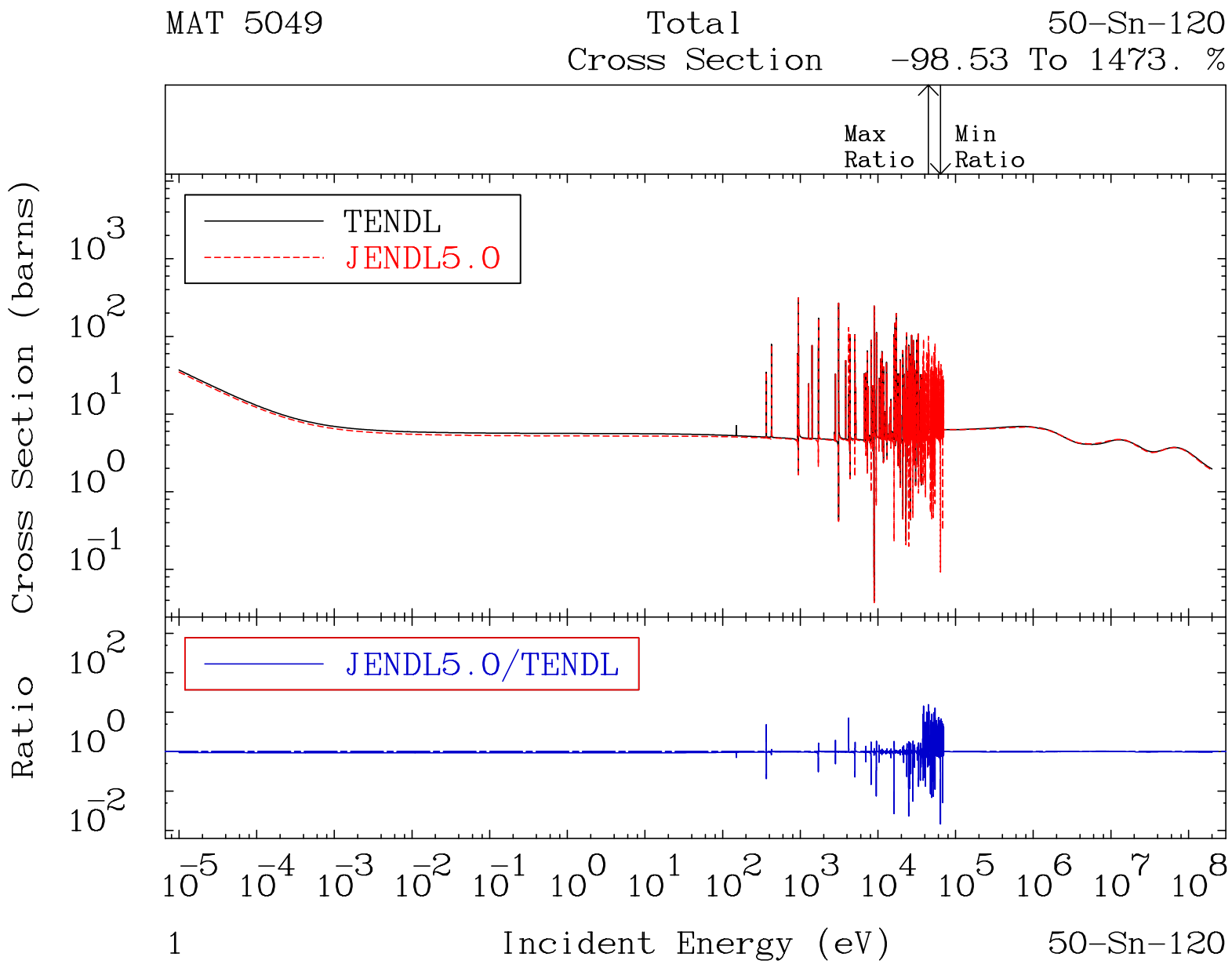
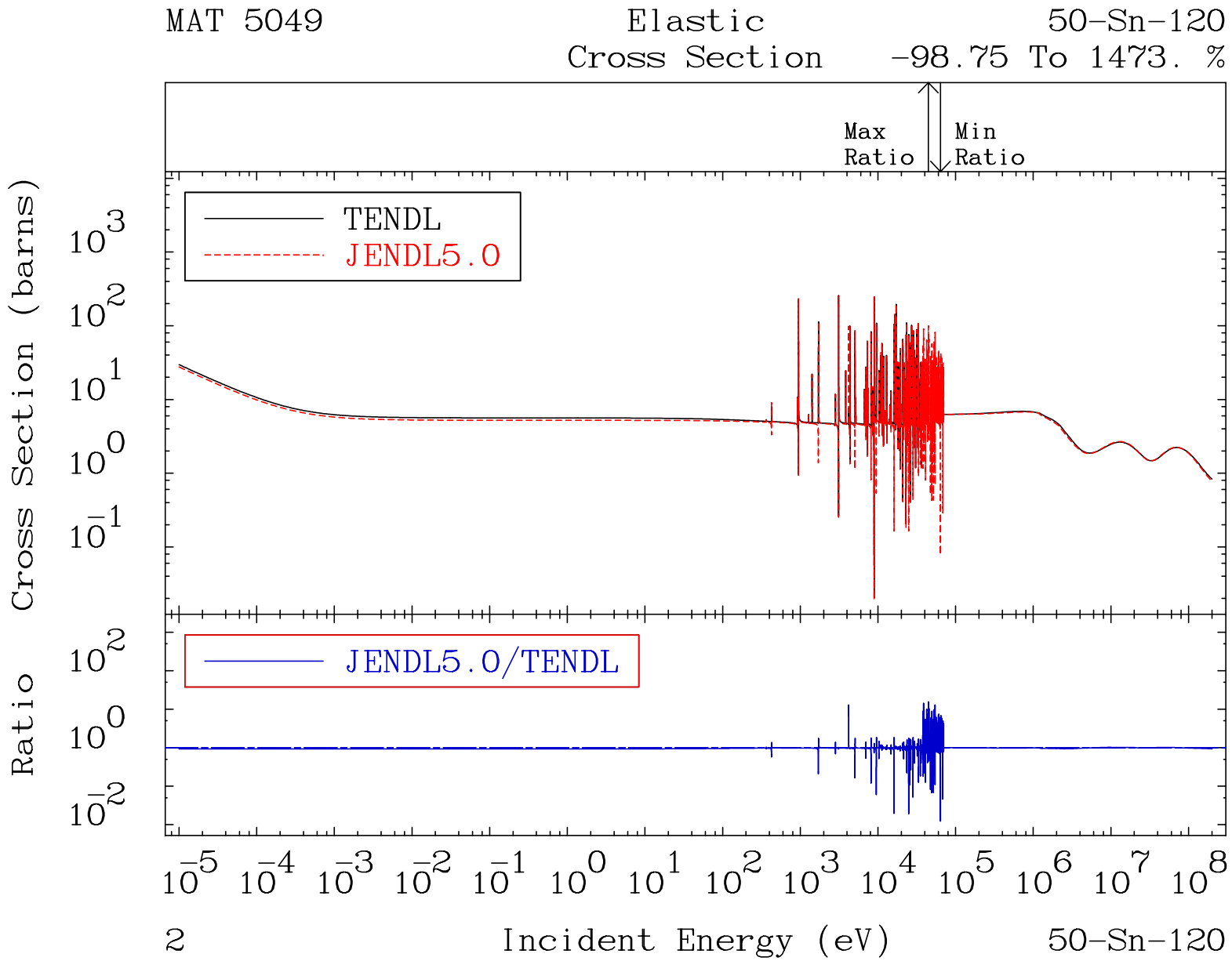
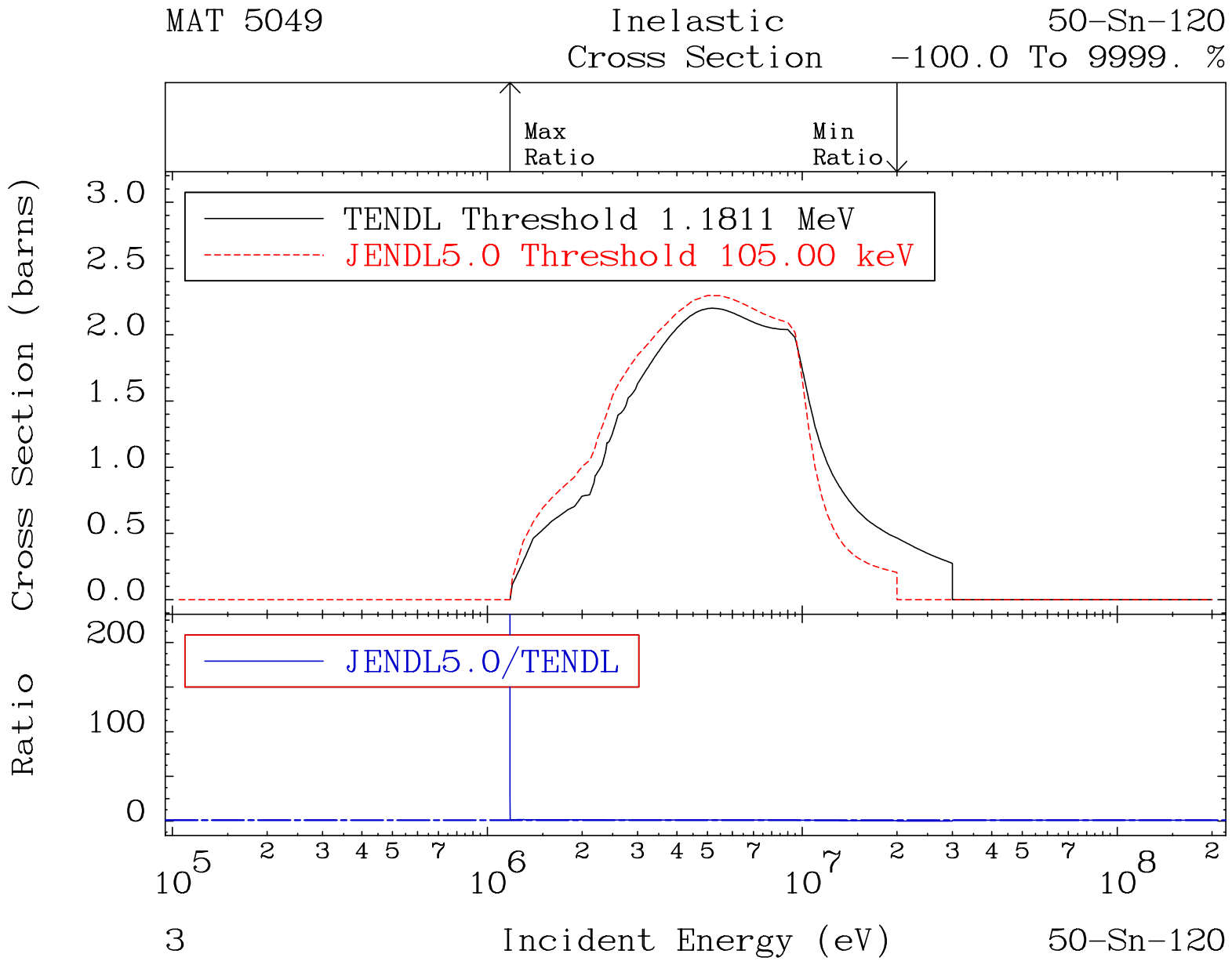
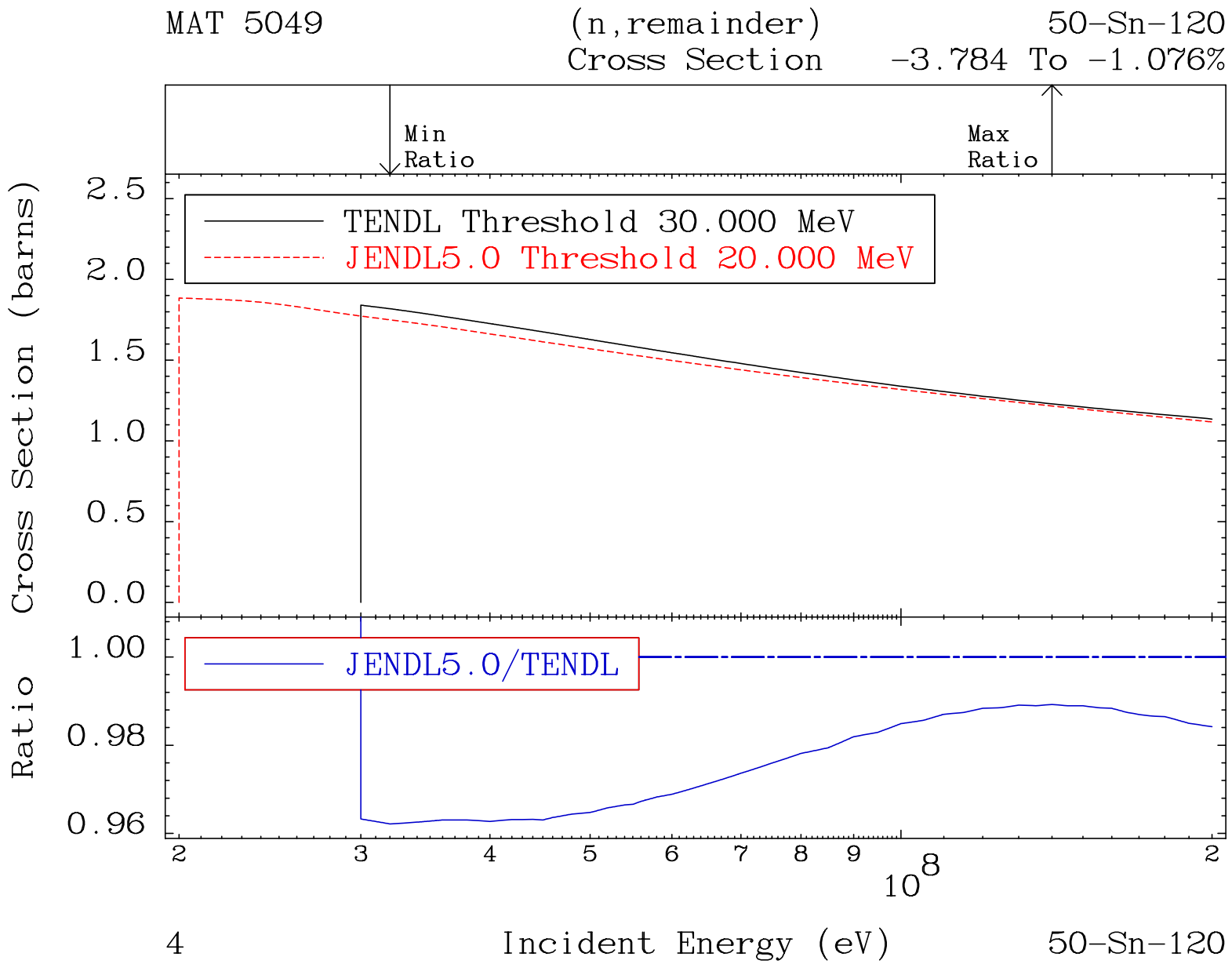
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

