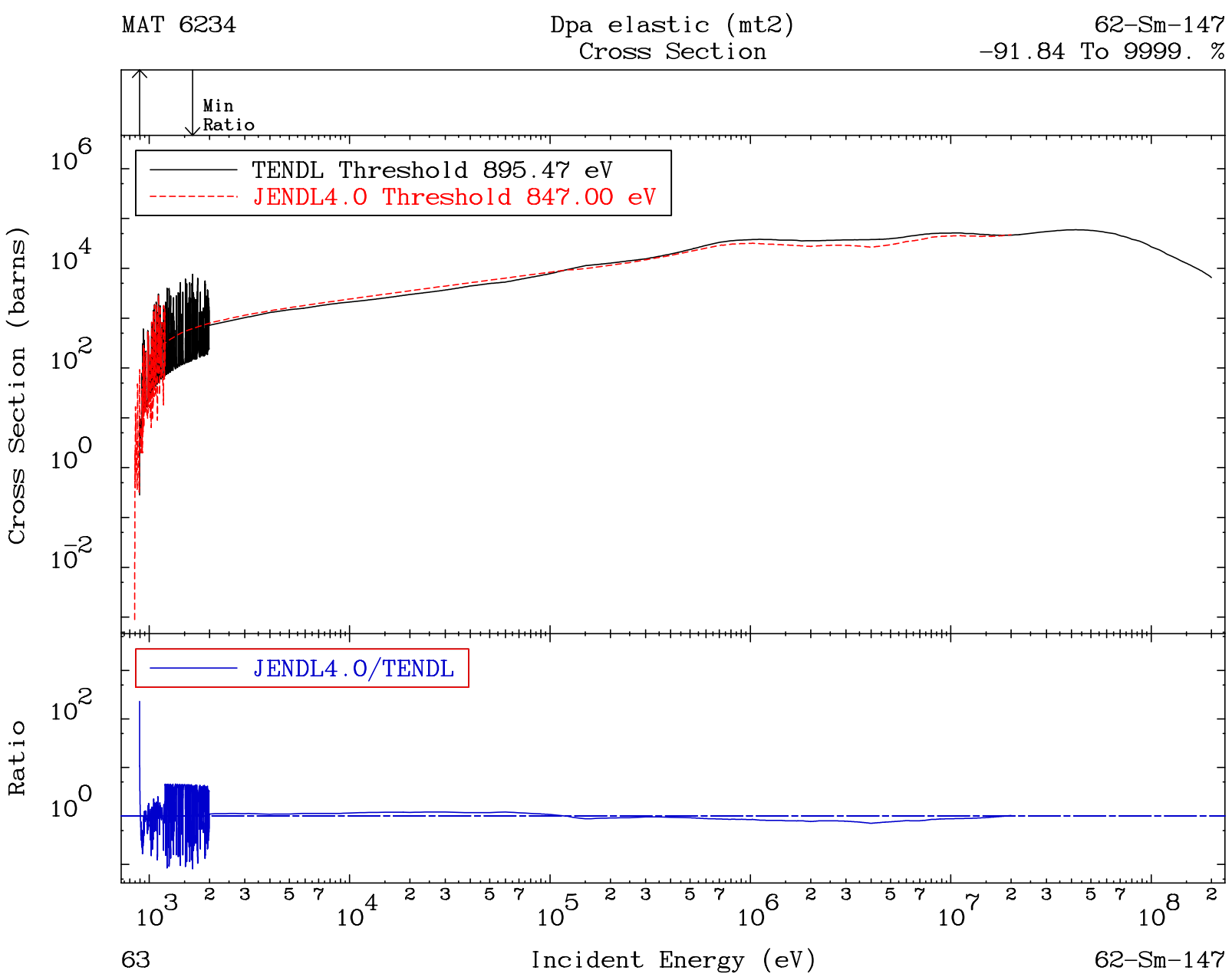

MAT 6234
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
62-Sm-147
-78.59 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JENDL4.0/TENDL
Ratio
10^9
10^6
10^3
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
58
Incident Energy (eV)
62-Sm-147

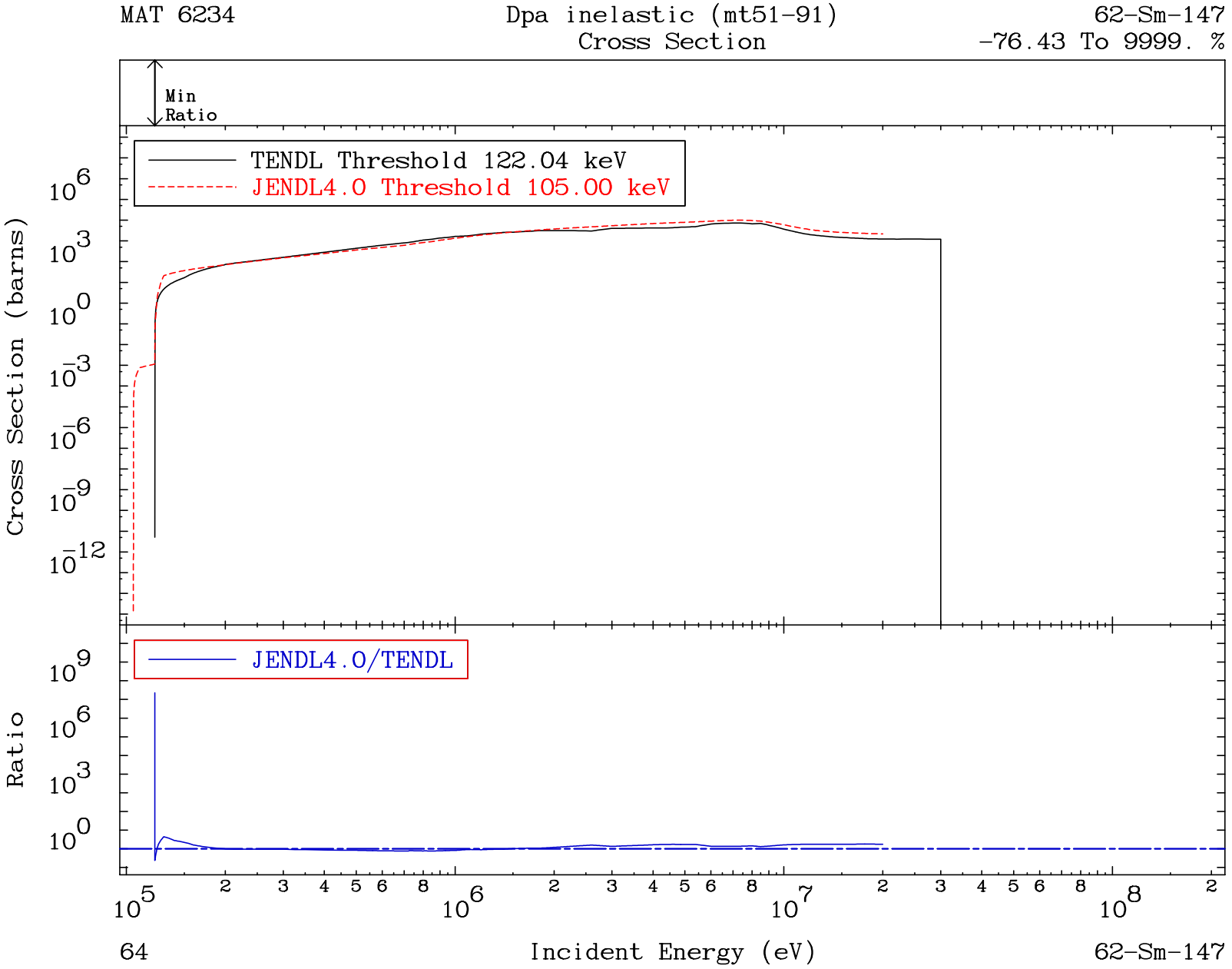

MAT 6234
Kerma capture (mt102)
Cross Section
62-Sm-147
-99.03 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
59
62-Sm-147

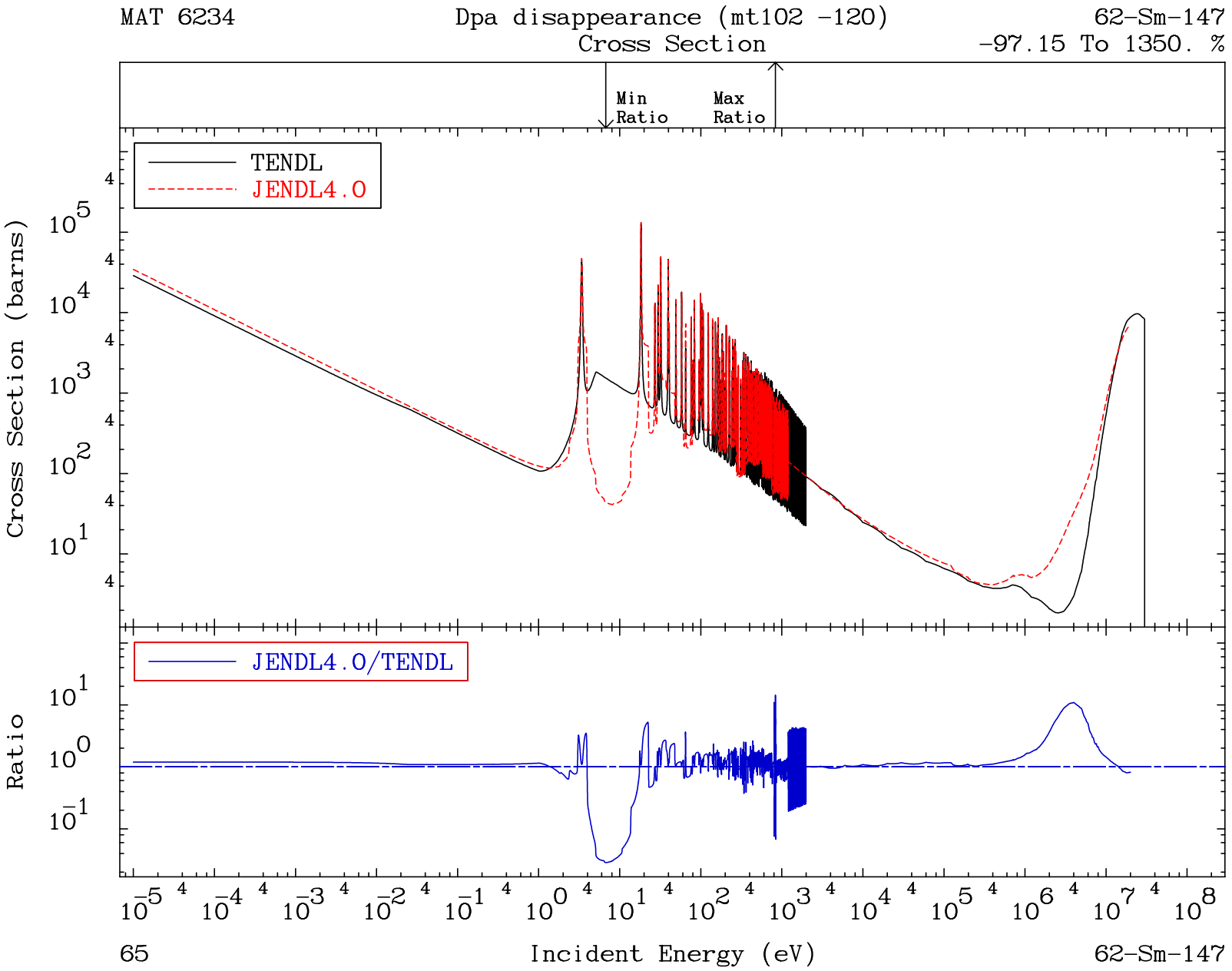

MAT 6234
Total photon (eV-barns)
Cross Section
62-Sm-147
-99.08 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
60
62-Sm-147