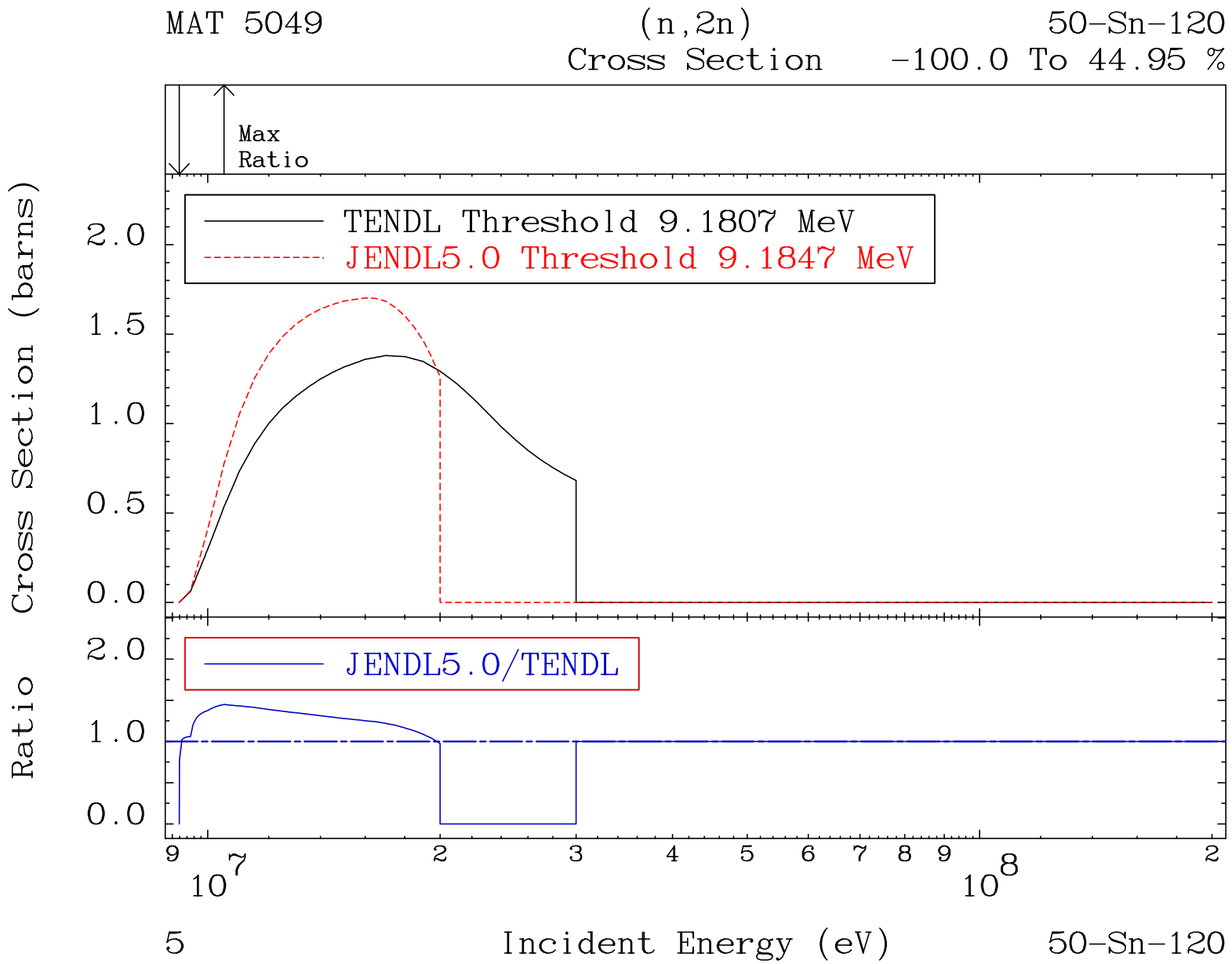
Press Mouse Button to Start

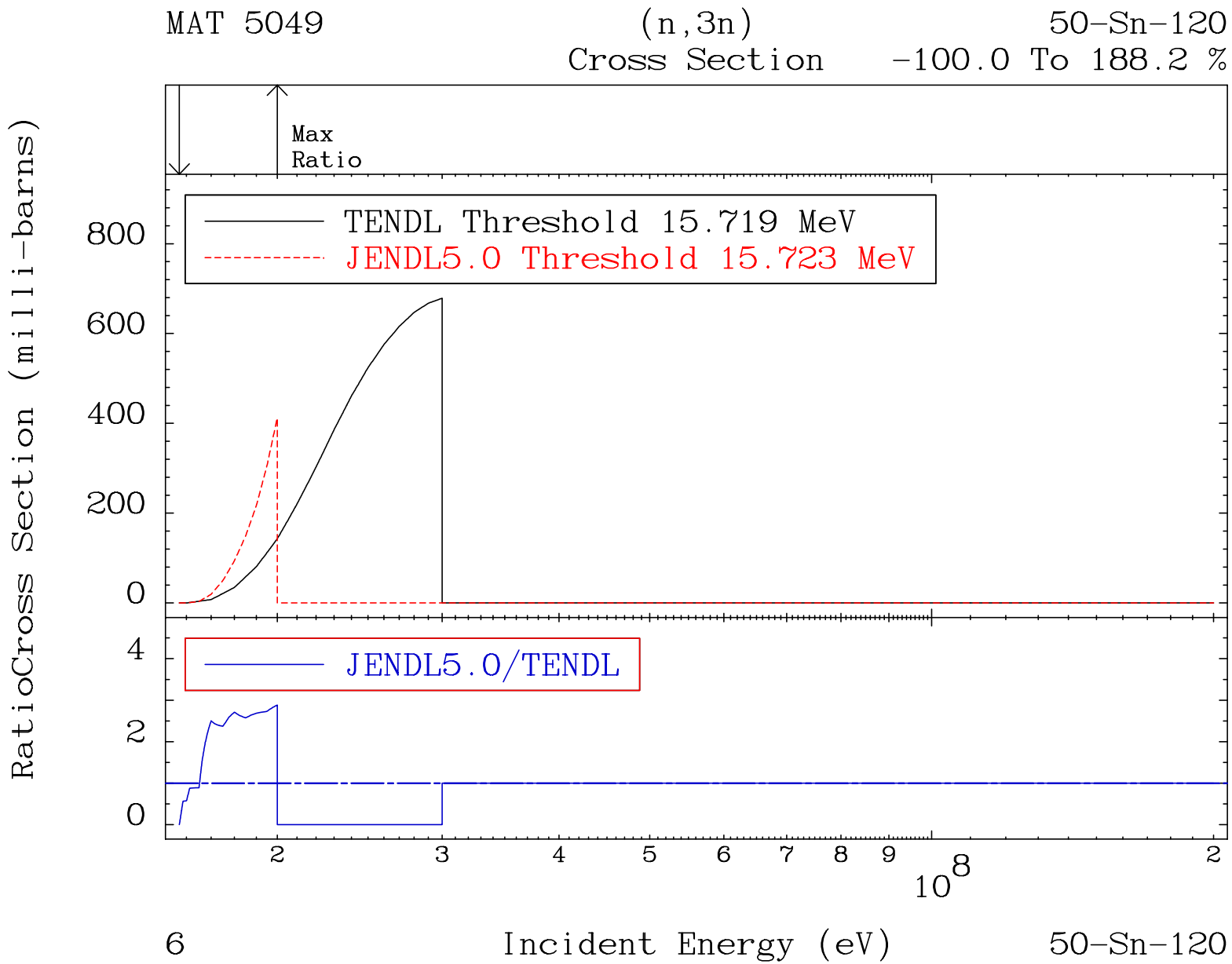

MAT 5049
Total
Cross Section
50-Sn-120
-98.53 To 1473. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
50-Sn-120

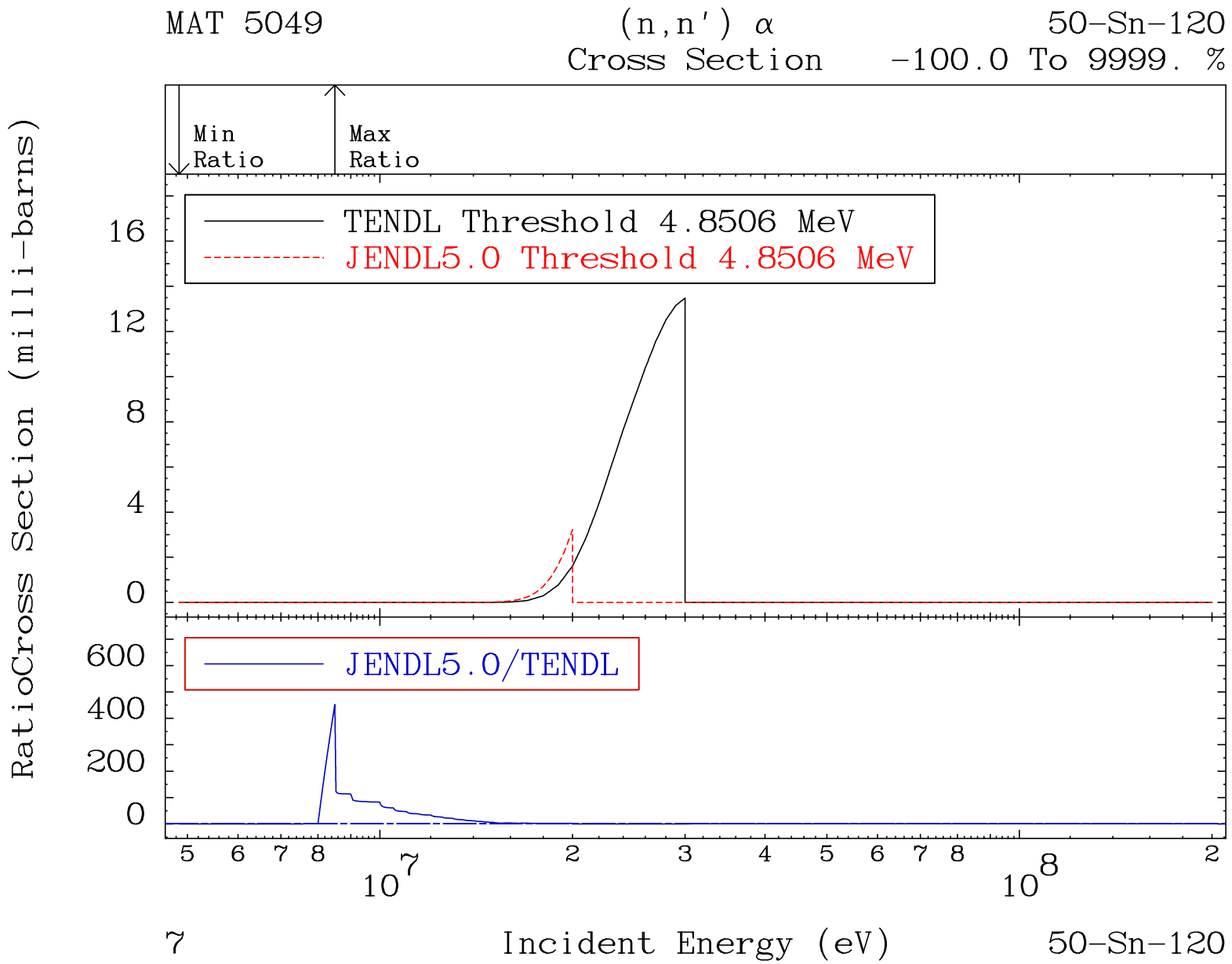

MAT 5049
Elastic
Cross Section
50-Sn-120
-98.75 To 1473. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
50-Sn-120

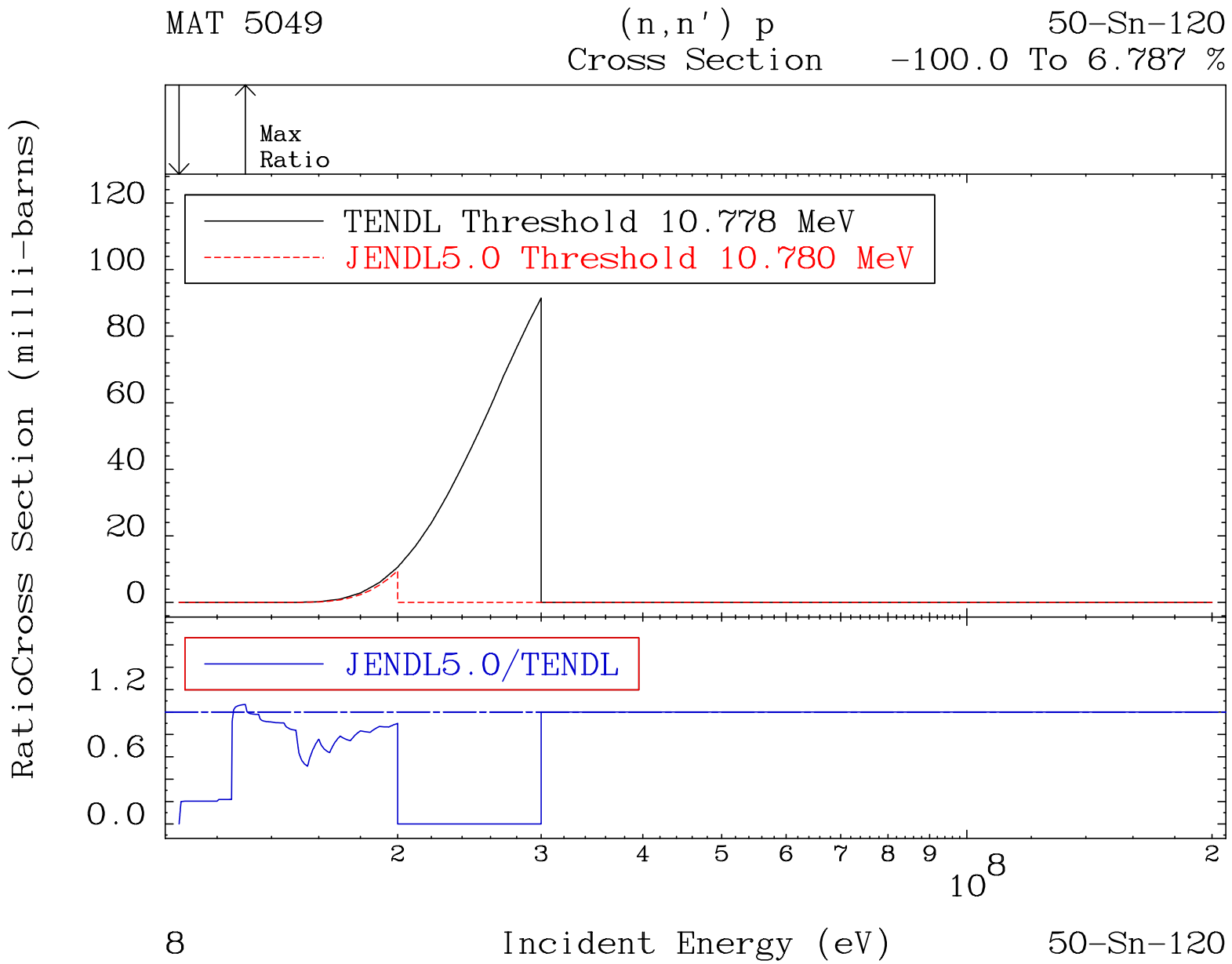

MAT 5049
Inelastic
Cross Section
50-Sn-120
-100.0 To 9999. %
Max
Ratio
Min
Ratio
TENDL Threshold 1.1811 MeV
JENDL5.0 Threshold 105.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
200
100
0
10^5
10^6
10^7
10^8
Incident Energy (eV)
3
50-Sn-120

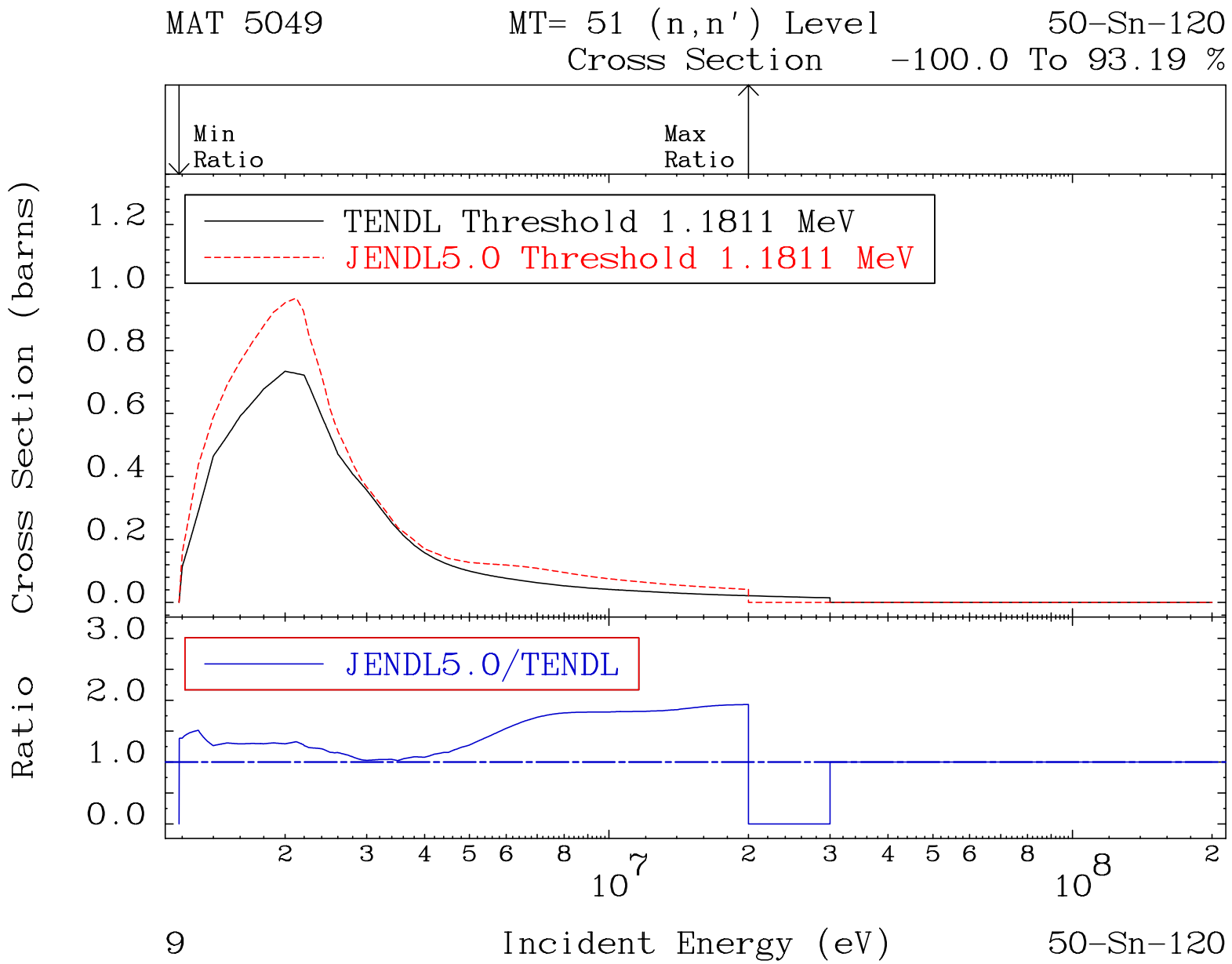

MAT 5049
(n,remainder)
Cross Section
50-Sn-120
-3.784 To -1.076%
Min
Ratio
Max
Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.00
0.98
0.96
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
50-Sn-120

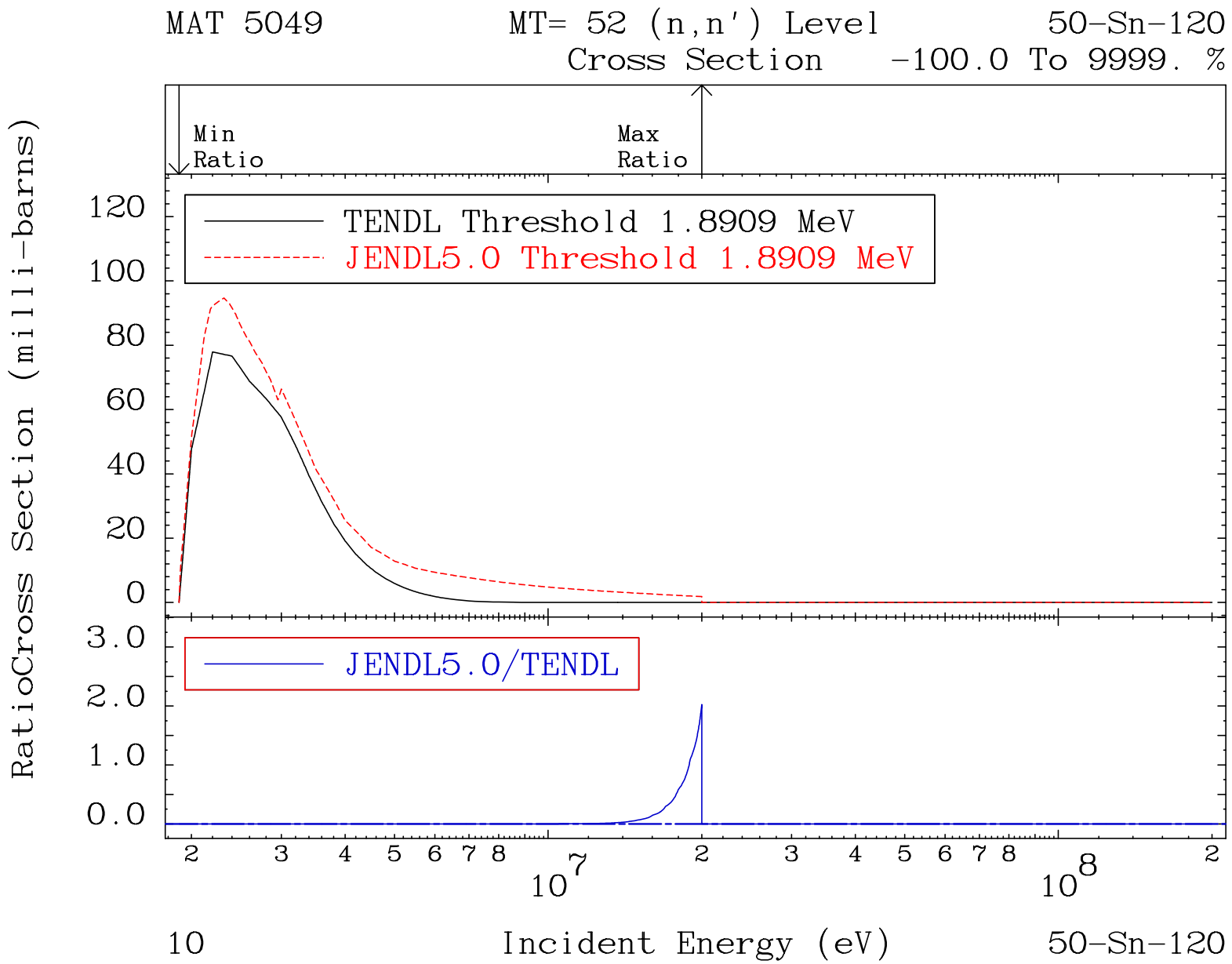

MAT 5049
(n,2n)
Cross Section
50-Sn-120
-100.0 To 44.95 %
Max
Ratio
TENDL Threshold 9.1807 MeV
JENDL5.0 Threshold 9.1847 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
50-Sn-120

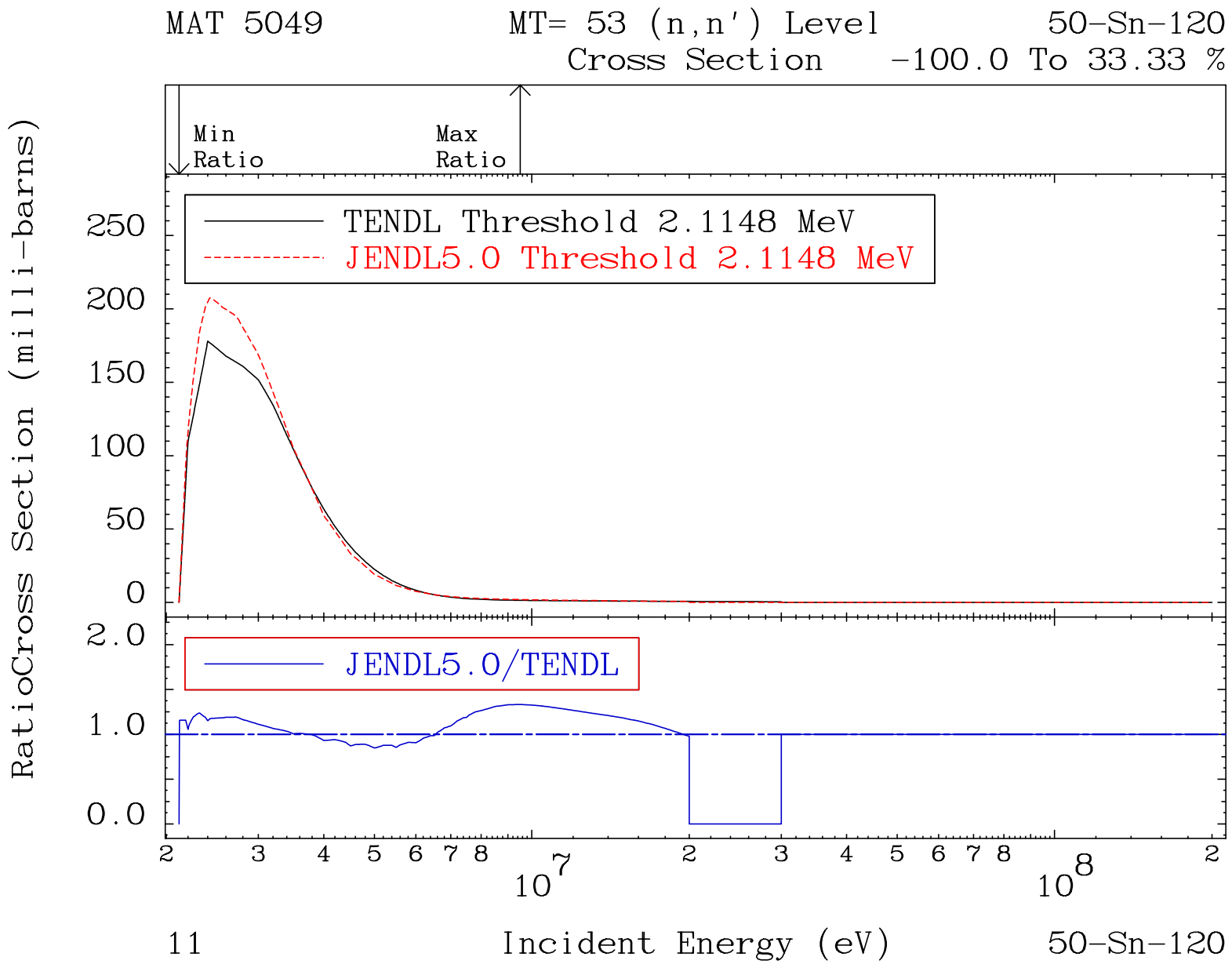

MAT 5049
(n,3n)
50-Sn-120
Cross Section
-100.0 To 188.2 %
Max
Ratio
TENDL Threshold 15.719 MeV
JENDL5.0 Threshold 15.723 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
50-Sn-120

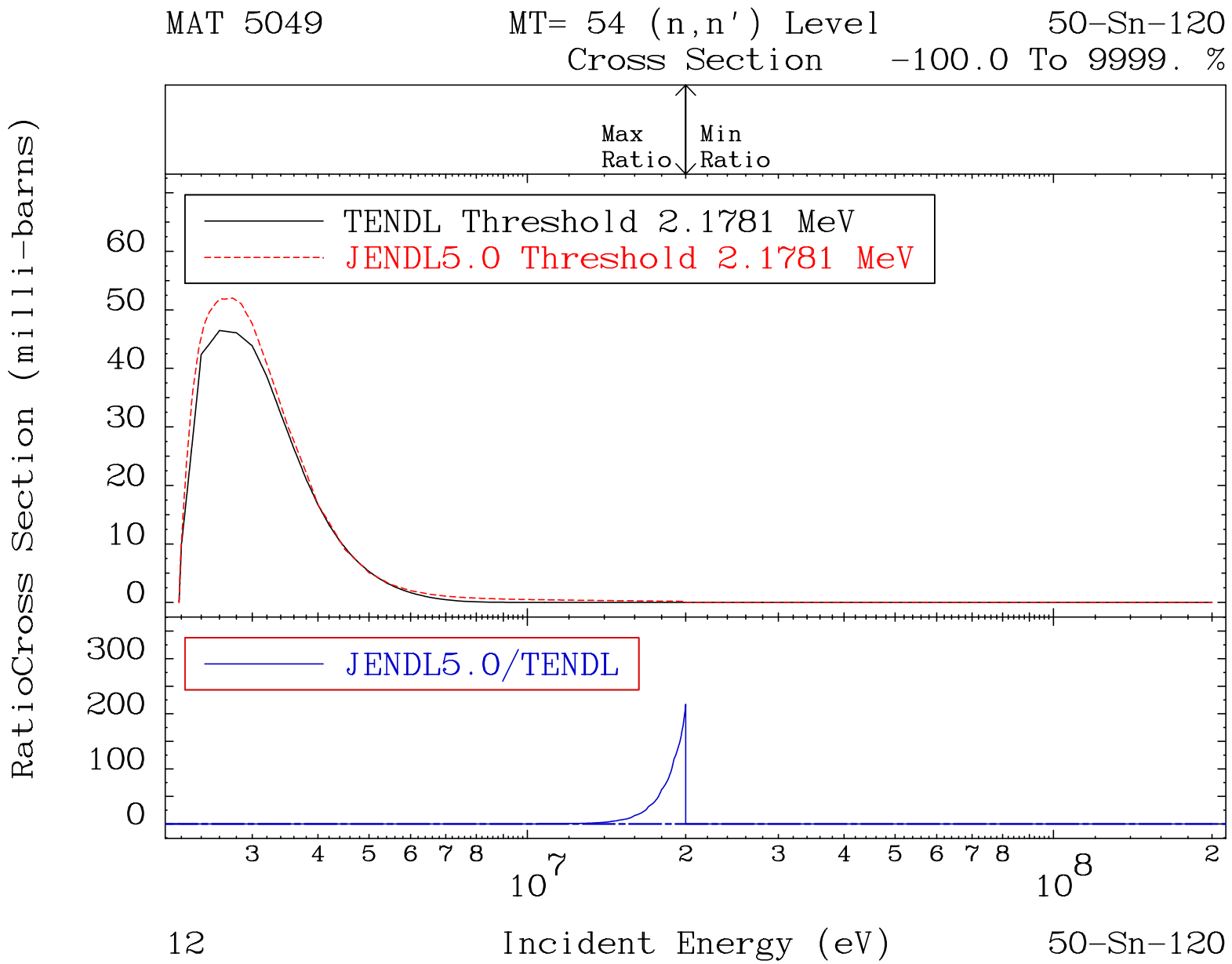

MAT 5049
(n,n') α
Cross Section
50-Sn-120
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.8506 MeV
JENDL5.0 Threshold 4.8506 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
600
400
200
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
7
Incident Energy (eV)
50-Sn-120

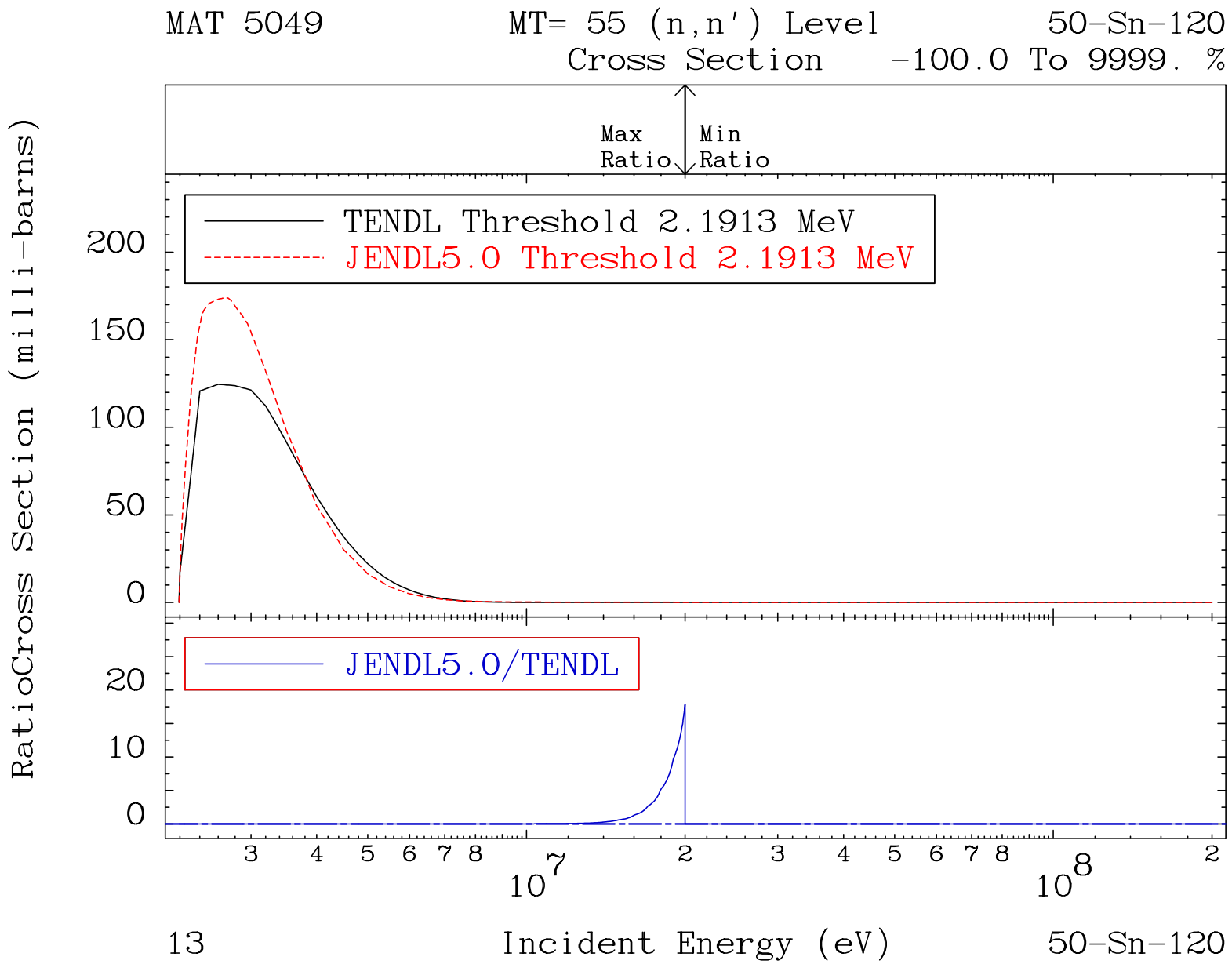

MAT 5049
(n,n') p
Cross Section
50-Sn-120
-100.0 To 6.787 %
Max
Ratio
TENDL Threshold 10.778 MeV
JENDL5.0 Threshold 10.780 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
2
10^8
8
Incident Energy (eV)
50-Sn-120