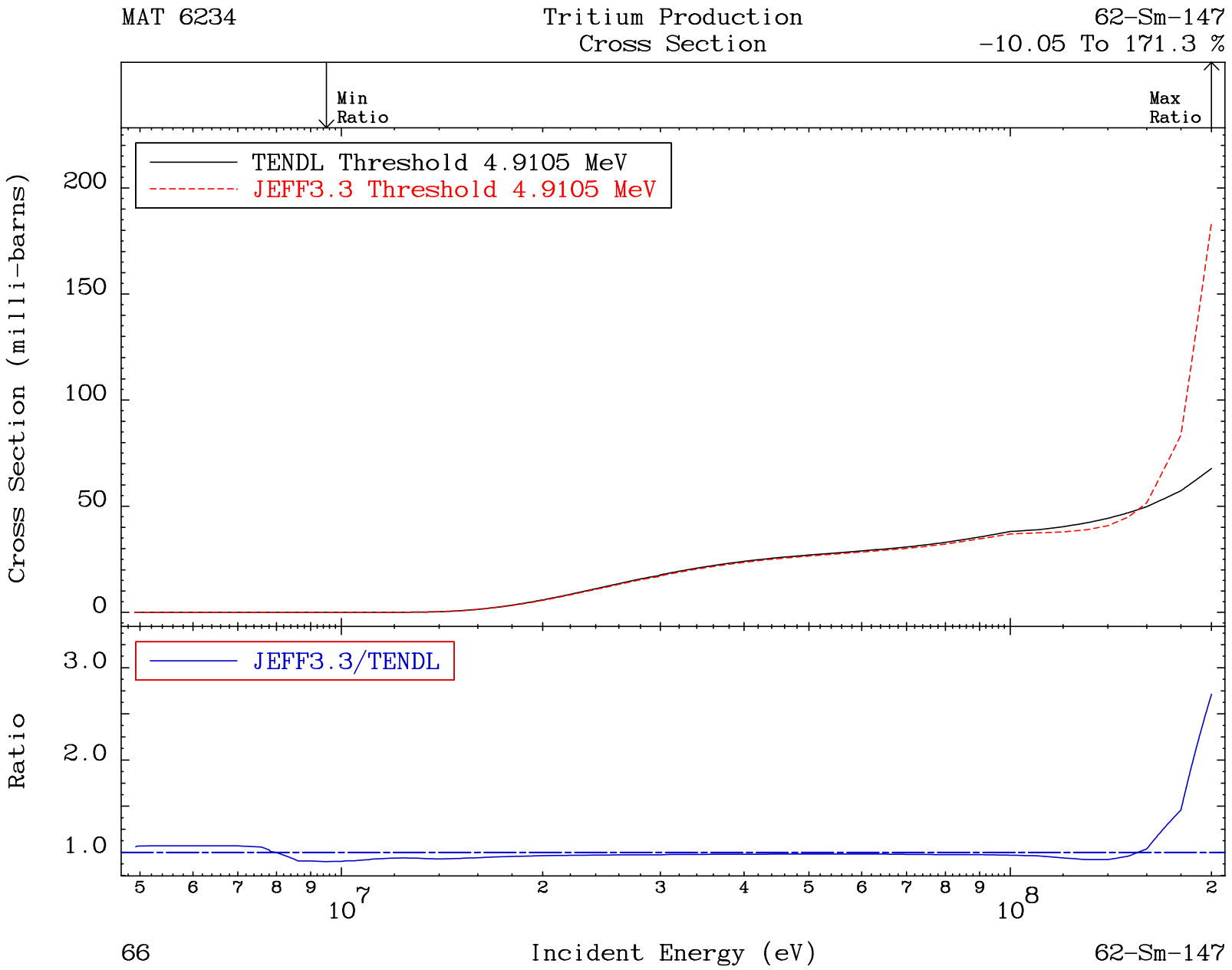

MAT 6234
Total kinematic kerma (high limit)
Cross Section
62-Sm-147
-99.19 To 865.6 %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
61
62-Sm-147

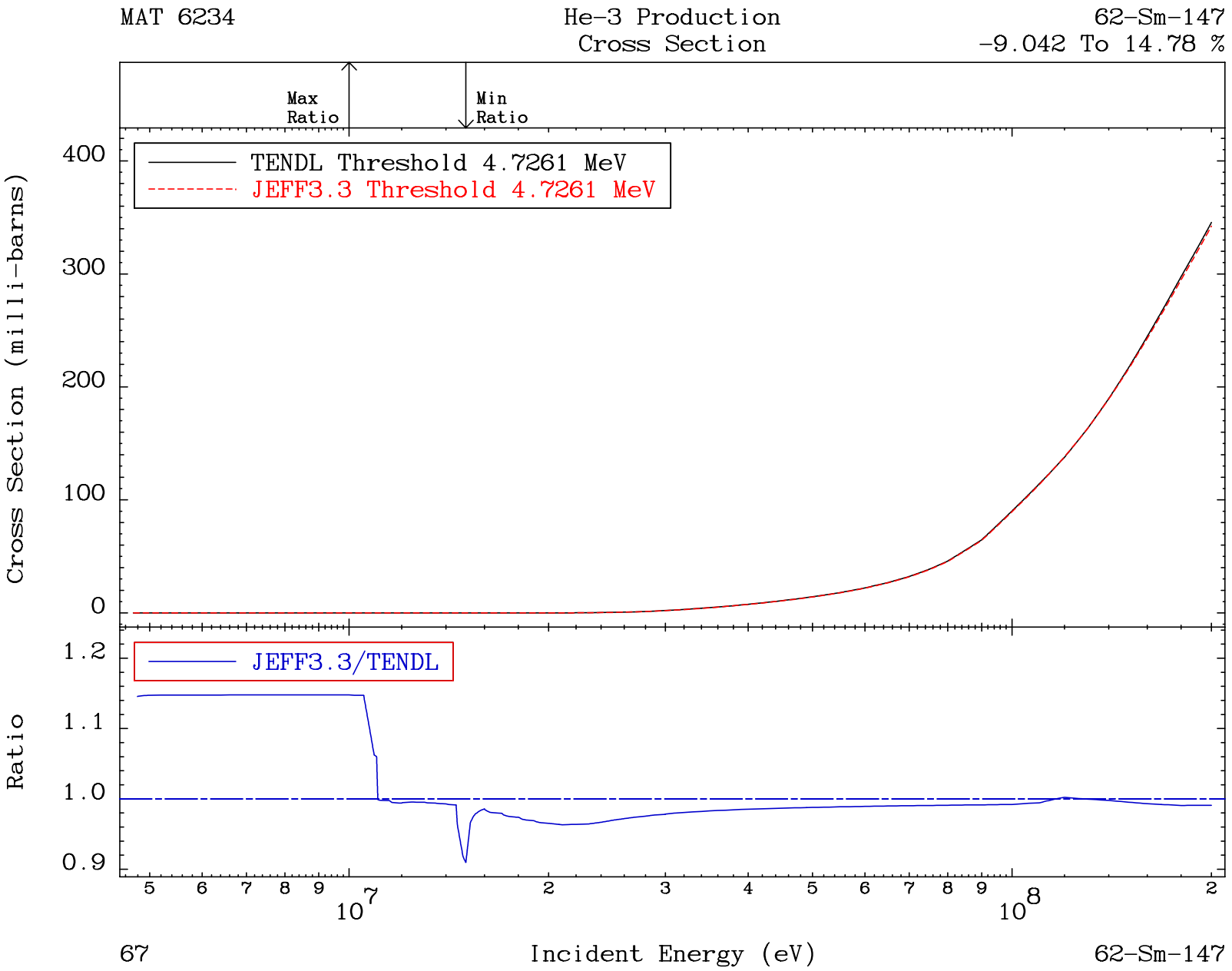

MAT 6234
Dpa total (eV-barns)
Cross Section
62-Sm-147
-97.15 To 1350. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
62
Incident Energy (eV)
62-Sm-147

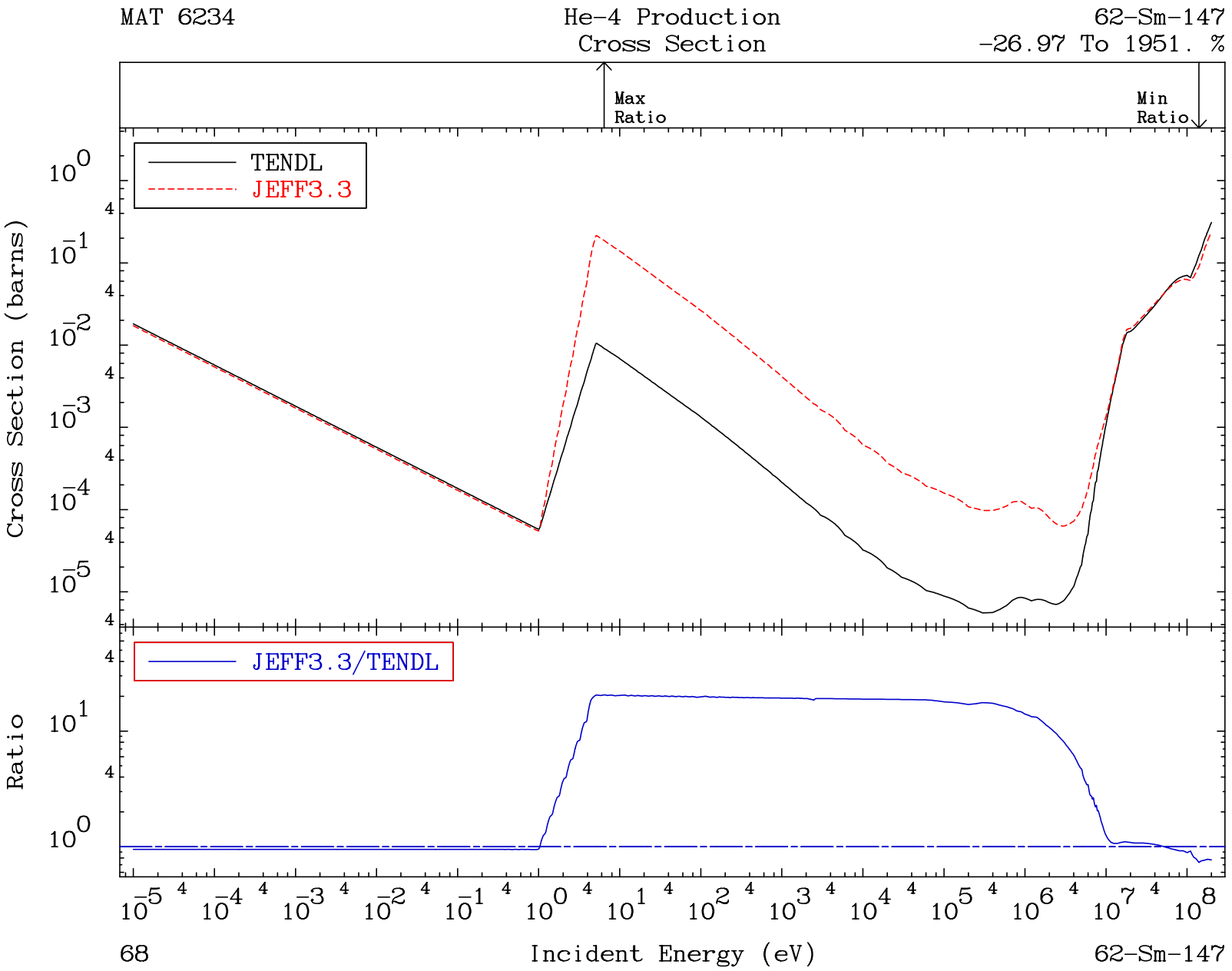

MAT 6234
Dpa elastic (mt2)
Cross Section
62-Sm-147
-91.84 To 9999. %
Min
Ratio
TENDL Threshold 895.47 eV
JENDL4.0 Threshold 847.00 eV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
63
62-Sm-147

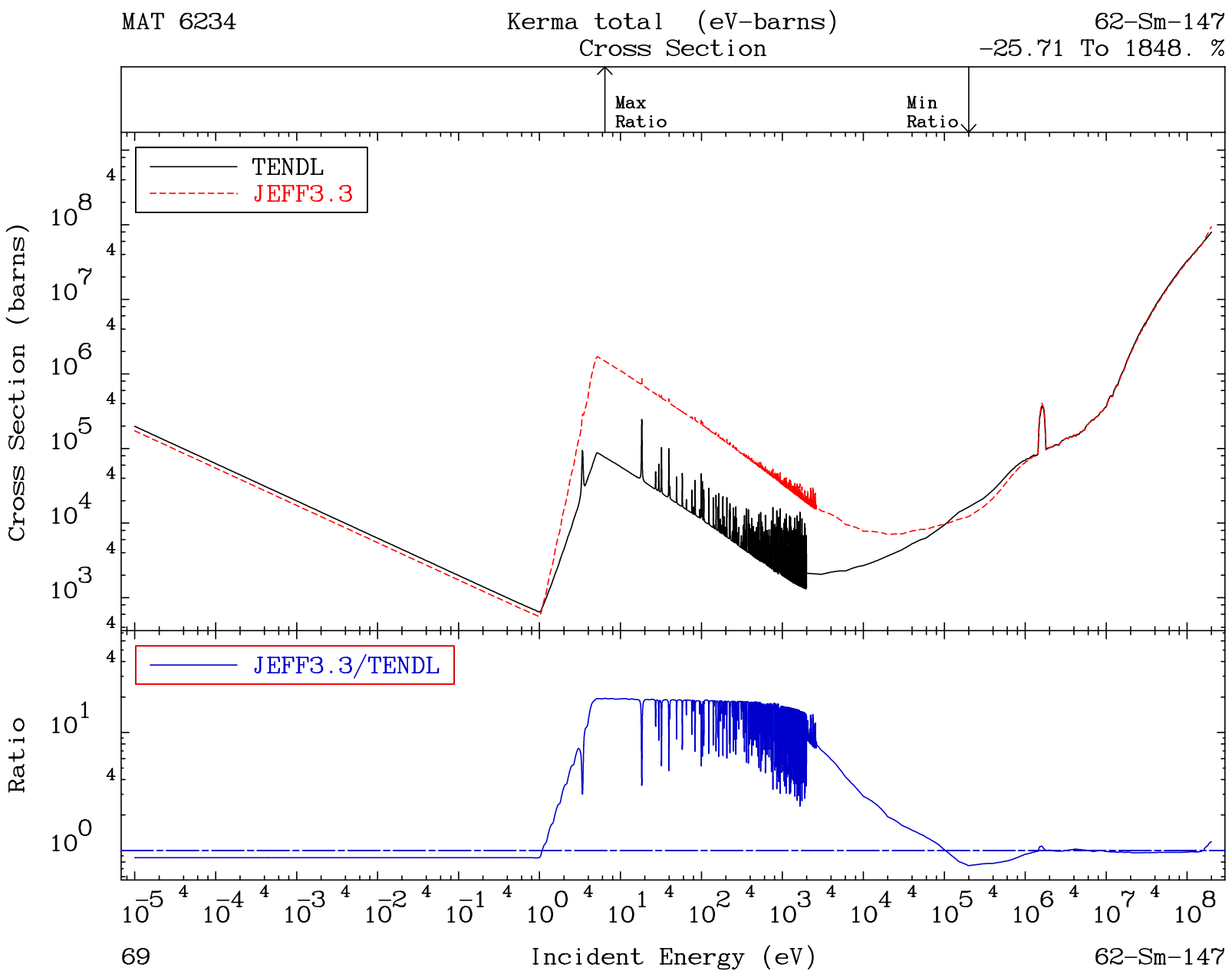

MAT 6234
Dpa inelastic (mt51-91)
Cross Section
62-Sm-147
-76.43 To 9999. %
Min
Ratio
TENDL Threshold 122.04 keV
JENDL4.0 Threshold 105.00 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
64
62-Sm-147

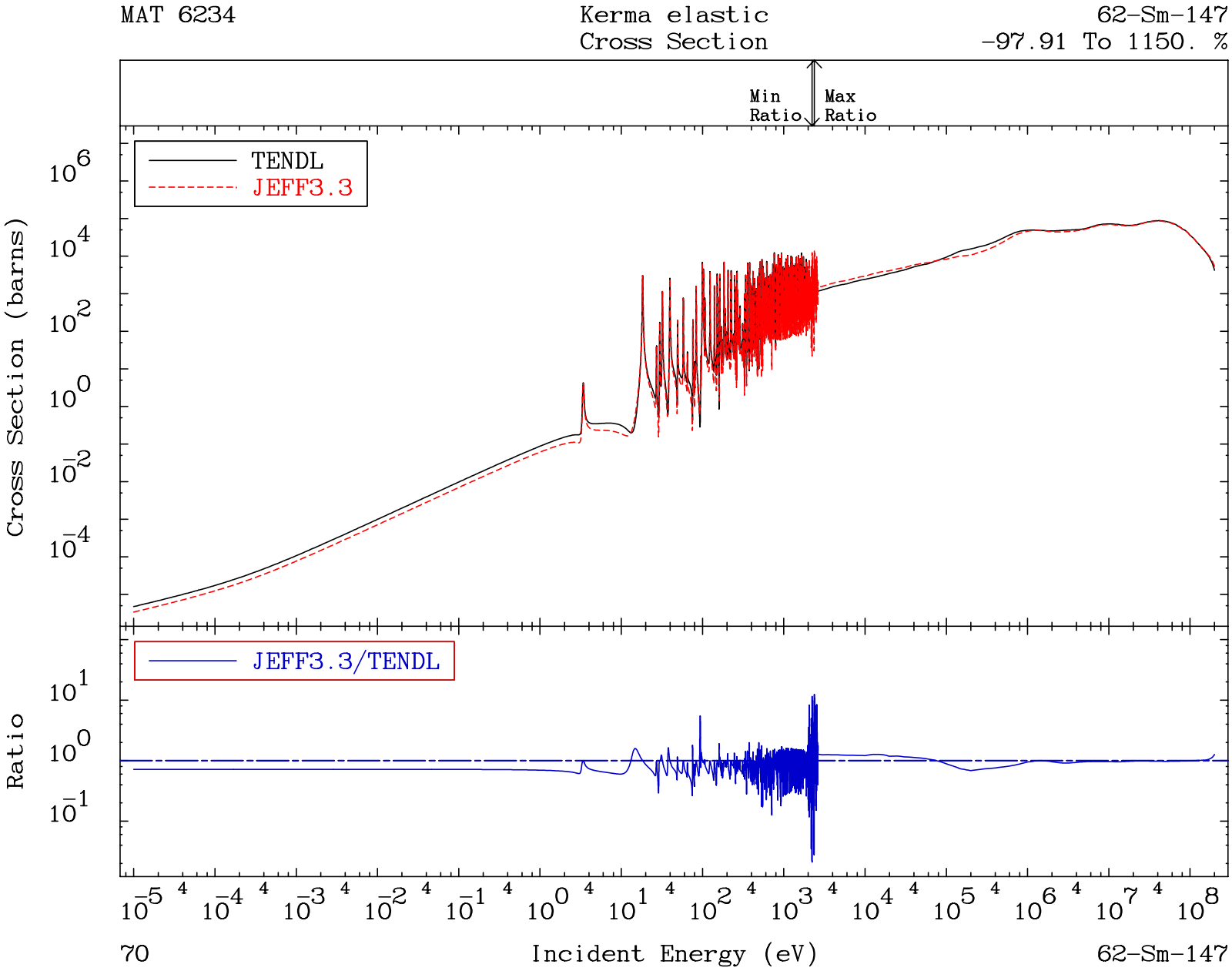

MAT 6234
Dpa disappearance (mt102 -120)
Cross Section
62-Sm-147
-97.15 To 1350. %
Min Ratio
Max Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
65
62-Sm-147

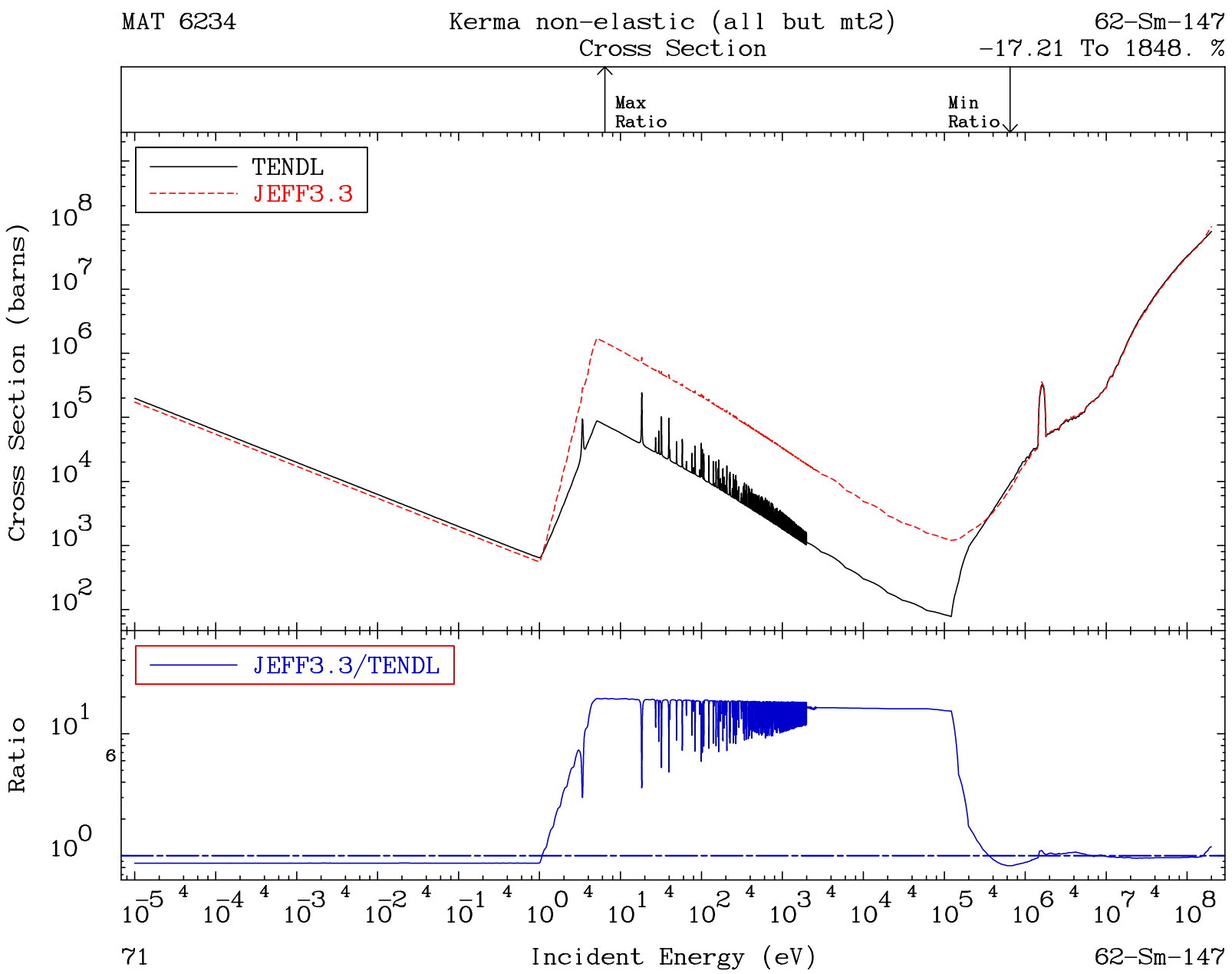

MAT 6234
Tritium Production
Cross Section
62-Sm-147
-10.05 To 171.3 %
Min
Ratio
Max
Ratio
TENDL Threshold 4.9105 MeV
JEFF3.3 Threshold 4.9105 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
66
Incident Energy (eV)
62-Sm-147