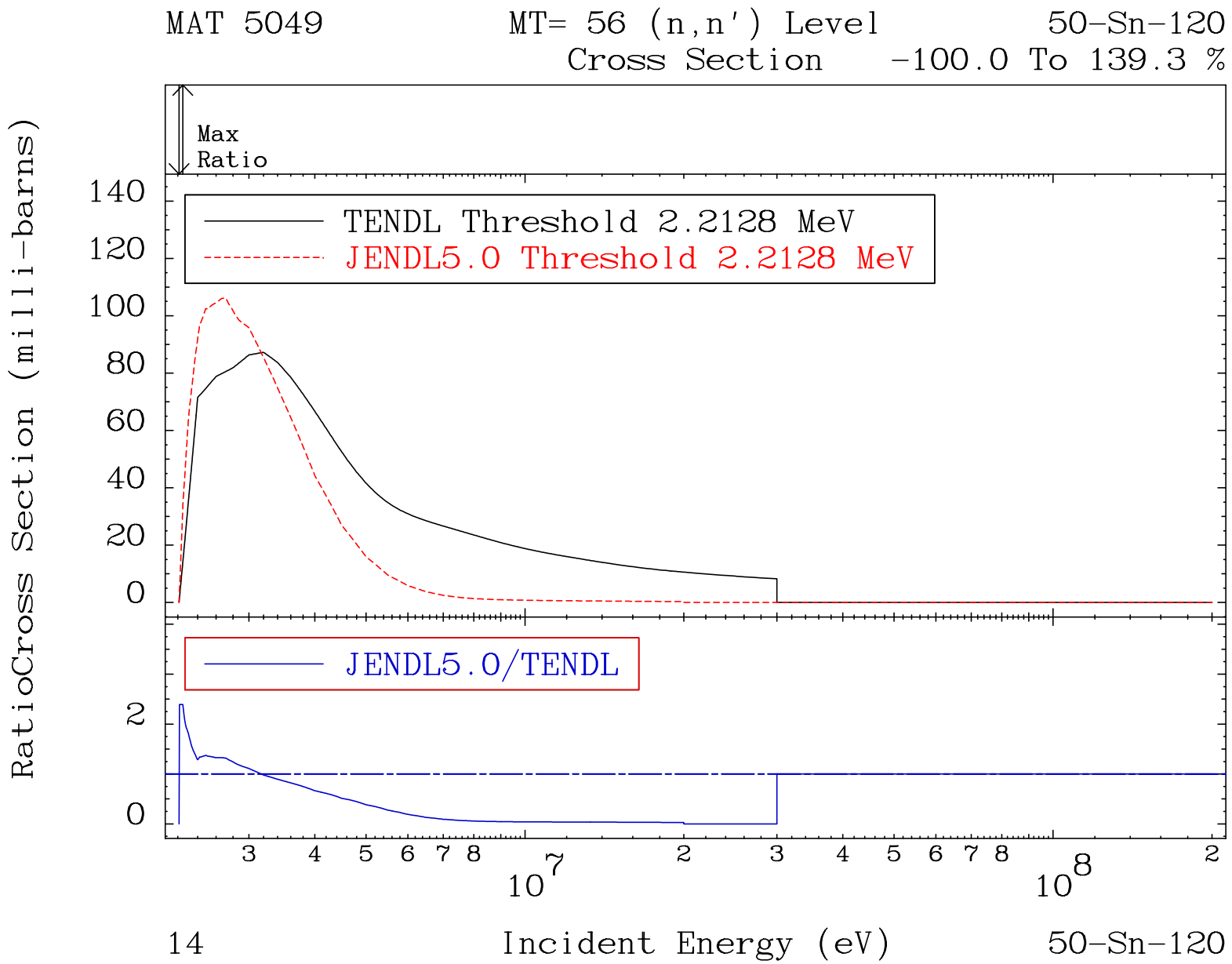

MAT 5049
MT= 51 (n,n') Level
50-Sn-120
Cross Section -100.0 To 93.19 %
Min Ratio
Max Ratio
TENDL Threshold 1.1811 MeV
JENDL5.0 Threshold 1.1811 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.2
1.0
0.8
0.6
0.4
0.2
0.0
3.0
2.0
1.0
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
9
Incident Energy (eV)
50-Sn-120

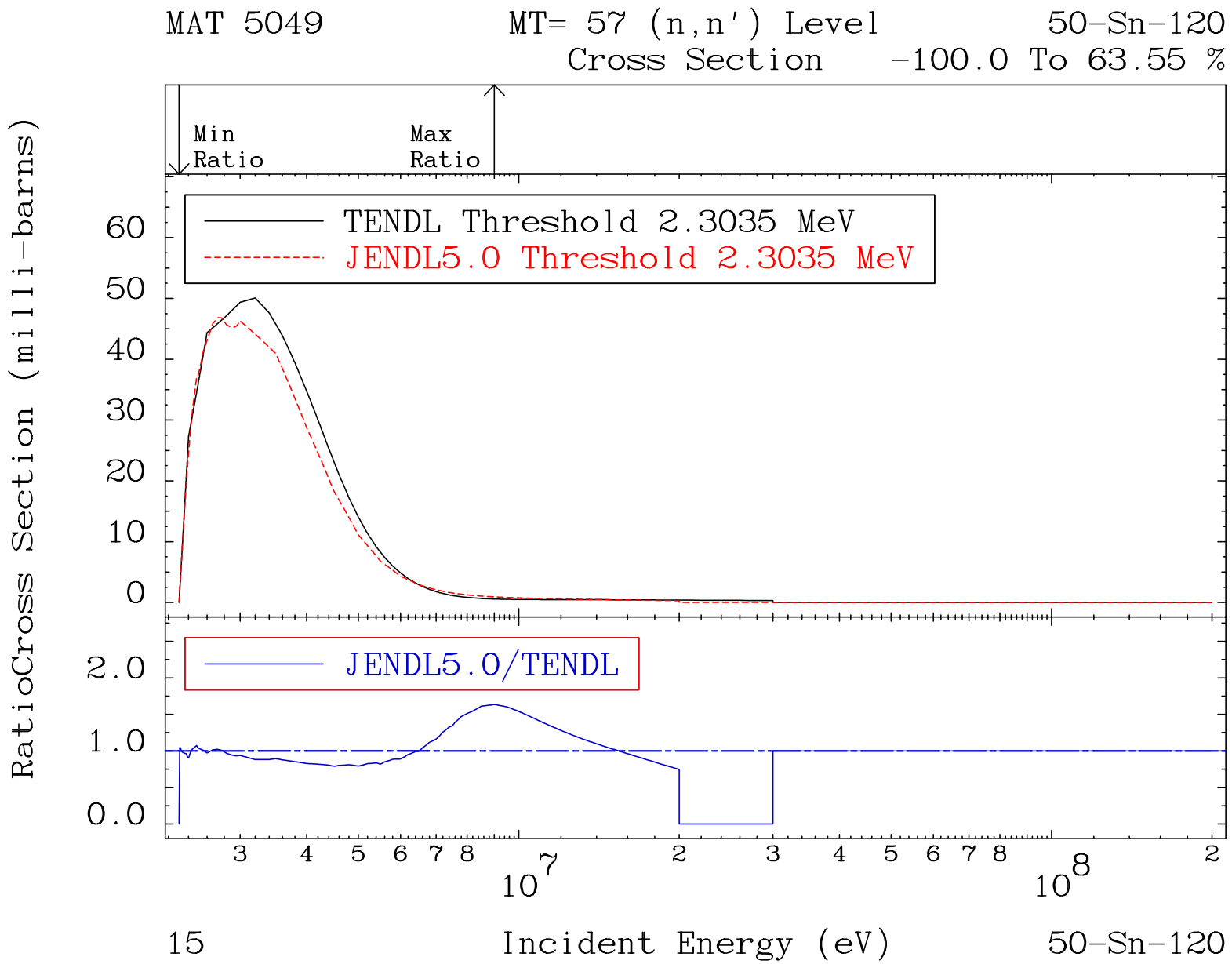

MAT 5049
MT= 52 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.8909 MeV
JENDL5.0 Threshold 1.8909 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
3.0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
50-Sn-120

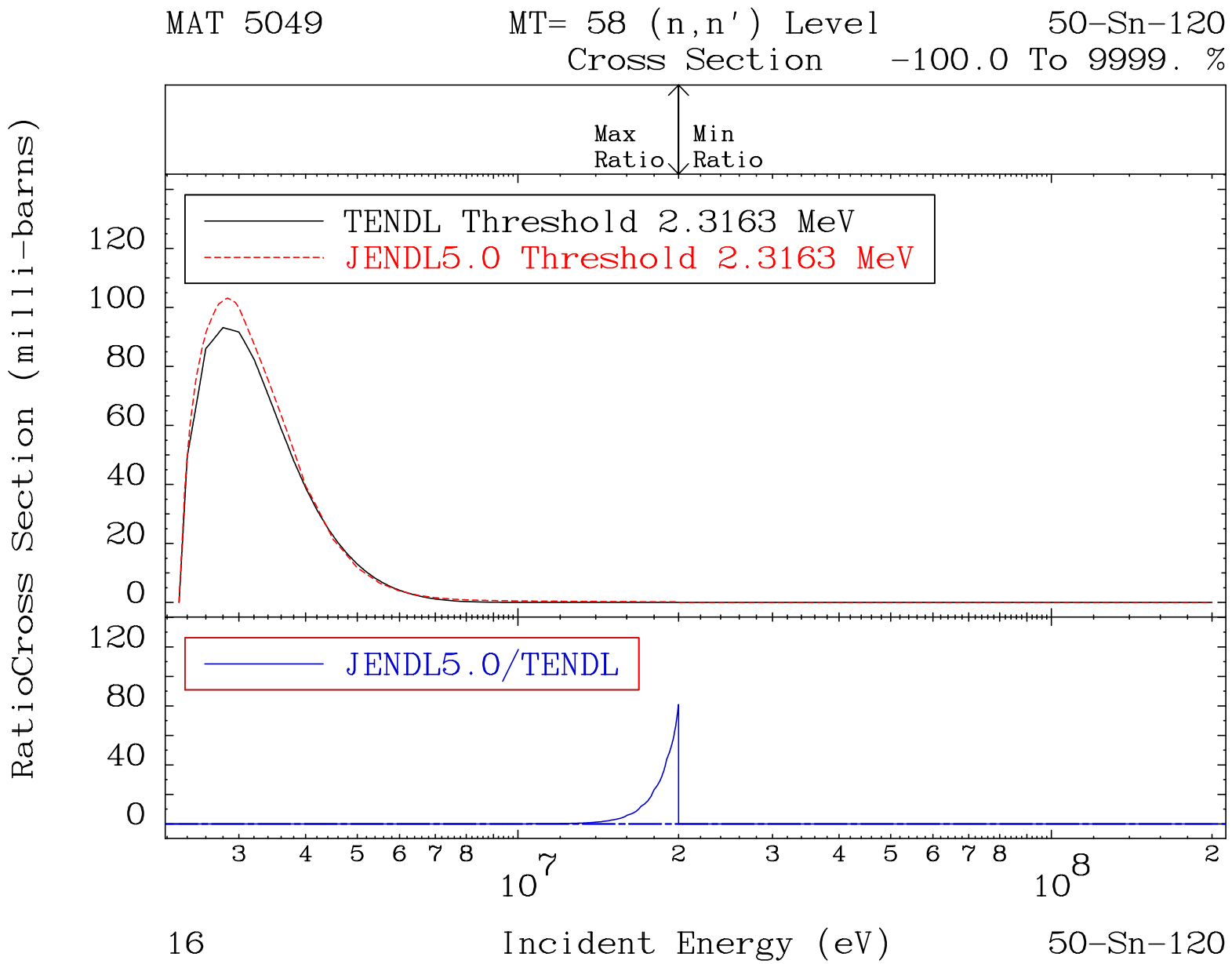

MAT 5049
MT= 53 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 33.33 %
Min Ratio
Max Ratio
TENDL Threshold 2.1148 MeV
JENDL5.0 Threshold 2.1148 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
50-Sn-120

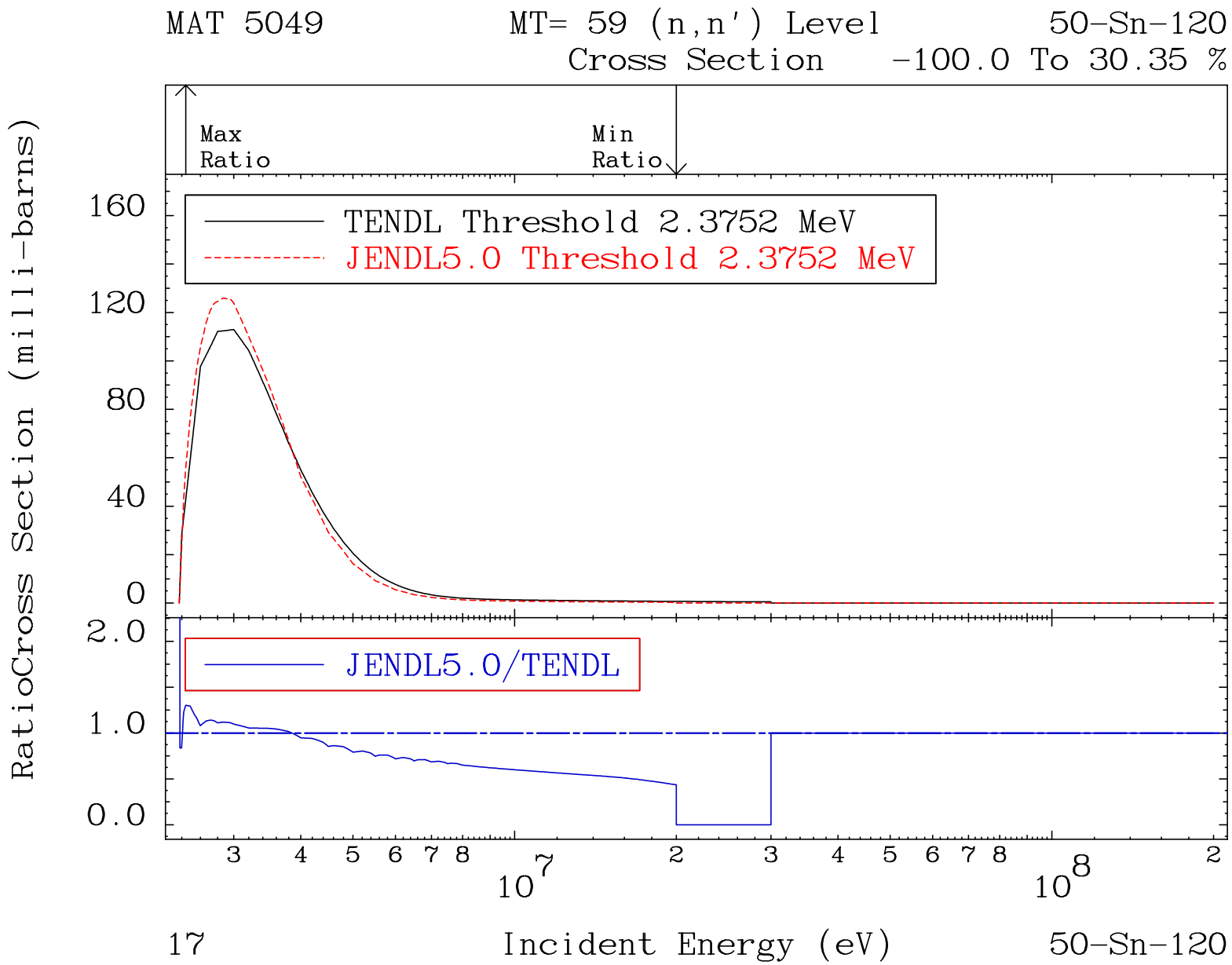

MAT 5049
MT= 54 (n,n') Level
50-Sn-120
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.1781 MeV
JENDL5.0 Threshold 2.1781 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
300
200
100
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
50-Sn-120