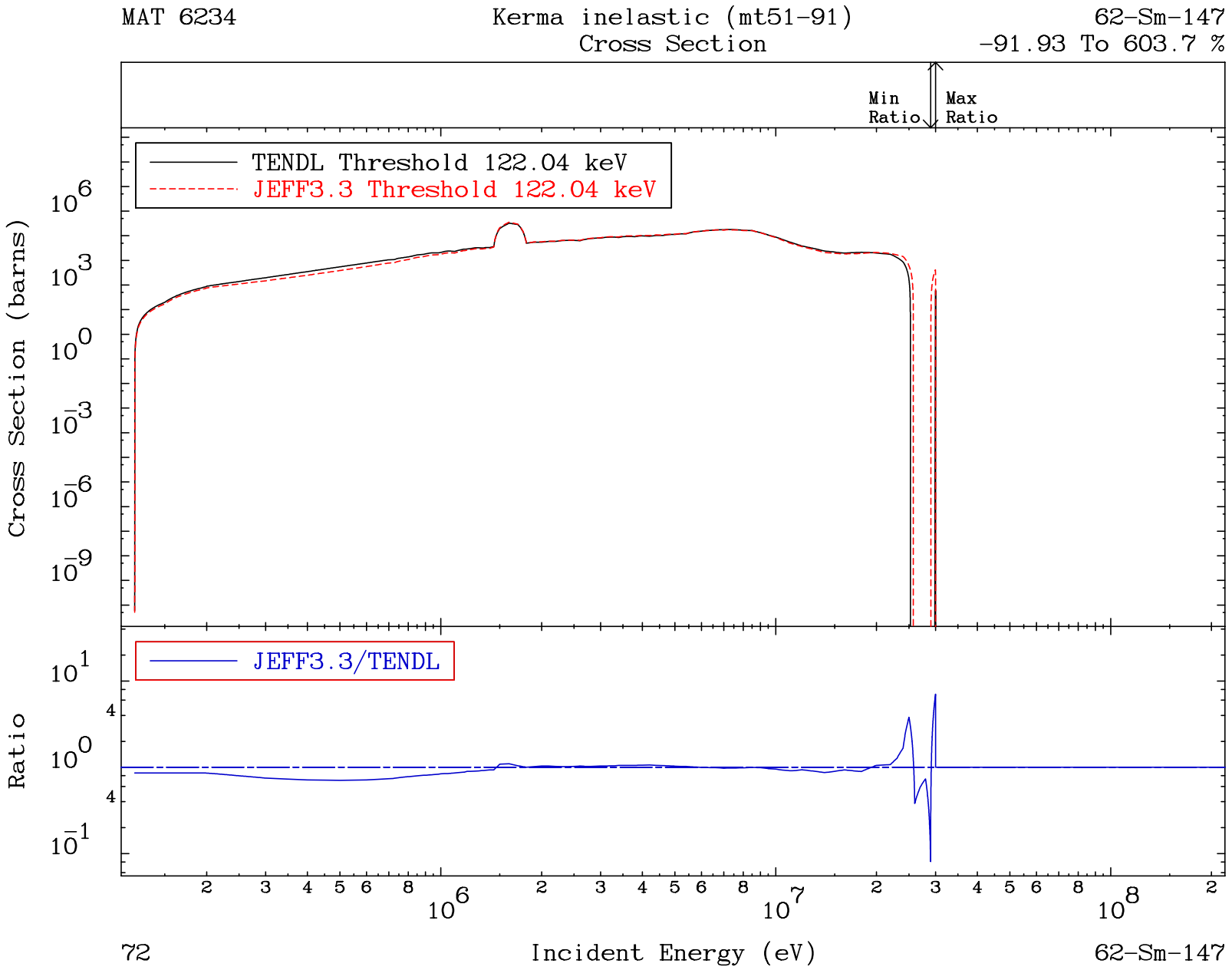

MAT 6234
He-3 Production
Cross Section
62-Sm-147
-9.042 To 14.78 %
Max Ratio
Min Ratio
TENDL Threshold 4.7261 MeV
JEFF3.3 Threshold 4.7261 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
0.9
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
67
Incident Energy (eV)
62-Sm-147

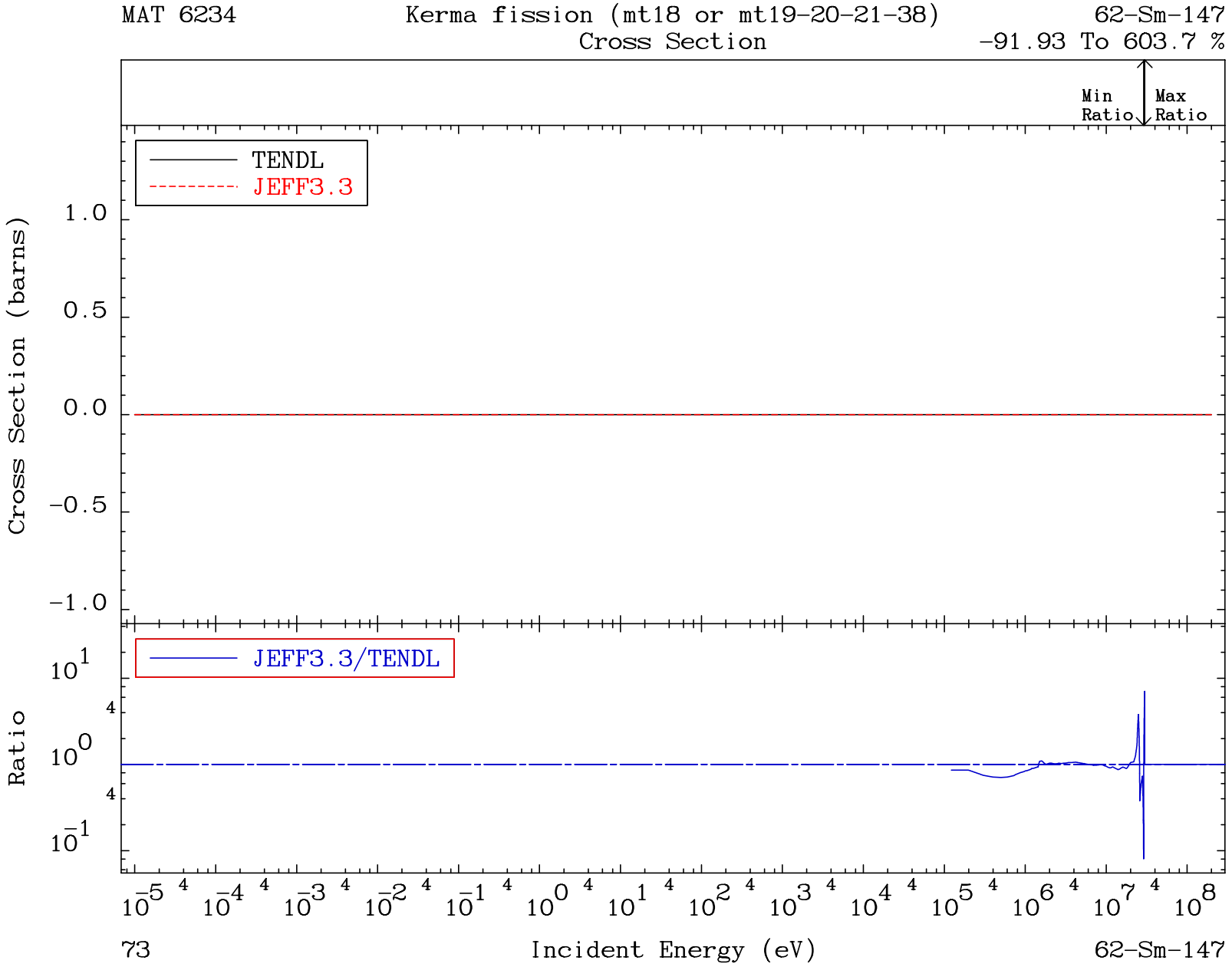

MAT 6234
He-4 Production
Cross Section
62-Sm-147
-26.97 To 1951. %
Max
Ratio
Min
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
62-Sm-147

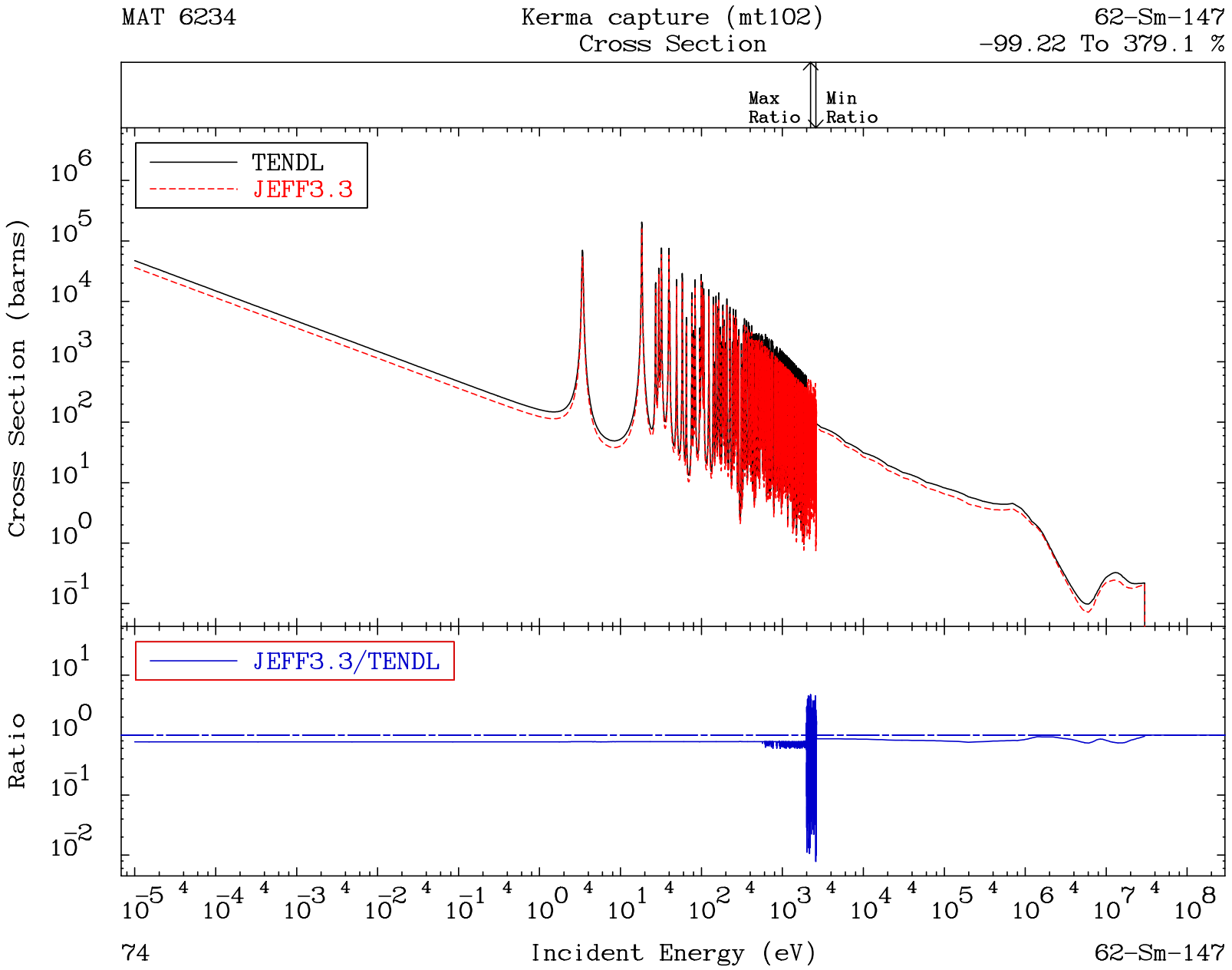

MAT 6234
Kerma total (eV-barns)
Cross Section
62-Sm-147
-25.71 To 1848. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
62-Sm-147

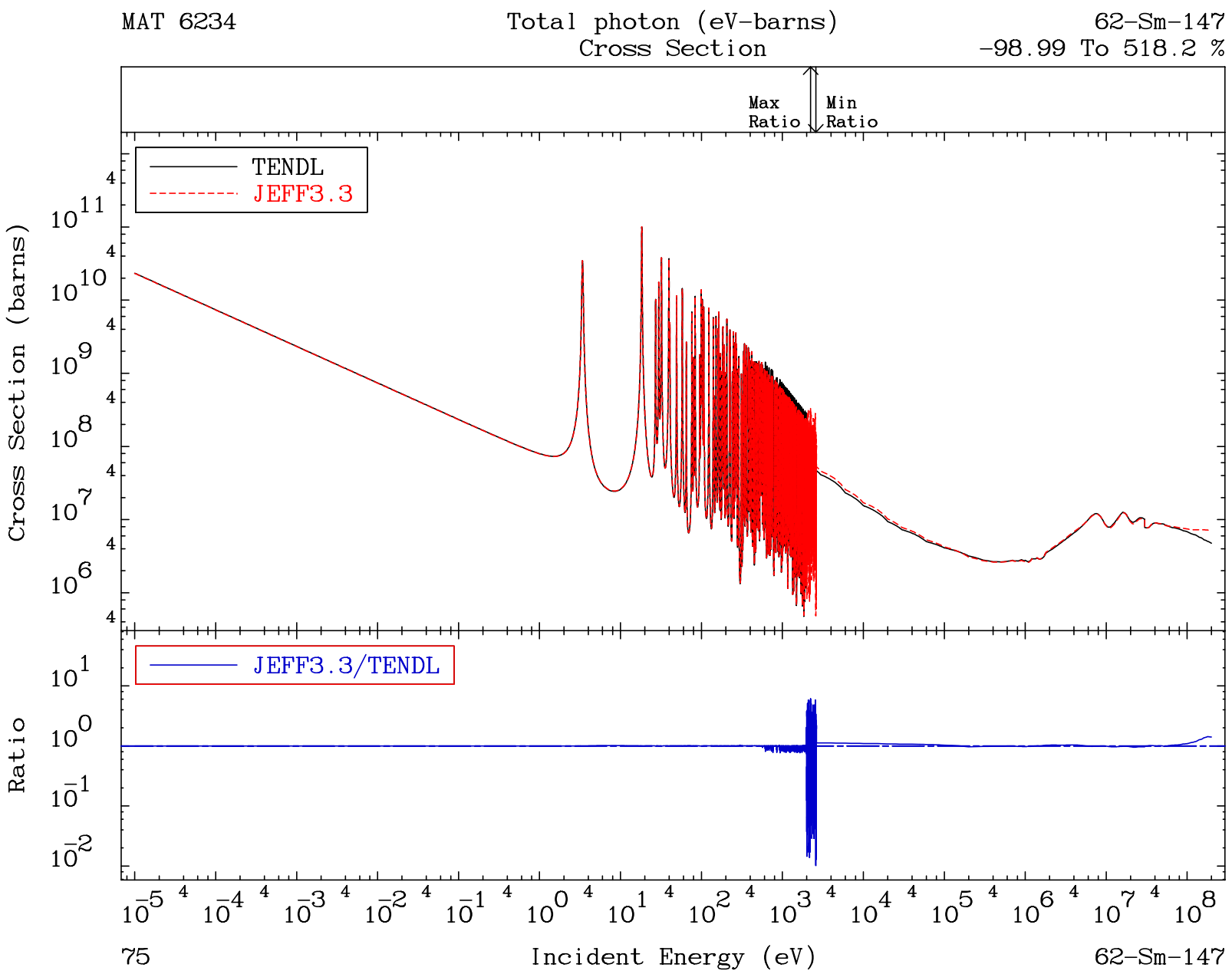

MAT 6234
Kerma elastic
Cross Section
62-Sm-147
-97.91 To 1150. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
62-Sm-147

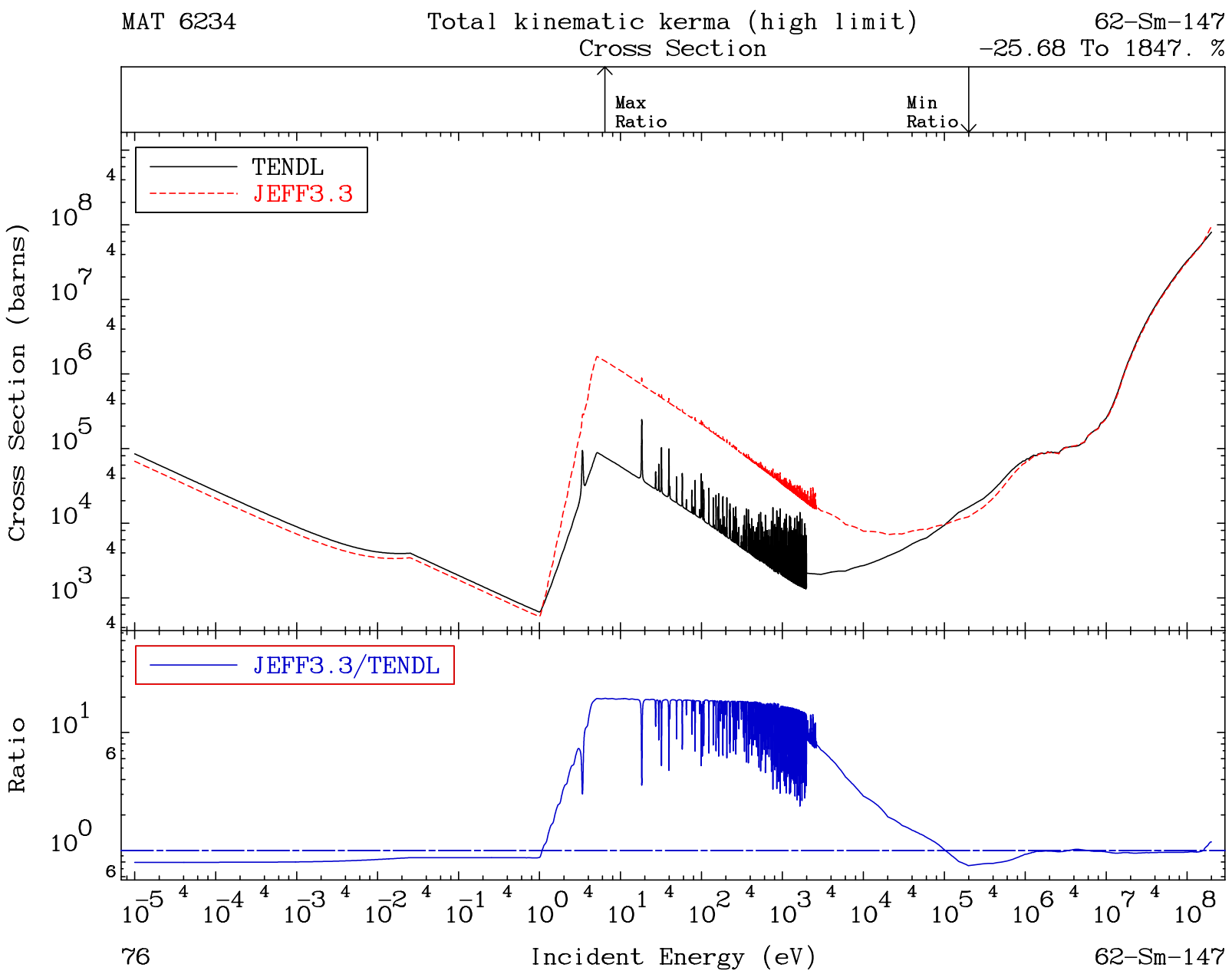

MAT 6234
Kerma non-elastic (all but mt2)
Cross Section
62-Sm-147
-17.21 To 1848. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
62-Sm-147

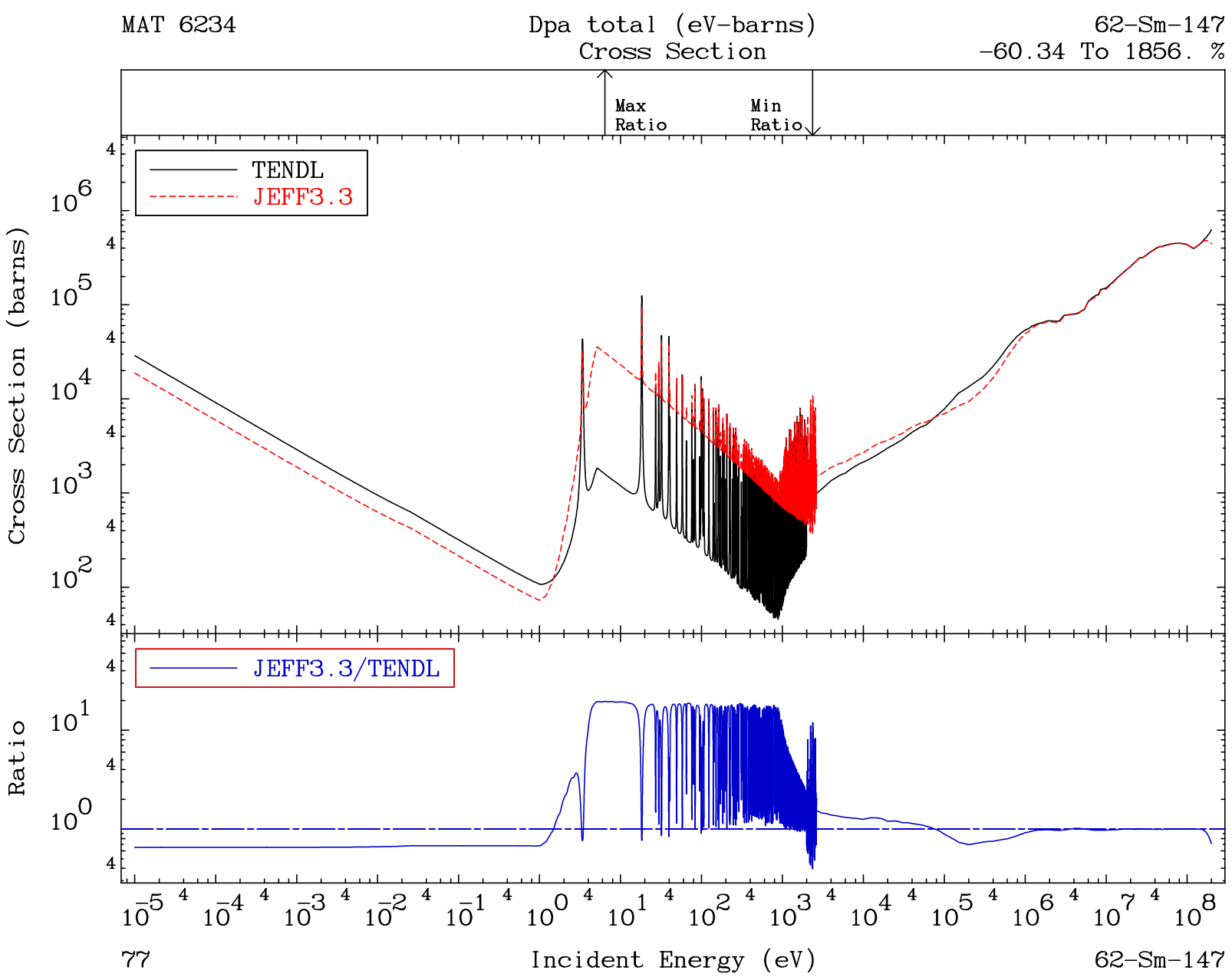

MAT 6234
Kerma inelastic (mt51-91)
Cross Section
62-Sm-147
-91.93 To 603.7 %
Min Ratio
Max Ratio
TENDL Threshold 122.04 keV
JEFF3.3 Threshold 122.04 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
62-Sm-147