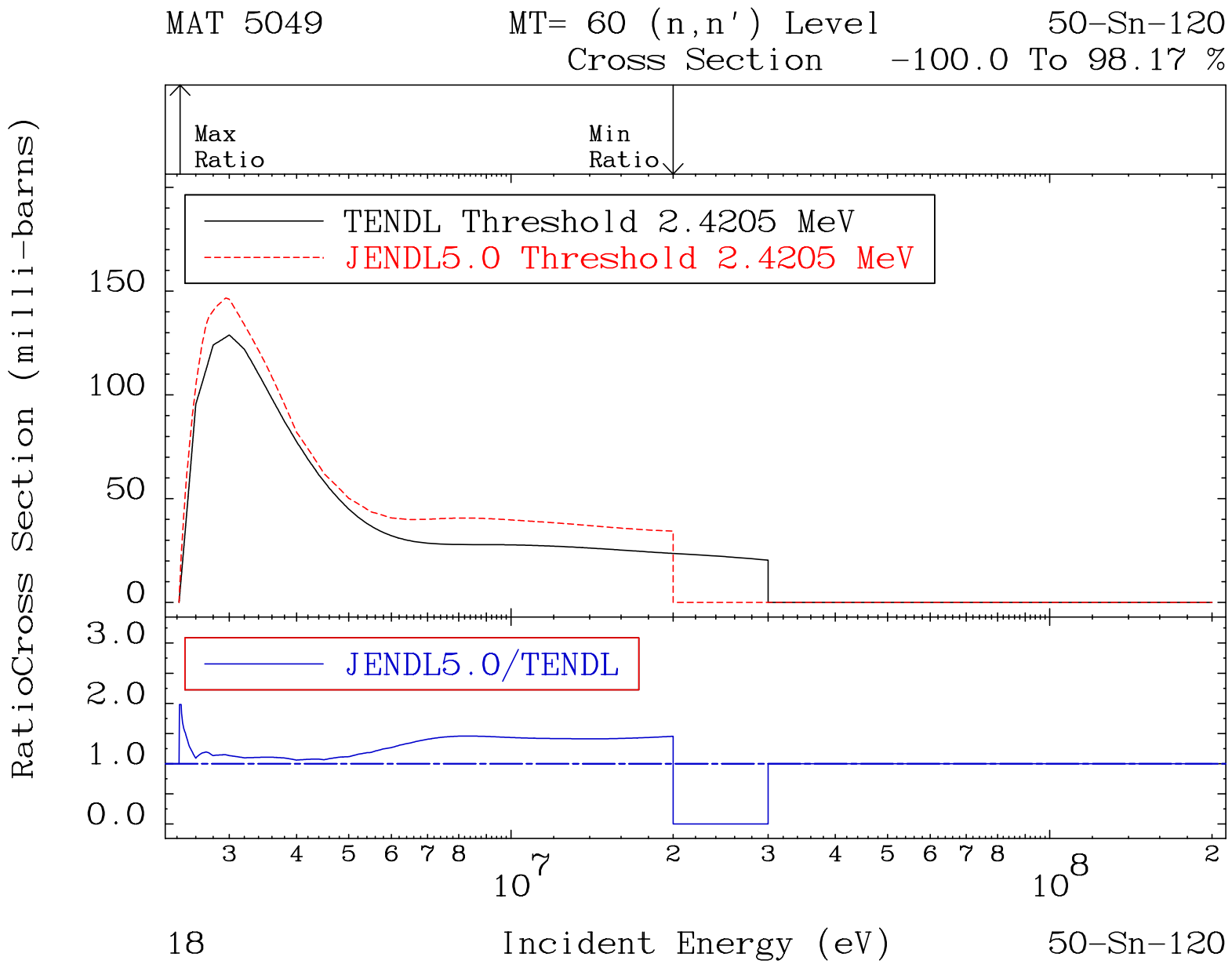

MAT 5049
MT= 55 (n,n') Level
50-Sn-120
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.1913 MeV
JENDL5.0 Threshold 2.1913 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
20
10
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
50-Sn-120

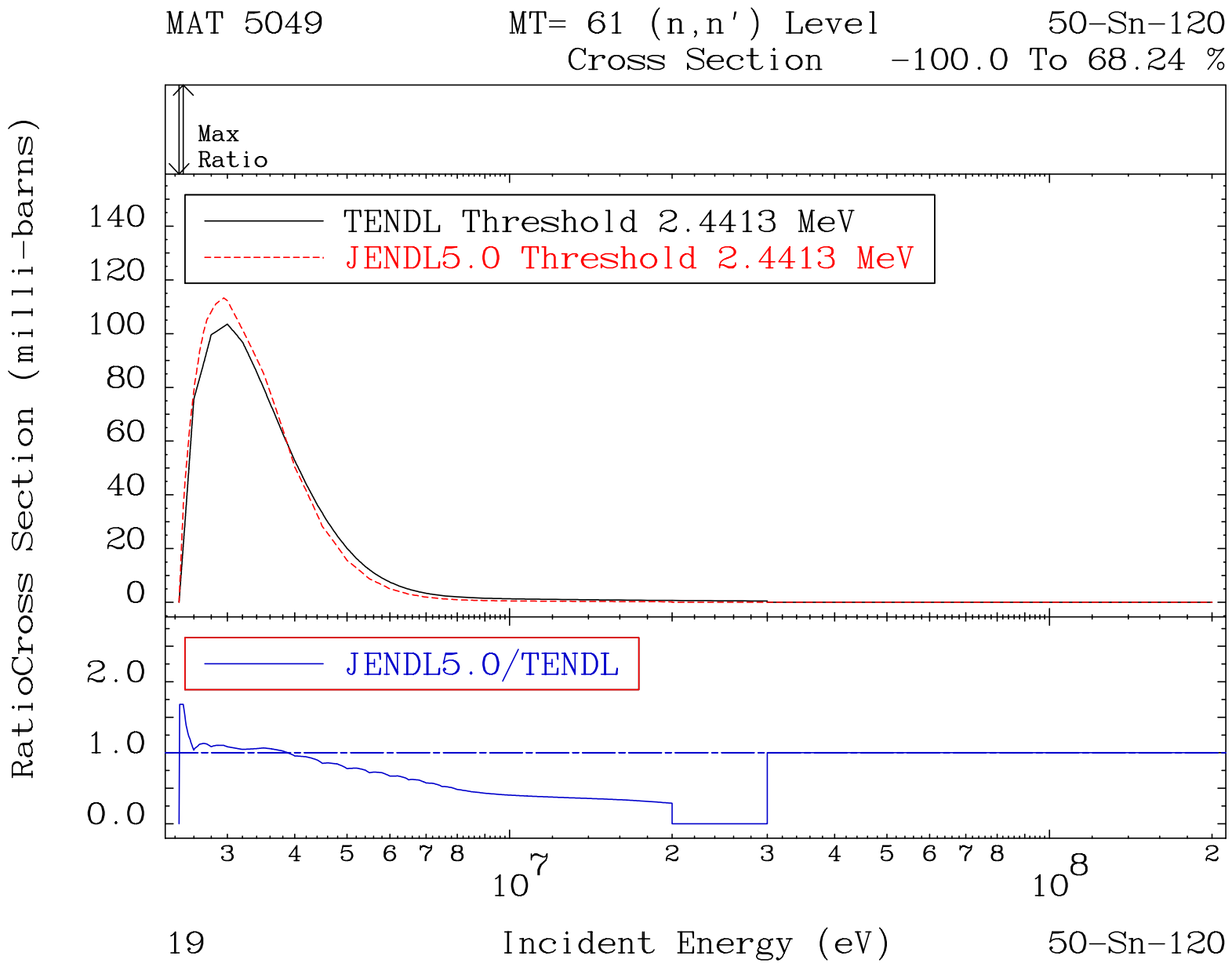

MAT 5049
MT= 56 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 139.3 %
Max
Ratio
TENDL Threshold 2.2128 MeV
JENDL5.0 Threshold 2.2128 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
50-Sn-120

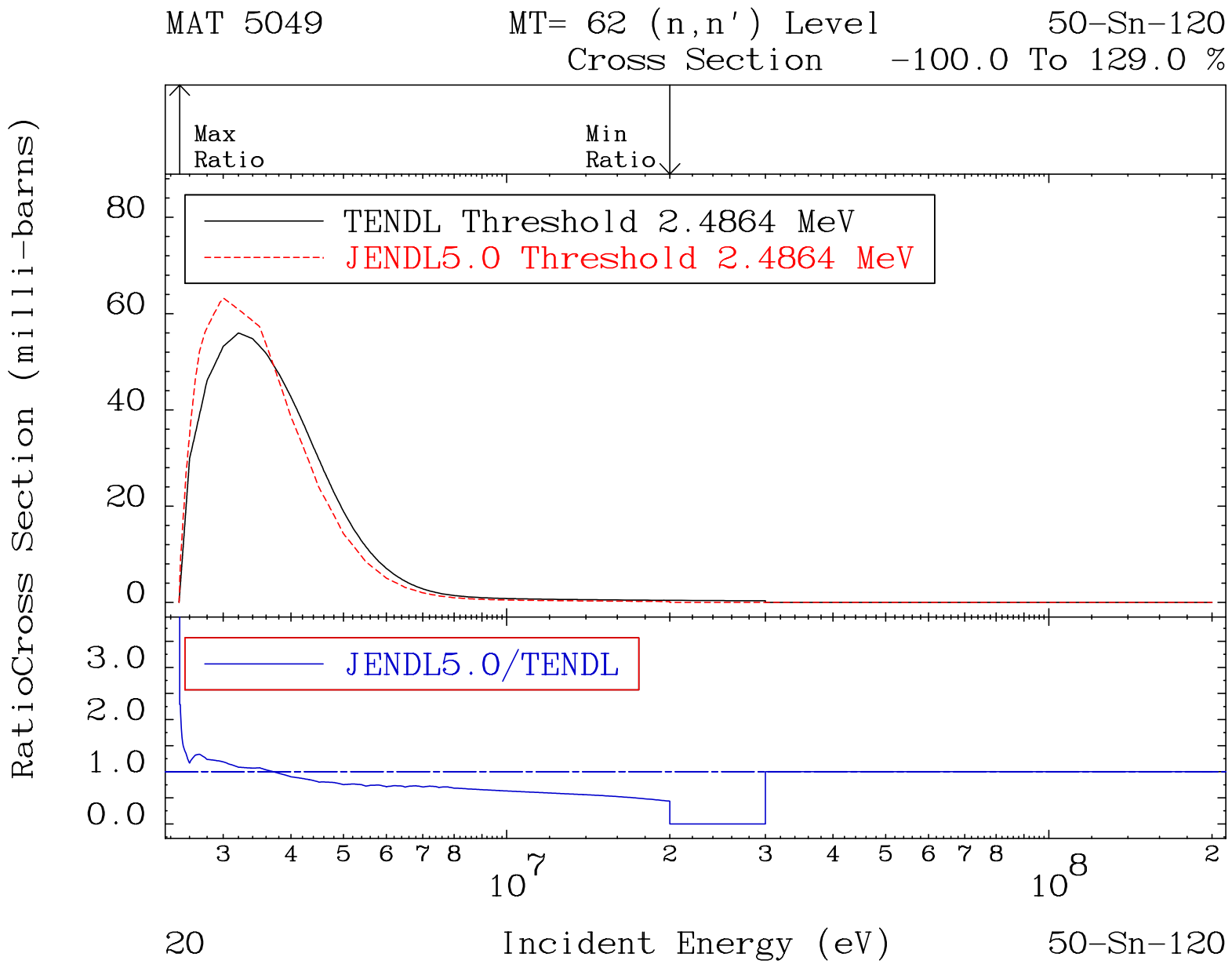

MAT 5049
MT= 57 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 63.55 %
Min Ratio
Max Ratio
TENDL Threshold 2.3035 MeV
JENDL5.0 Threshold 2.3035 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
50-Sn-120

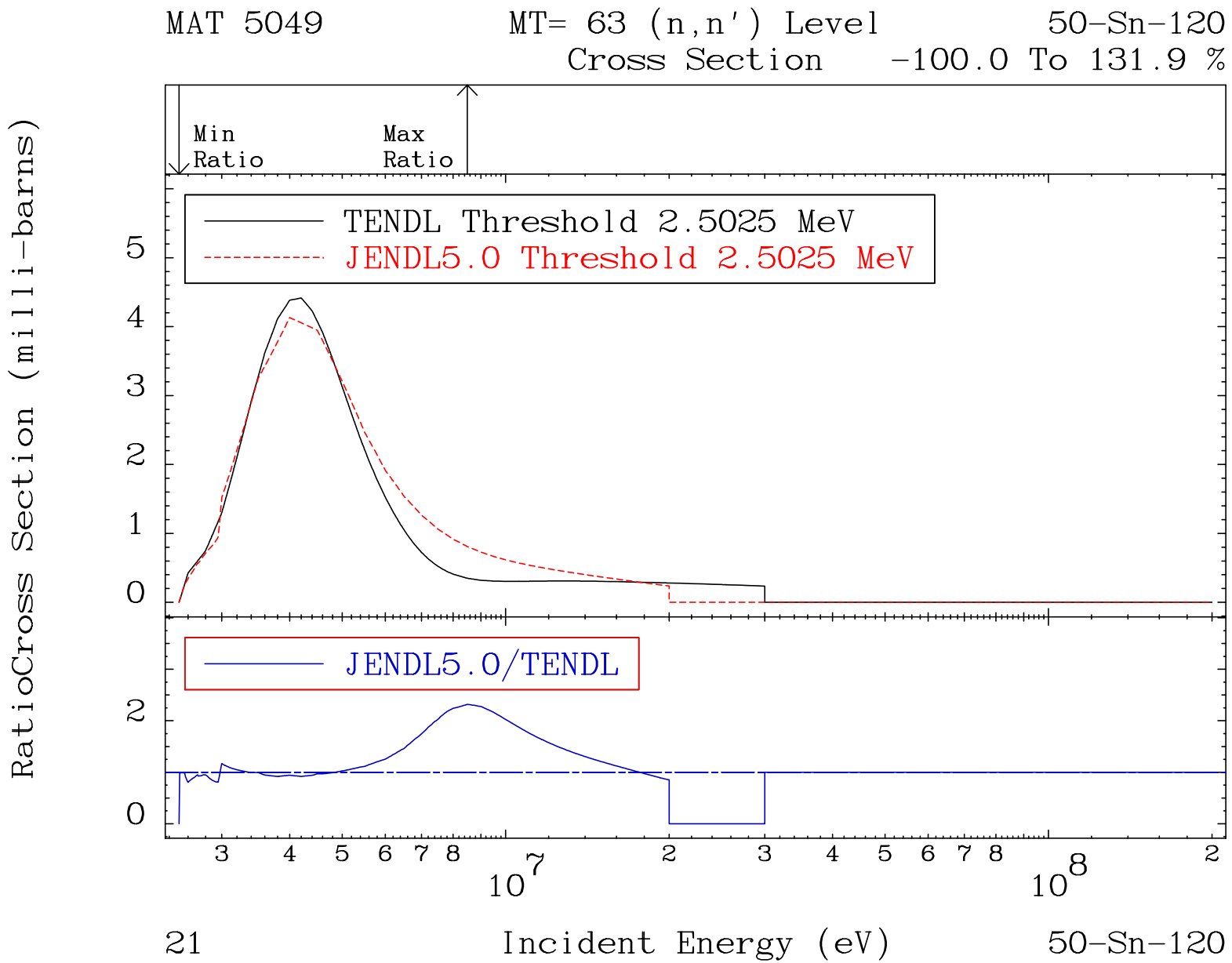

MAT 5049
MT= 58 (n,n') Level
50-Sn-120
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.3163 MeV
JENDL5.0 Threshold 2.3163 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
120
80
40
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
50-Sn-120