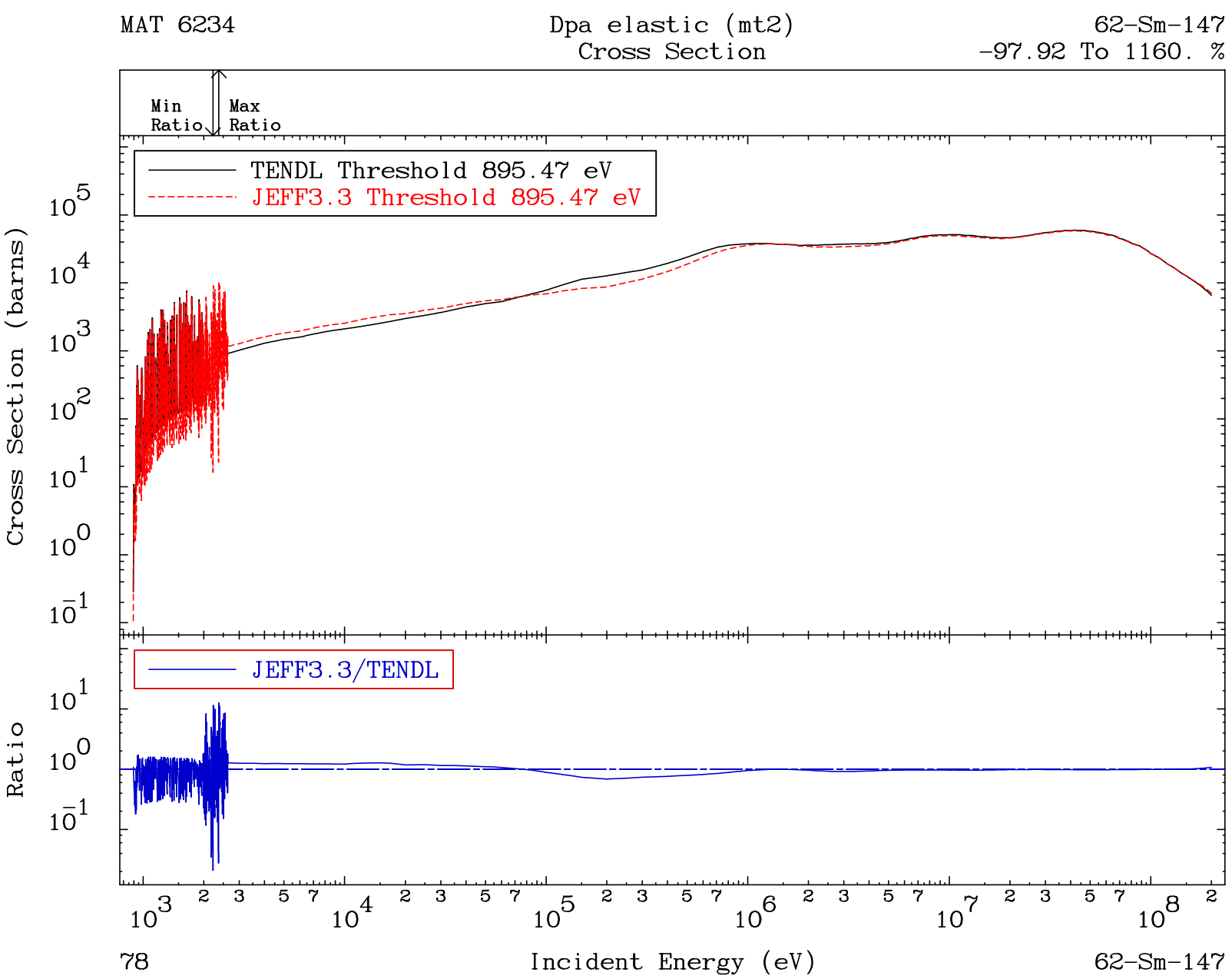

MAT 6234
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
62-Sm-147
-91.93 To 603.7 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
10^1
10^0
10^-1
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
73
Incident Energy (eV)
62-Sm-147

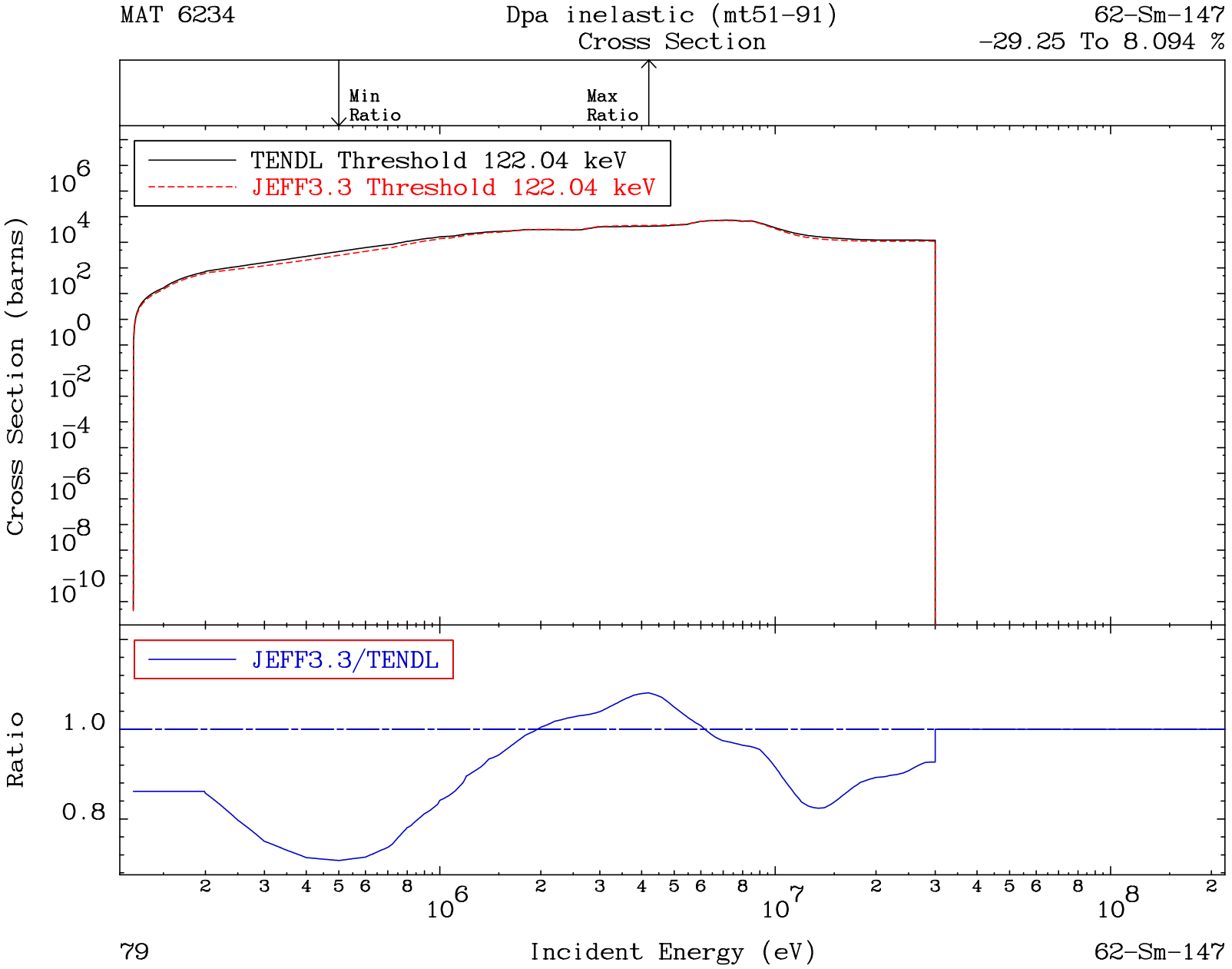

MAT 6234
Kerma capture (mt102)
Cross Section
62-Sm-147
-99.22 To 379.1 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
74
62-Sm-147

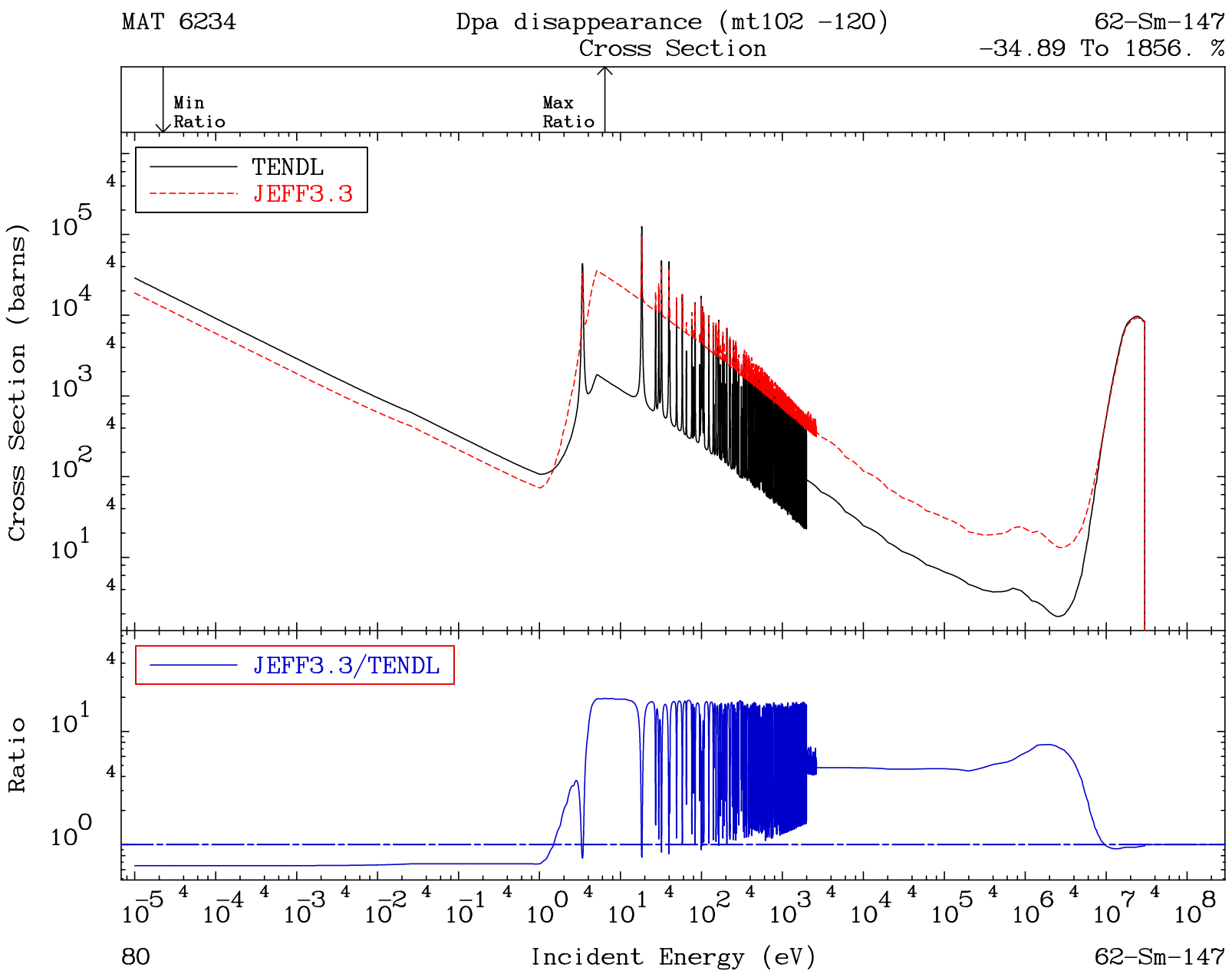

MAT 6234
Total photon (eV-barns)
Cross Section
62-Sm-147
-98.99 To 518.2 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
62-Sm-147