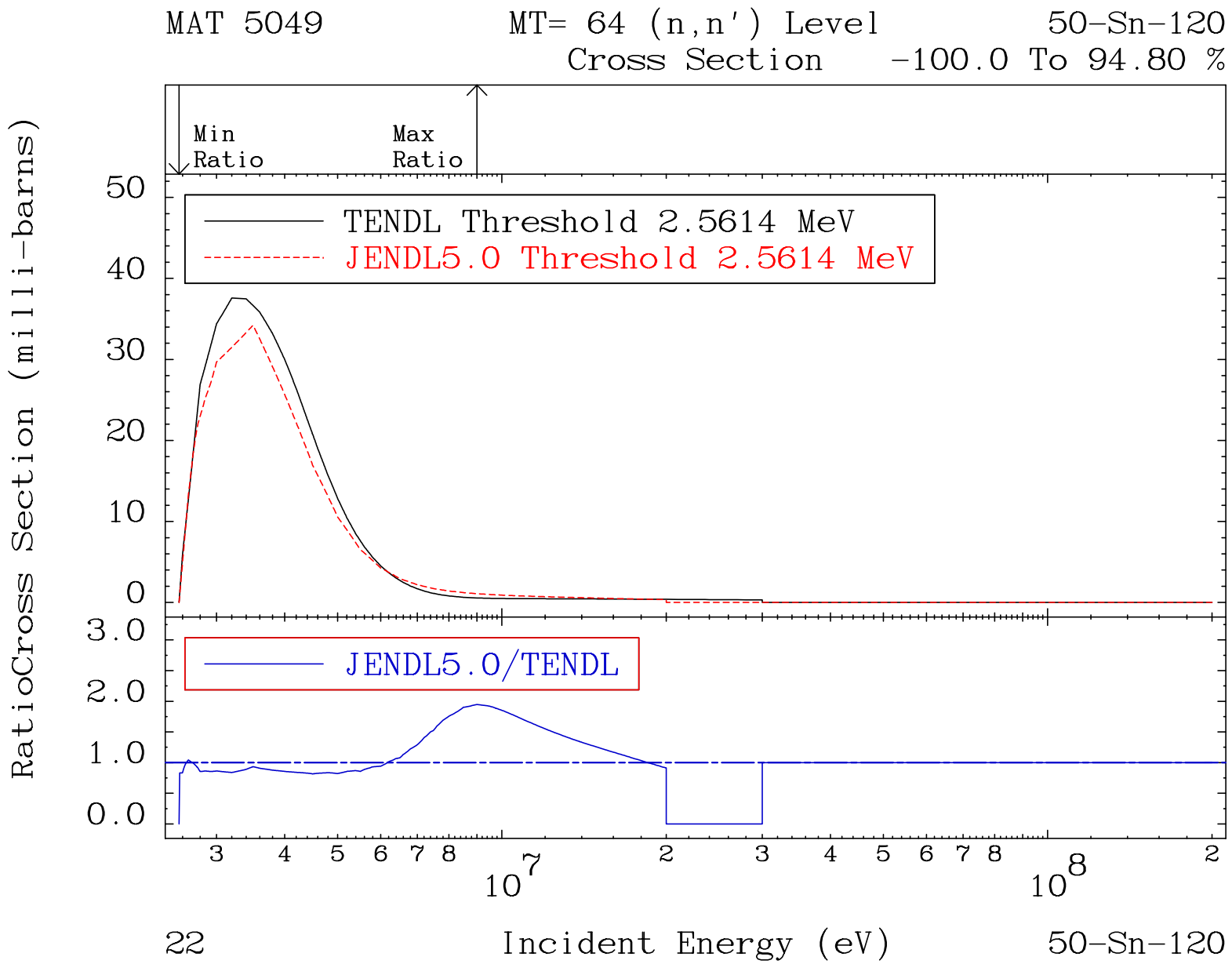

MAT 5049
MT= 59 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 30.35 %
Max Ratio
Min Ratio
TENDL Threshold 2.3752 MeV
JENDL5.0 Threshold 2.3752 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
50-Sn-120

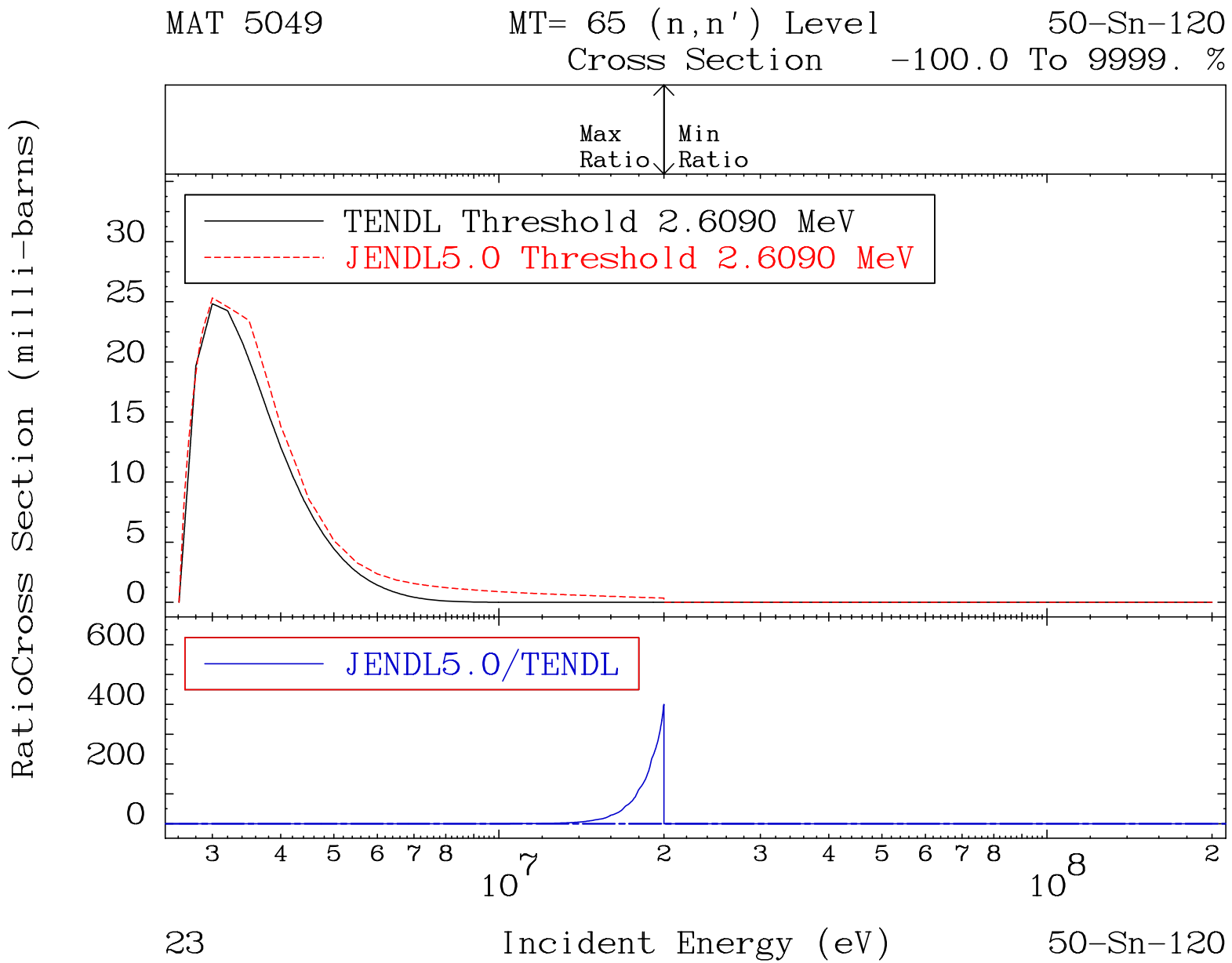

MAT 5049
MT= 60 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 98.17 %
Max Ratio
Min Ratio
TENDL Threshold 2.4205 MeV
JENDL5.0 Threshold 2.4205 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
150
100
50
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
50-Sn-120

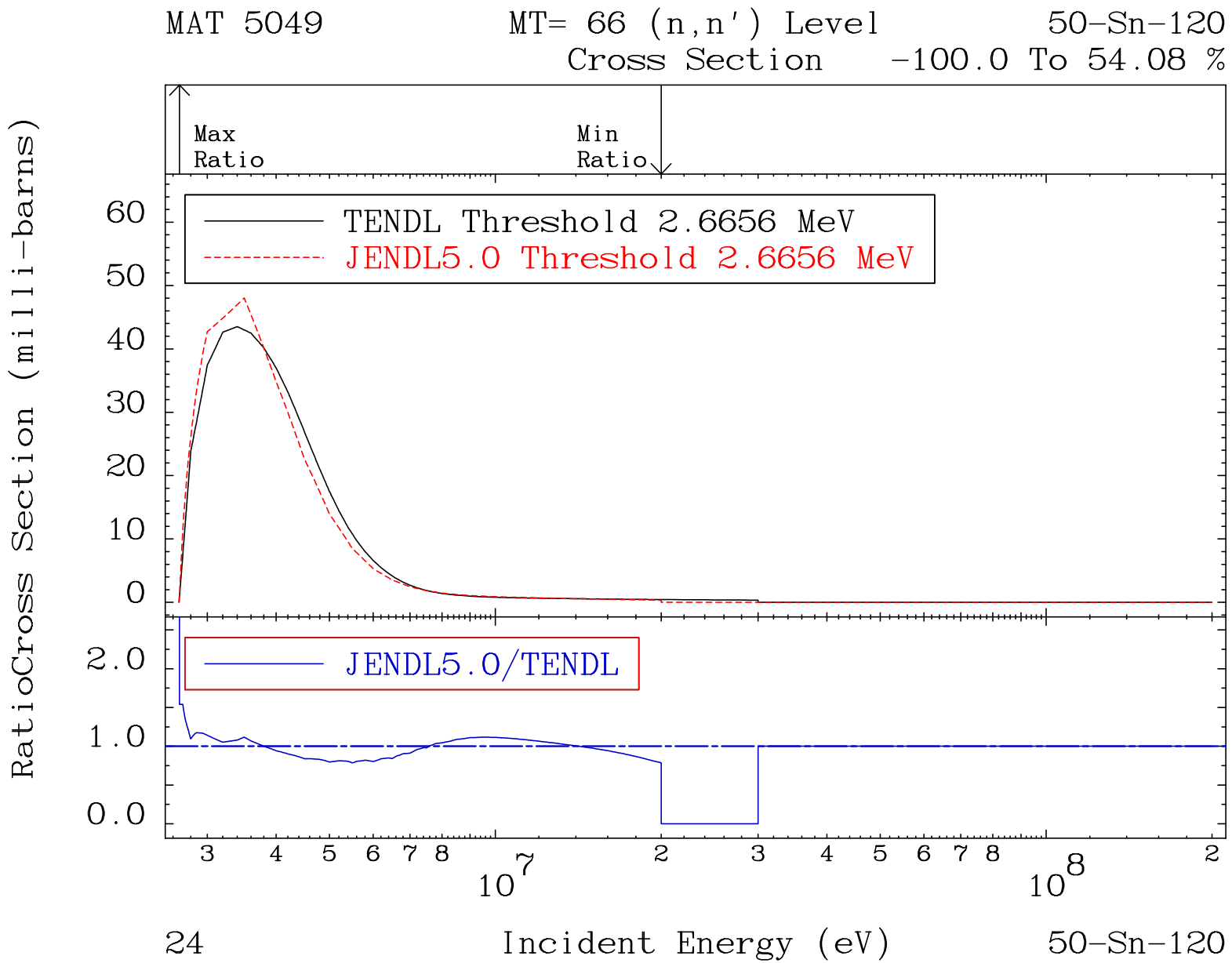

MAT 5049
MT= 61 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 68.24 %
Max
Ratio
TENDL Threshold 2.4413 MeV
JENDL5.0 Threshold 2.4413 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
50-Sn-120

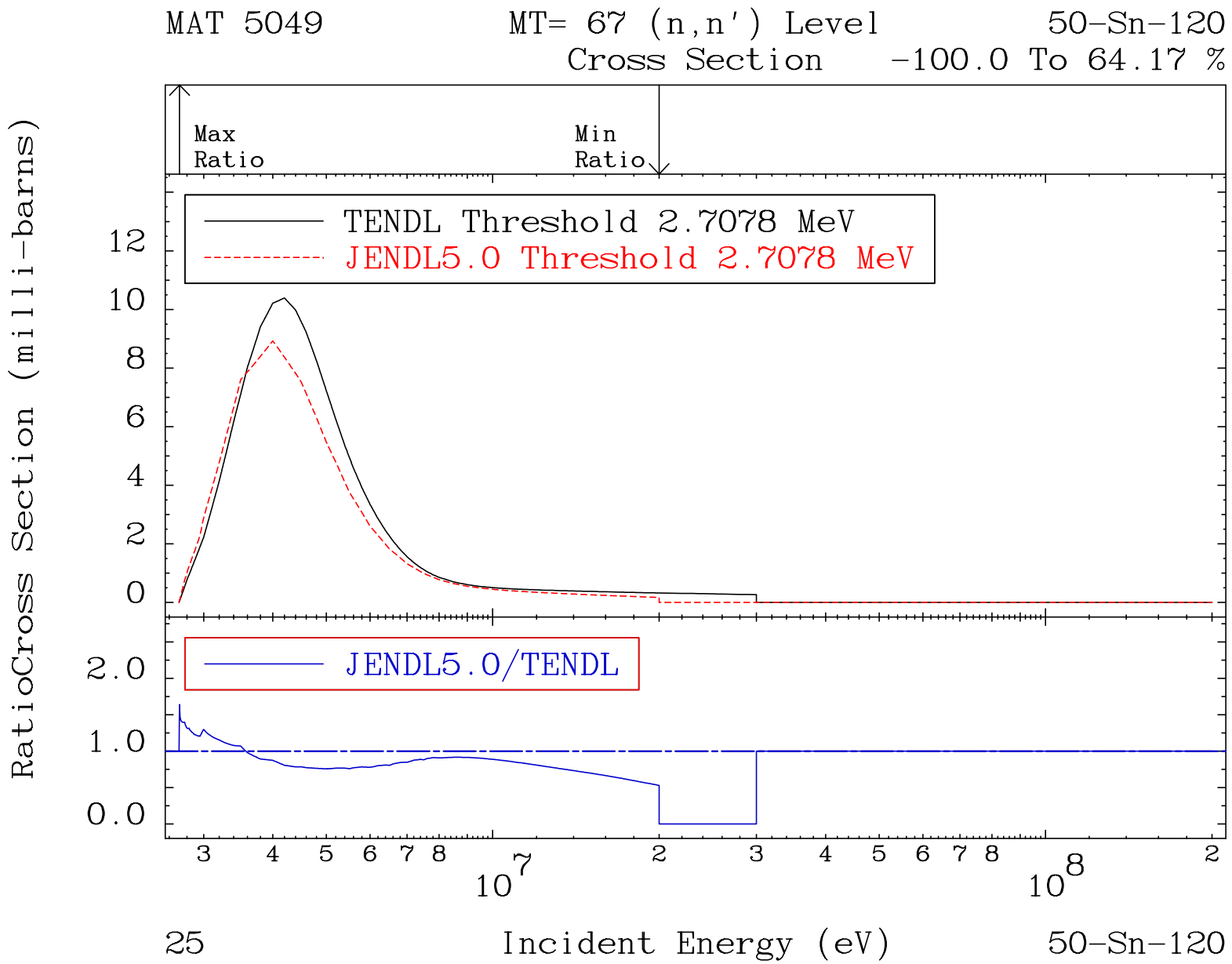

MAT 5049
MT= 62 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 129.0 %
Max Ratio
Min Ratio
TENDL Threshold 2.4864 MeV
JENDL5.0 Threshold 2.4864 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
50-Sn-120

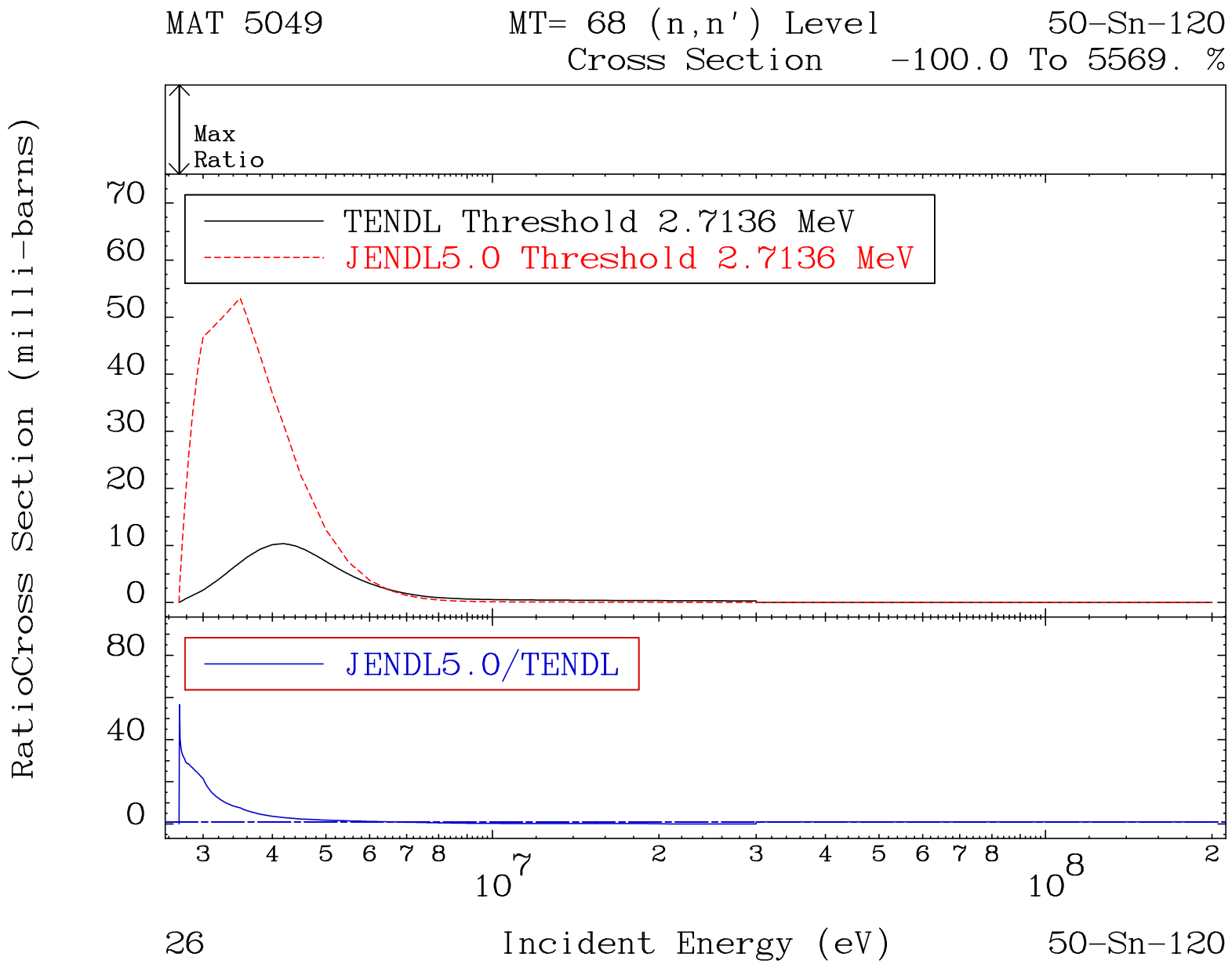

MAT 5049
MT= 63 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 131.9 %
Min Ratio
Max Ratio
TENDL Threshold 2.5025 MeV
JENDL5.0 Threshold 2.5025 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
21
50-Sn-120

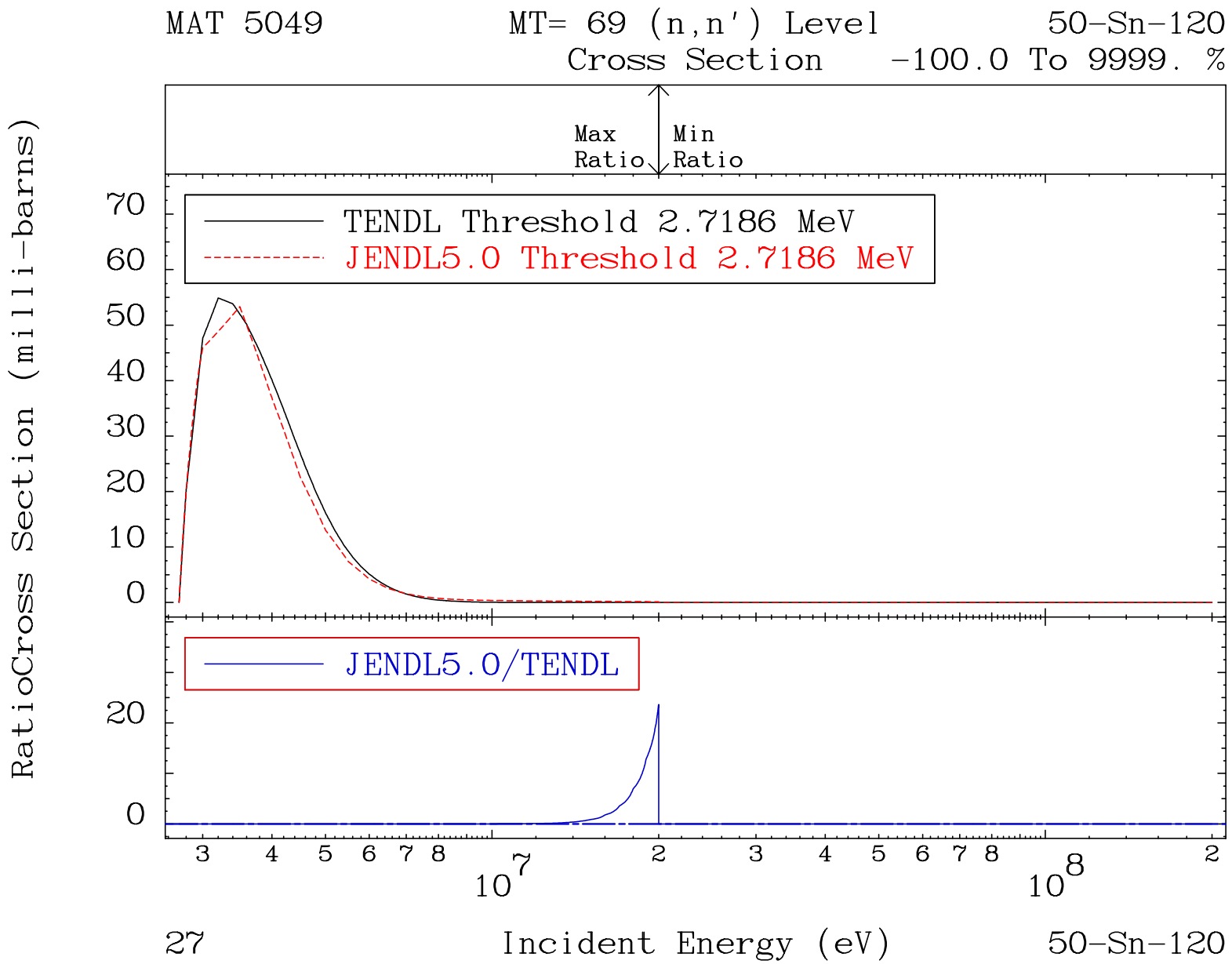

MAT 5049
MT= 64 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 94.80 %
Min Ratio
Max Ratio
TENDL Threshold 2.5614 MeV
JENDL5.0 Threshold 2.5614 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
50-Sn-120

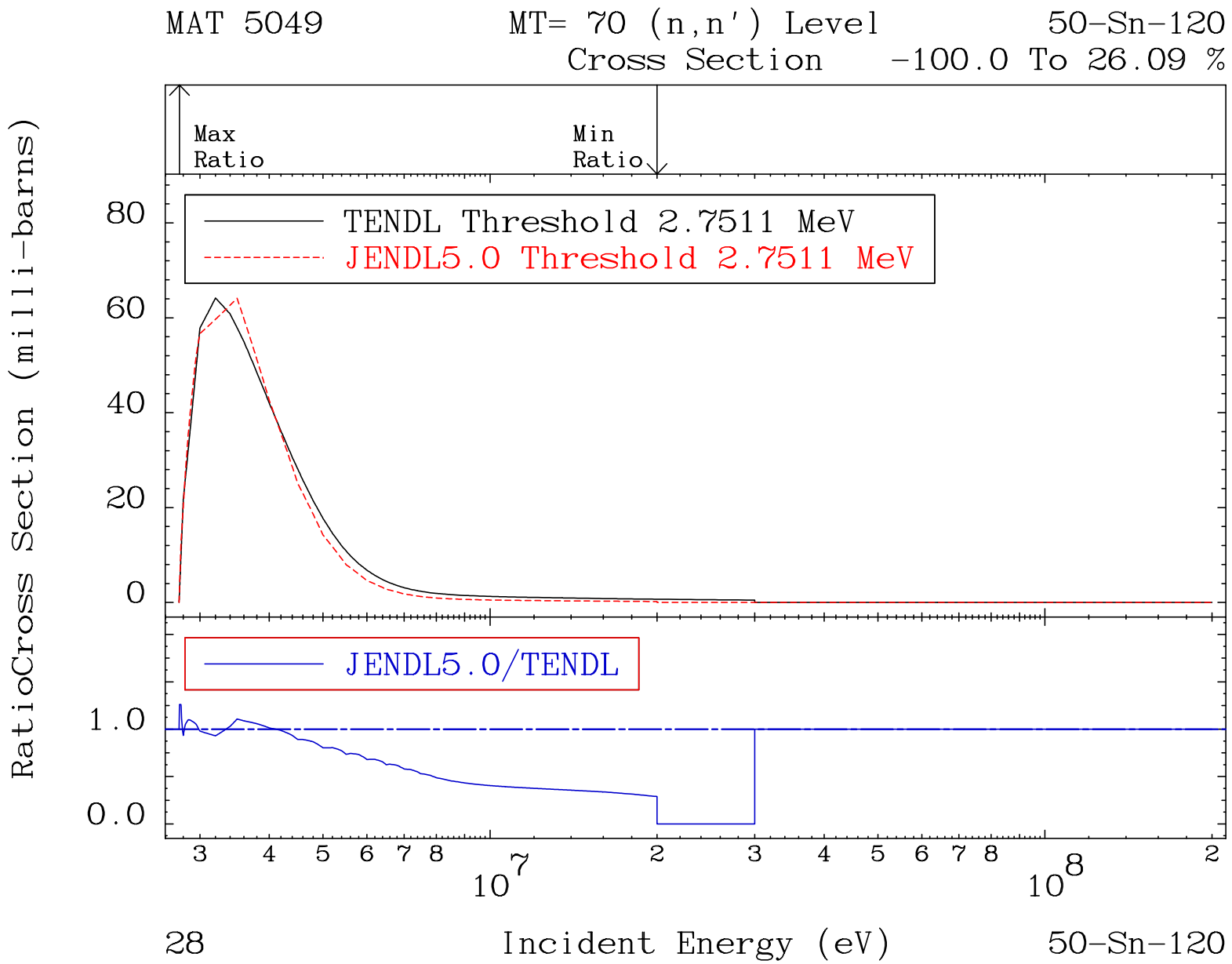

MAT 5049
MT= 65 (n,n') Level
50-Sn-120
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.6090 MeV
JENDL5.0 Threshold 2.6090 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
600
400
200
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
50-Sn-120

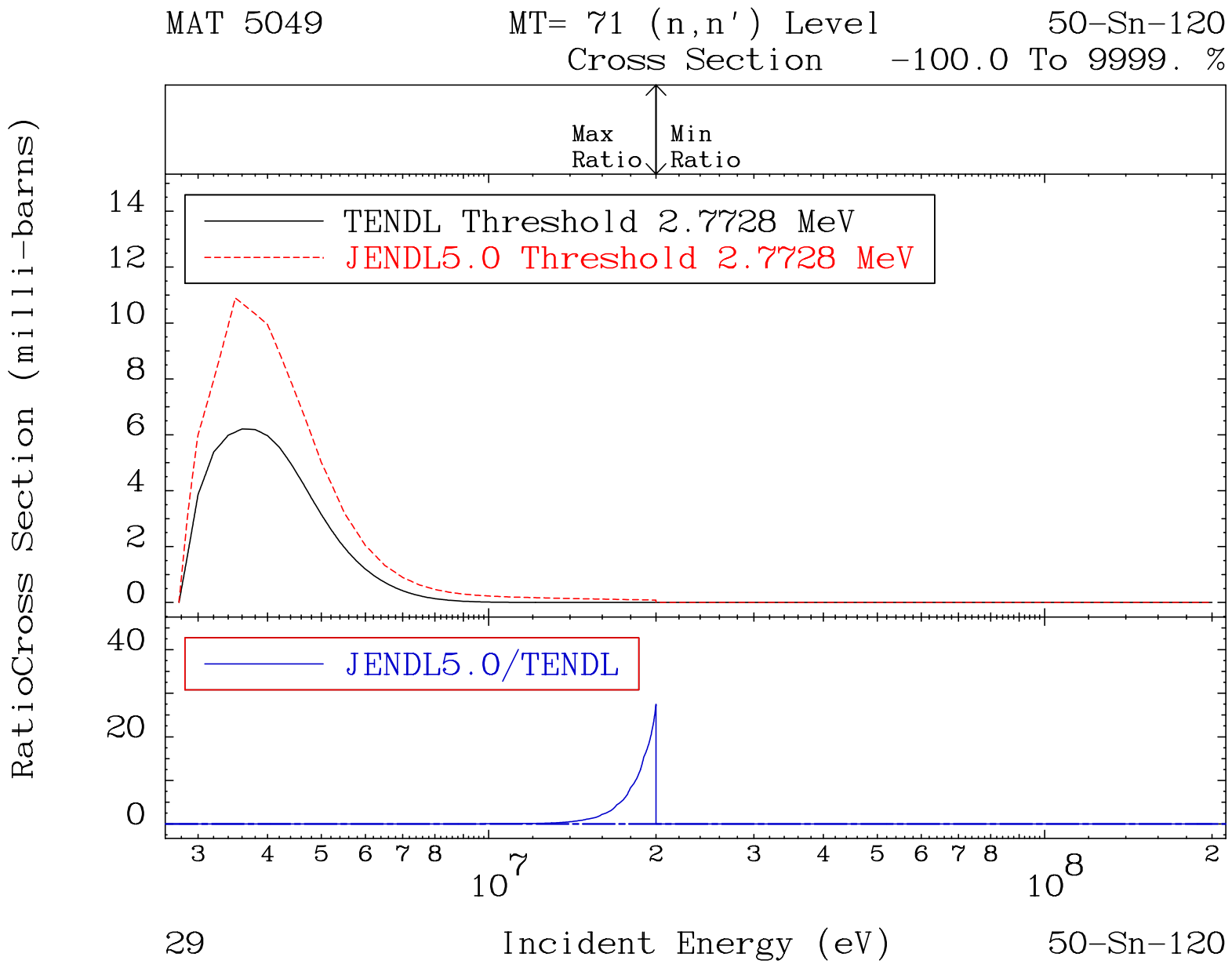

MAT 5049
MT= 66 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 54.08 %
Max Ratio
Min Ratio
TENDL Threshold 2.6656 MeV
JENDL5.0 Threshold 2.6656 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
50-Sn-120