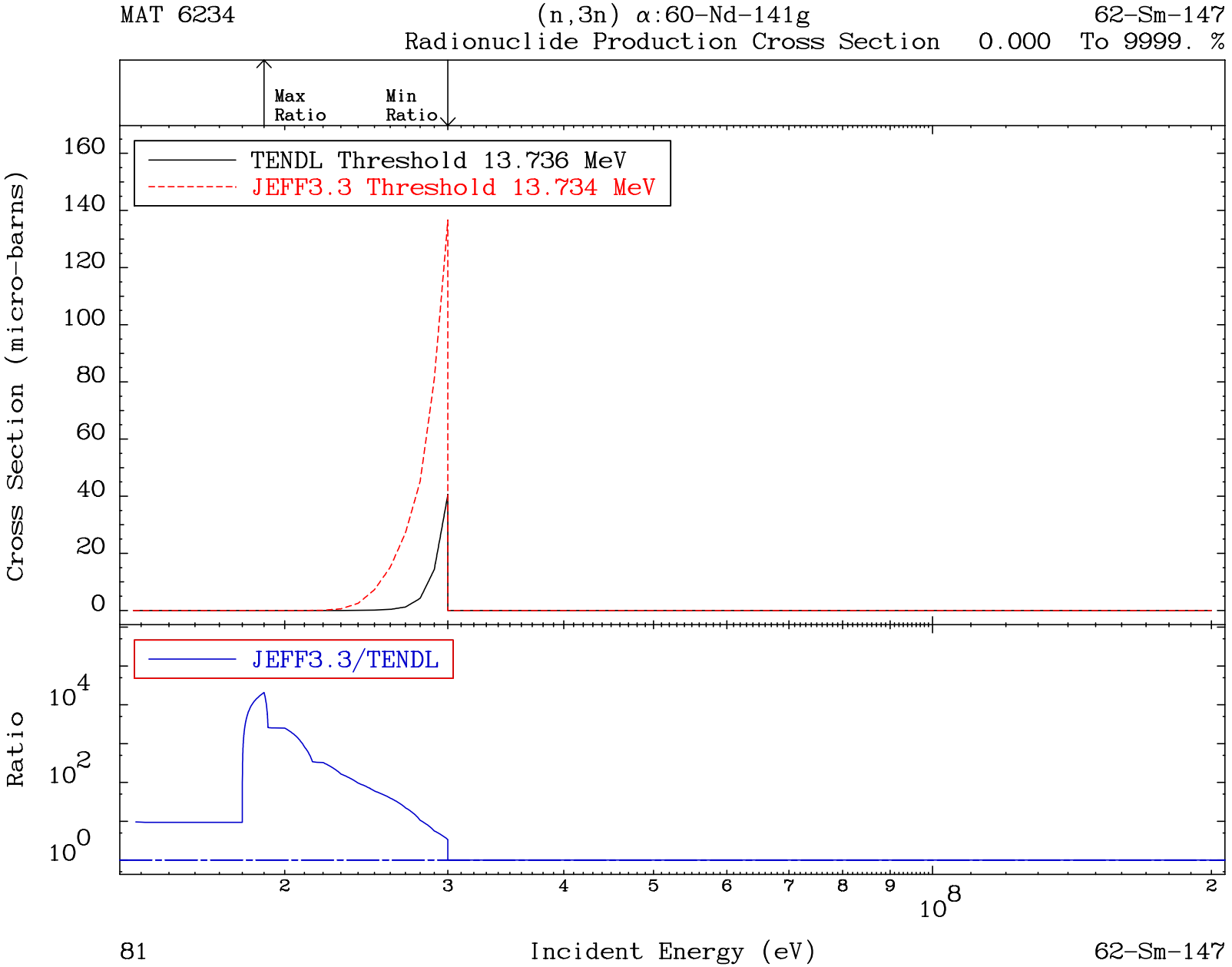

MAT 6234
Total kinematic kerma (high limit)
Cross Section
62-Sm-147
-25.68 To 1847. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
76
62-Sm-147

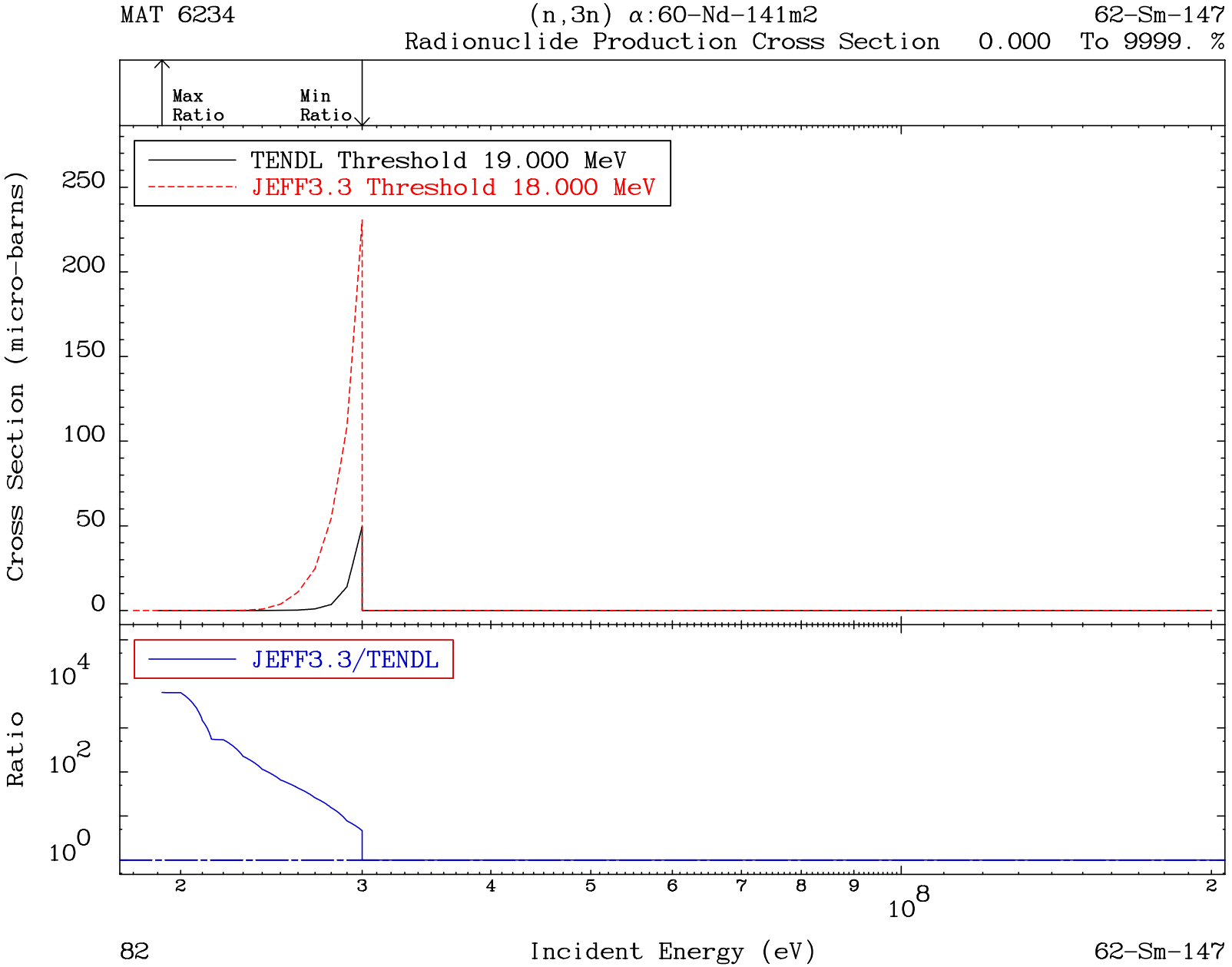

MAT 6234
Dpa total (eV-barns)
Cross Section
62-Sm-147
-60.34 To 1856. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
62-Sm-147

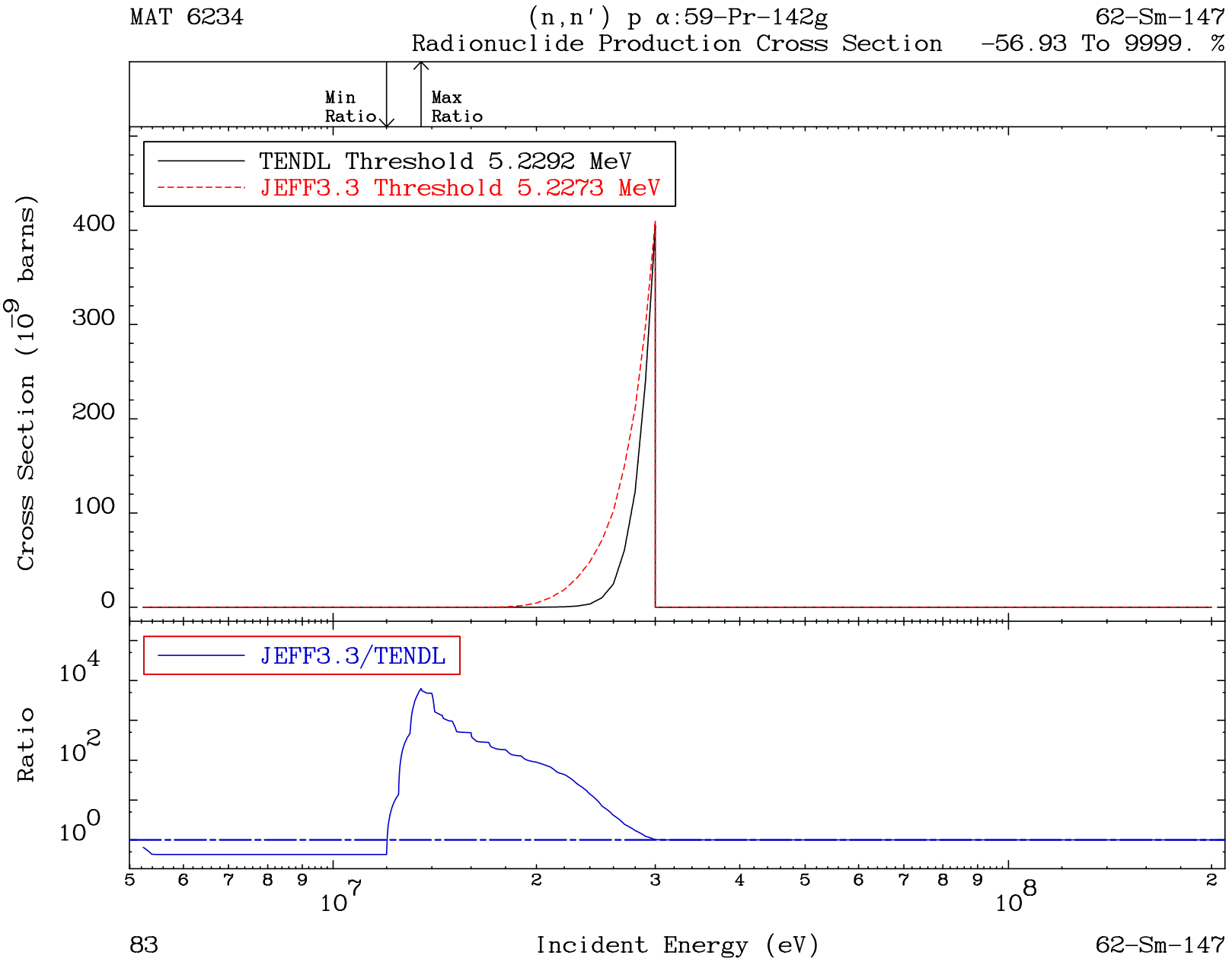

MAT 6234
Dpa elastic (mt2)
Cross Section
62-Sm-147
-97.92 To 1160. %
Min Ratio
Max Ratio
TENDL Threshold 895.47 eV
JEFF3.3 Threshold 895.47 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
78
62-Sm-147

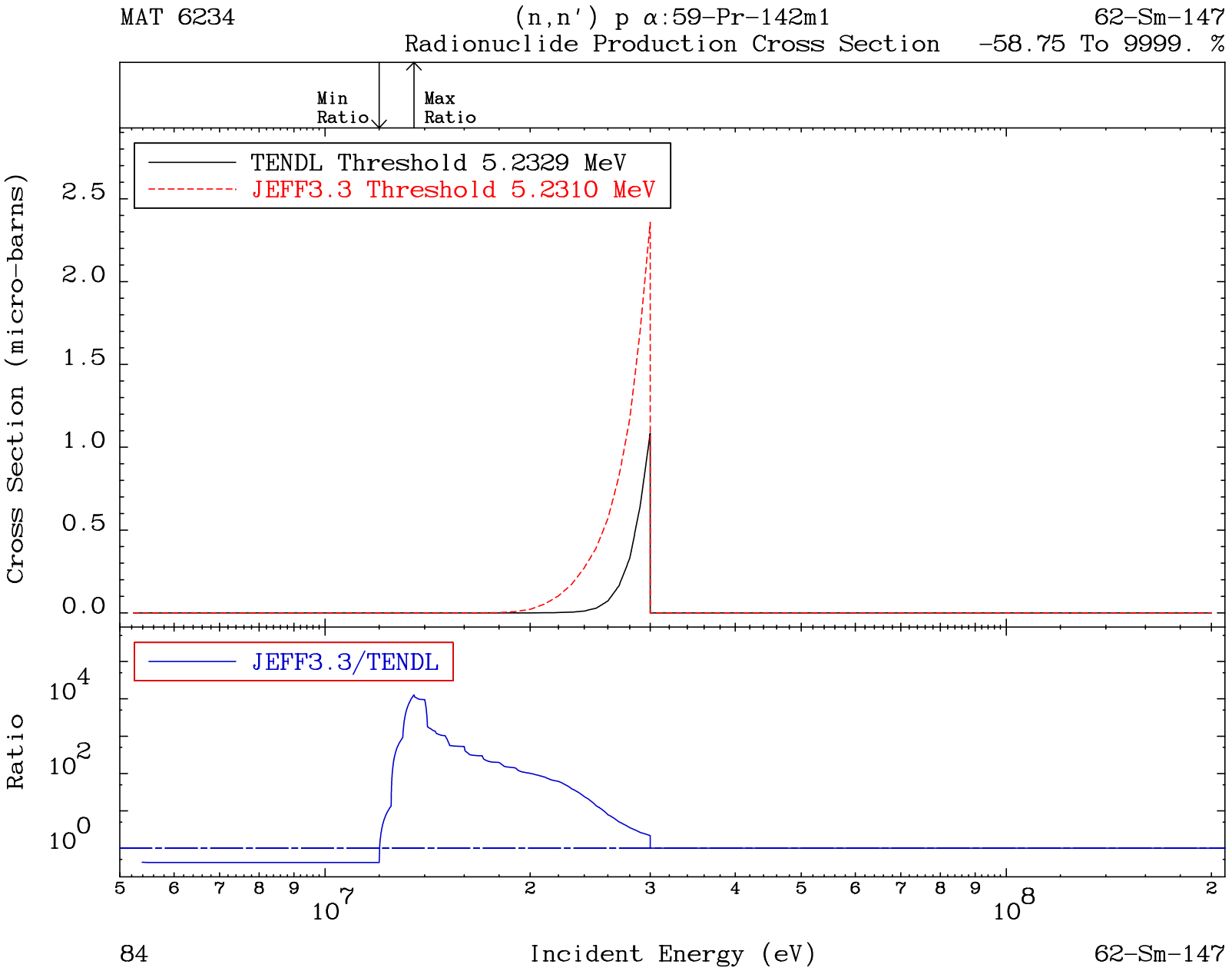

MAT 6234
Dpa inelastic (mt51-91)
Cross Section
62-Sm-147
-29.25 To 8.094 %
Min Ratio
Max Ratio
TENDL Threshold 122.04 keV
JEFF3.3 Threshold 122.04 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
79
62-Sm-147

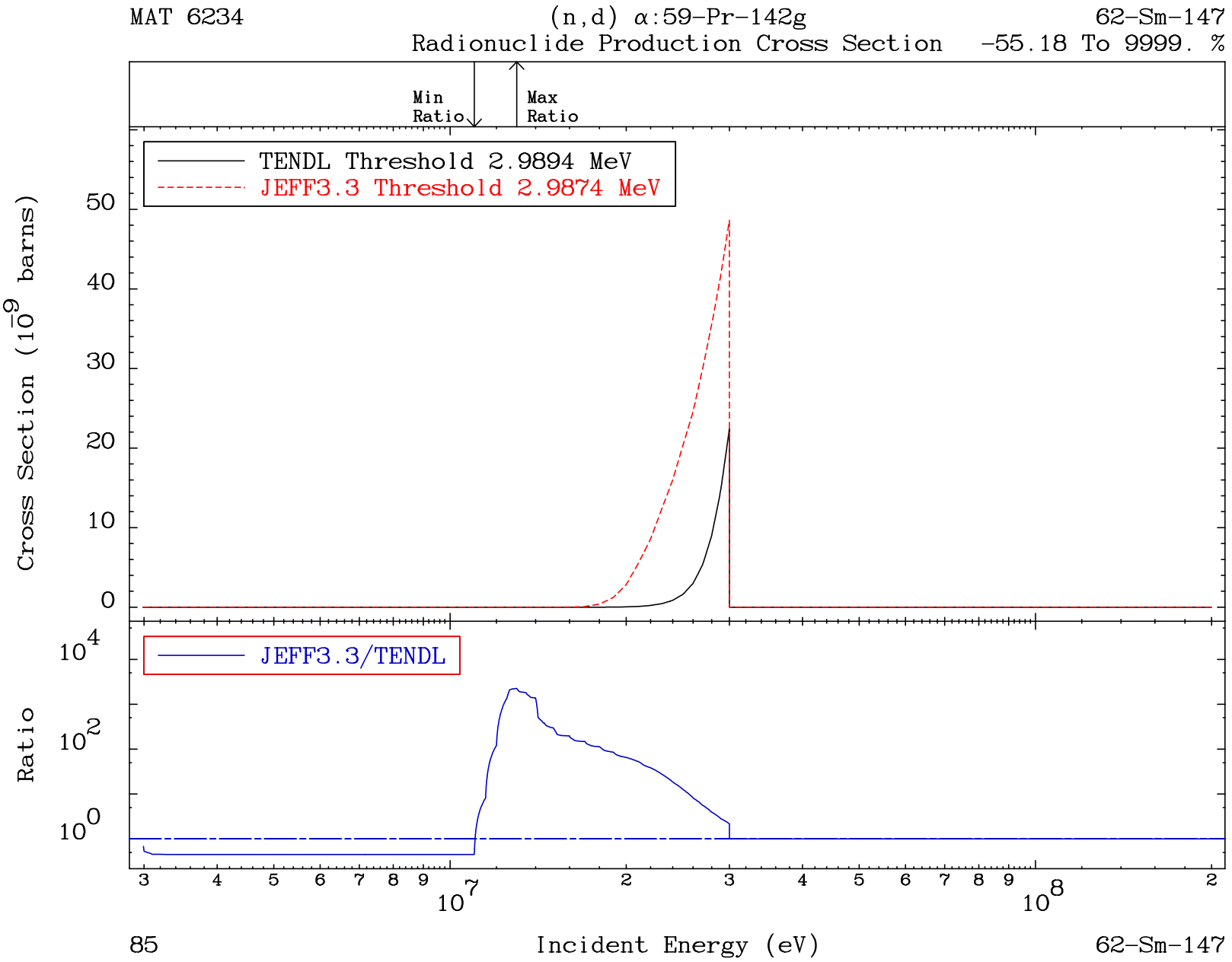

MAT 6234
Dpa disappearance (mt102 -120)
Cross Section
62-Sm-147
-34.89 To 1856. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
80
62-Sm-147

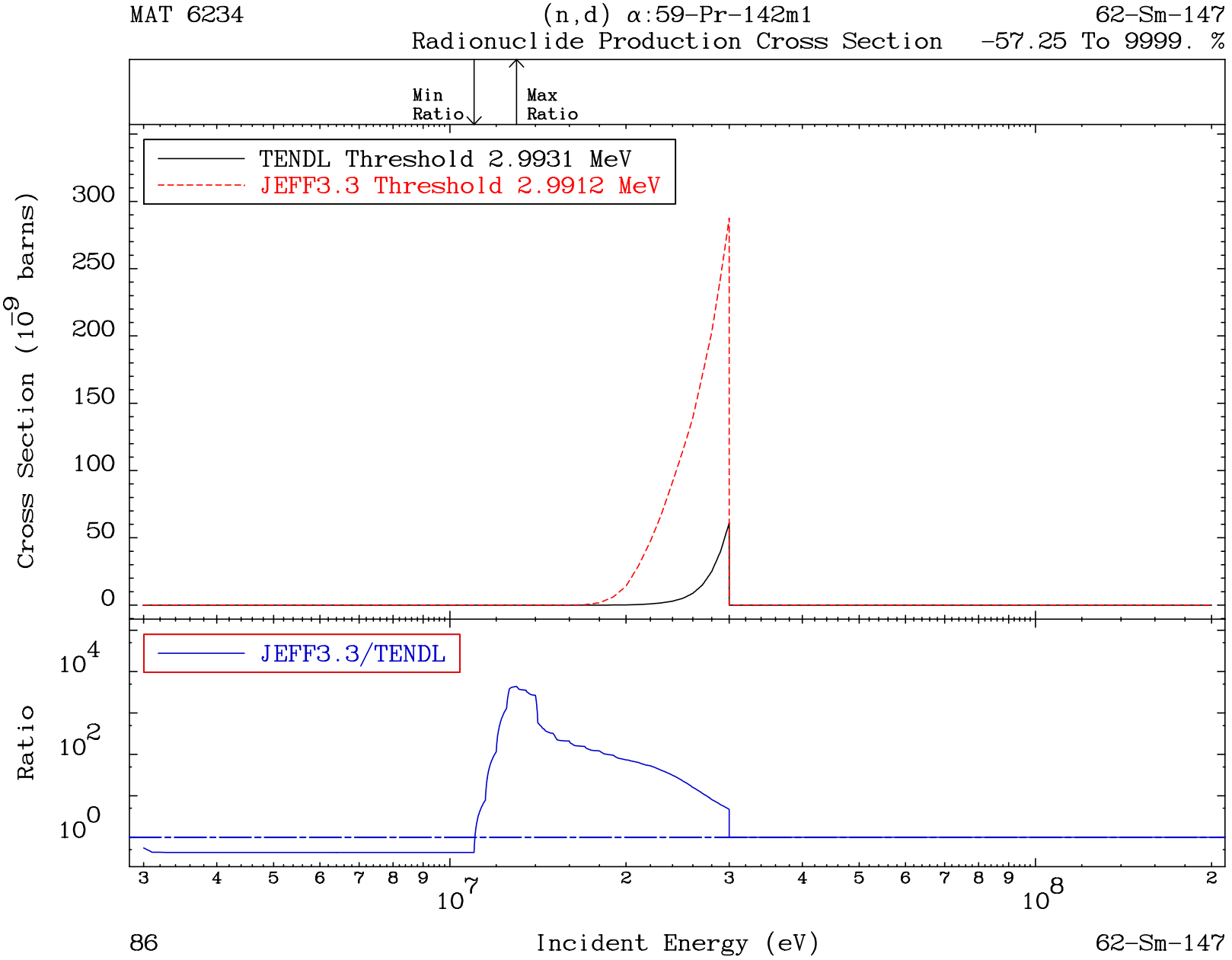

MAT 6234
(n,3n) α:60-Nd-141g
62-Sm-147
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.736 MeV
JEFF3.3 Threshold 13.734 MeV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
62-Sm-147


MAT 6234
(n,3n) α:60-Nd-141m2
62-Sm-147
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 19.000 MeV
JEFF3.3 Threshold 18.000 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
62-Sm-147


MAT 6234
(n,n') p α:59-Pr-142g
62-Sm-147
Radionuclide Production Cross Section
-56.93 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.2292 MeV
JEFF3.3 Threshold 5.2273 MeV
Cross Section (10^{-9} barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
83
Incident Energy (eV)
62-Sm-147


MAT 6234
(n,n') p α:59-Pr-142m1
62-Sm-147
Radionuclide Production Cross Section -58.75 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 5.2329 MeV
JEFF3.3 Threshold 5.2310 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
84
Incident Energy (eV)
62-Sm-147


MAT 6234
(n,d) α:59-Pr-142g
62-Sm-147
Radionuclide Production Cross Section -55.18 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.9894 MeV
JEFF3.3 Threshold 2.9874 MeV
Cross Section (10^{-9} barns)
50
40
30
20
10
0
JEFF3.3/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
85
Incident Energy (eV)
62-Sm-147


MAT 6234
(n,d) α:59-Pr-142m1
62-Sm-147
Radionuclide Production Cross Section -57.25 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.9931 MeV
JEFF3.3 Threshold 2.9912 MeV
Cross Section (10^{-9} barns)
300
250
200
150
100
50
0
JEFF3.3/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
86
Incident Energy (eV)
62-Sm-147