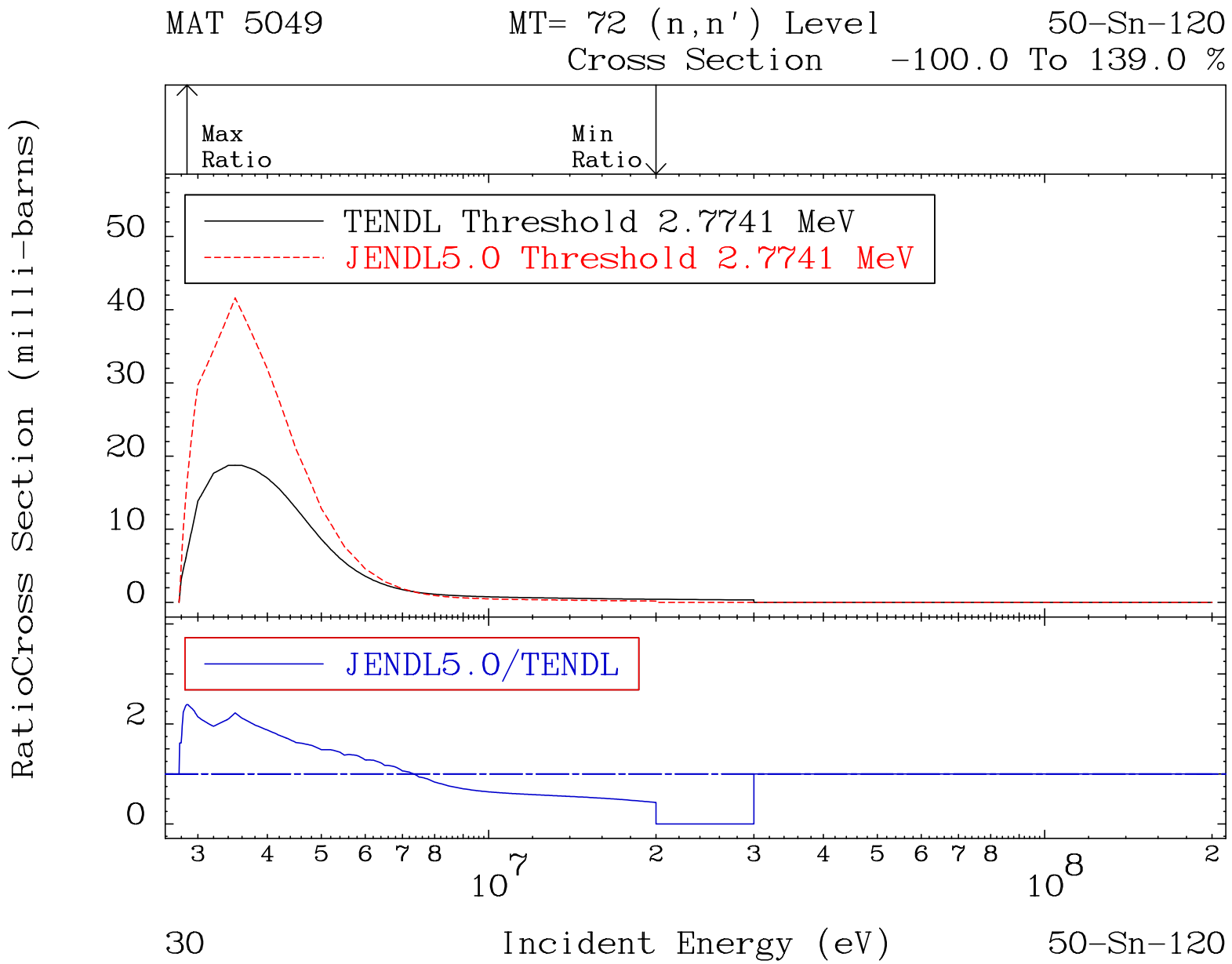

MAT 5049
MT= 67 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 64.17 %
Max Ratio
Min Ratio
TENDL Threshold 2.7078 MeV
JENDL5.0 Threshold 2.7078 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
12
10
8
6
4
2
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
25
50-Sn-120

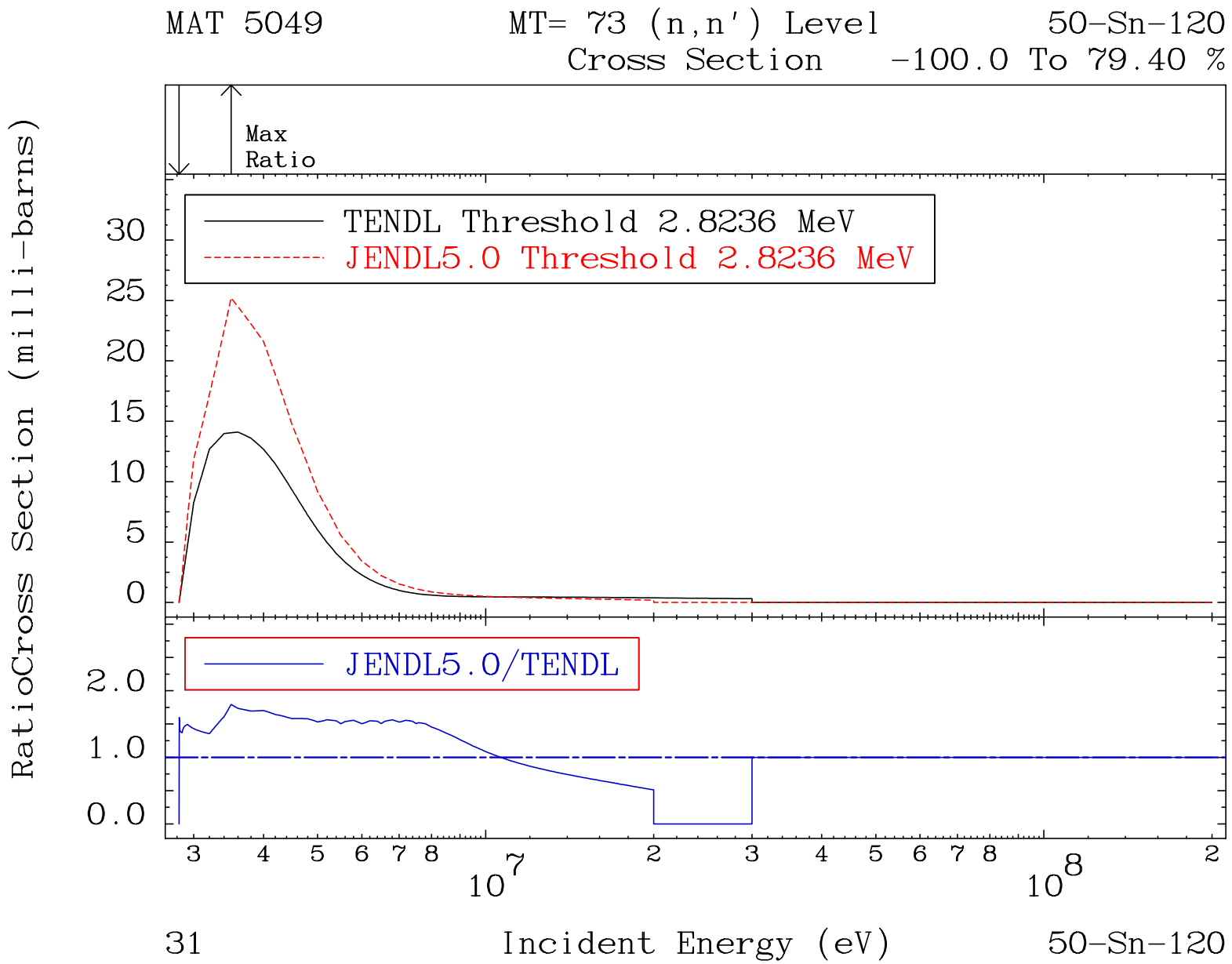

MAT 5049
MT= 68 (n,n') Level
50-Sn-120
Cross Section -100.0 To 5569. %
Max
Ratio
TENDL Threshold 2.7136 MeV
JENDL5.0 Threshold 2.7136 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
80
40
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
50-Sn-120

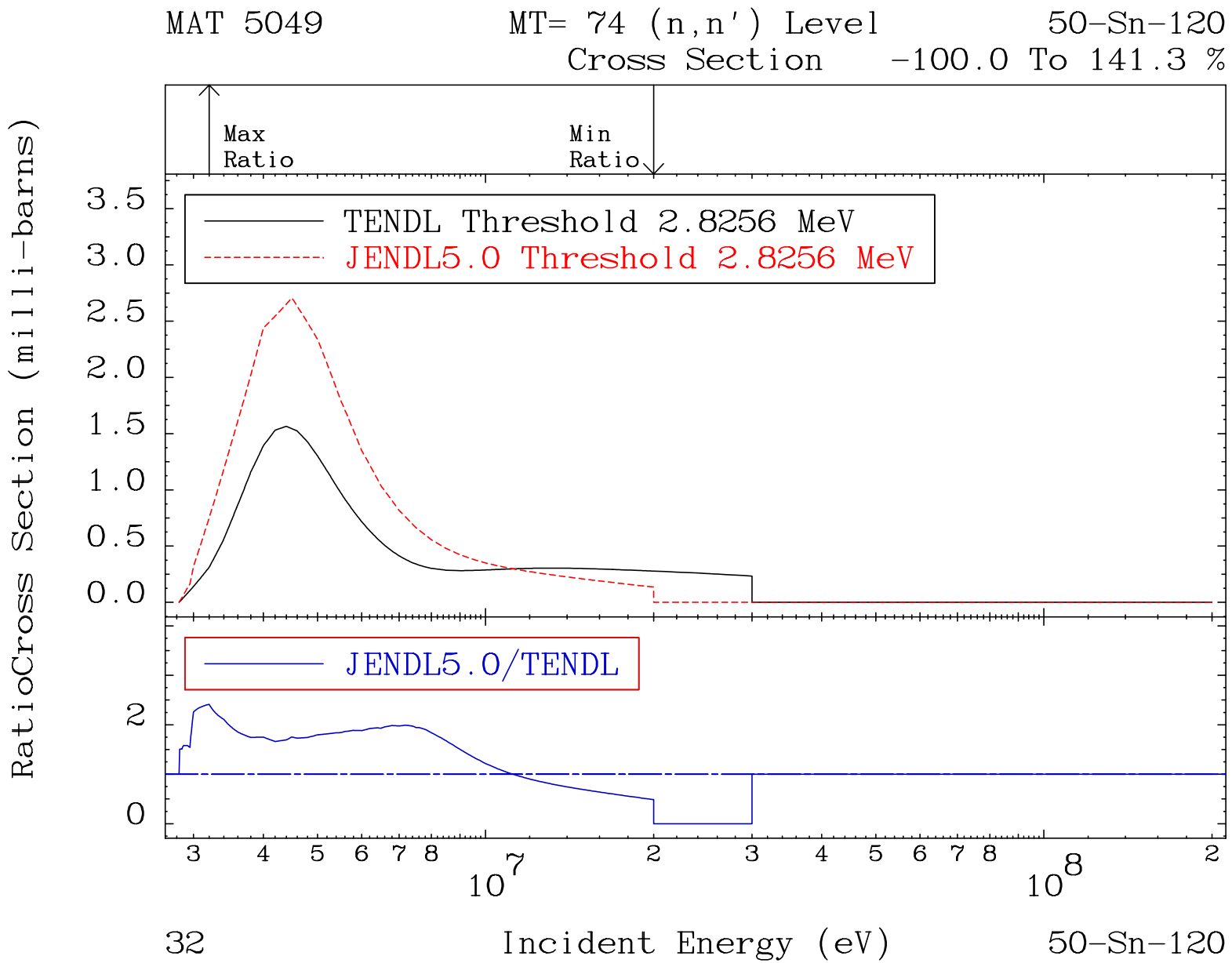

MAT 5049
MT= 69 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.7186 MeV
JENDL5.0 Threshold 2.7186 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
20
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
50-Sn-120

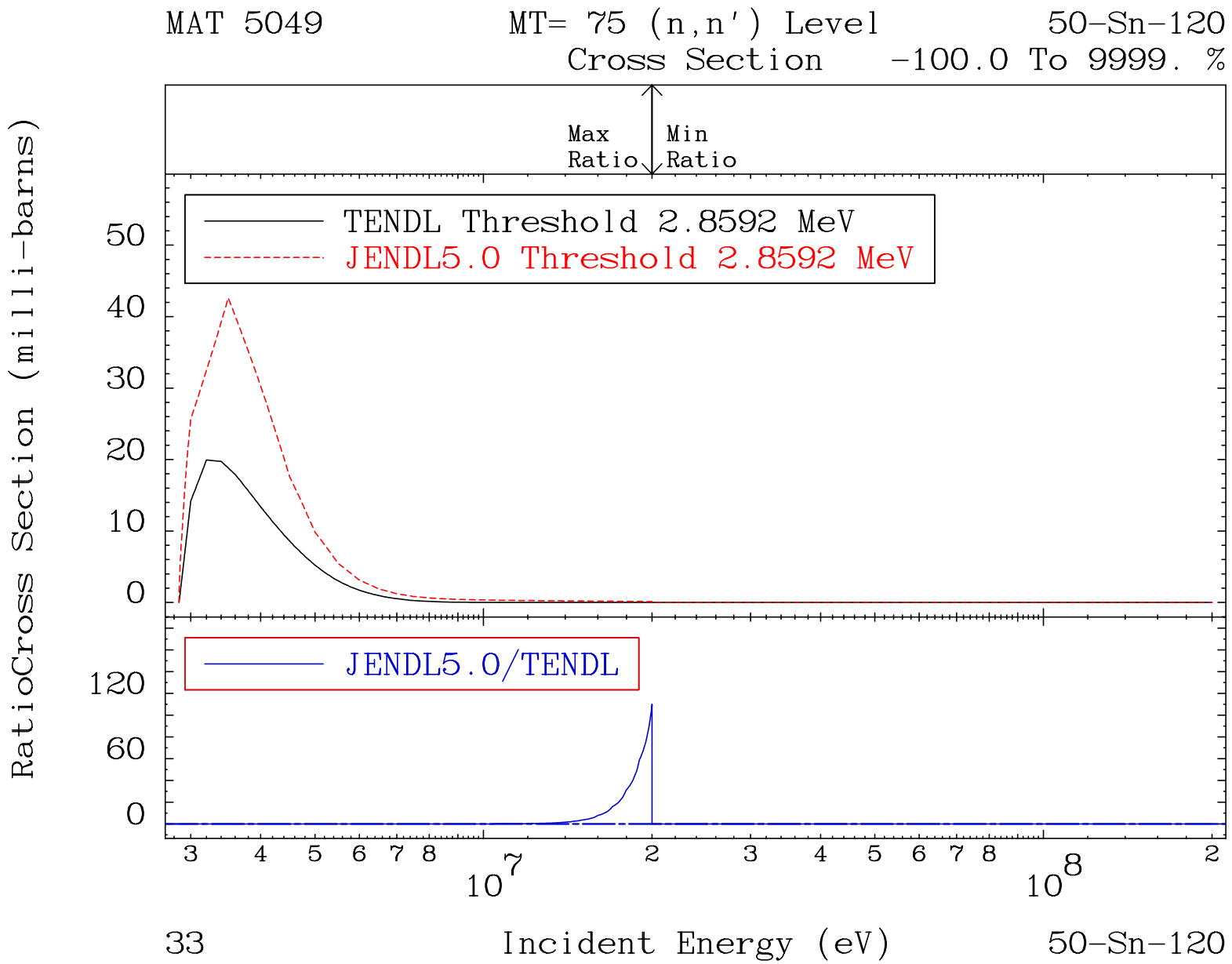

MAT 5049
MT= 70 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 26.09 %
Max Ratio
Min Ratio
TENDL Threshold 2.7511 MeV
JENDL5.0 Threshold 2.7511 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
50-Sn-120

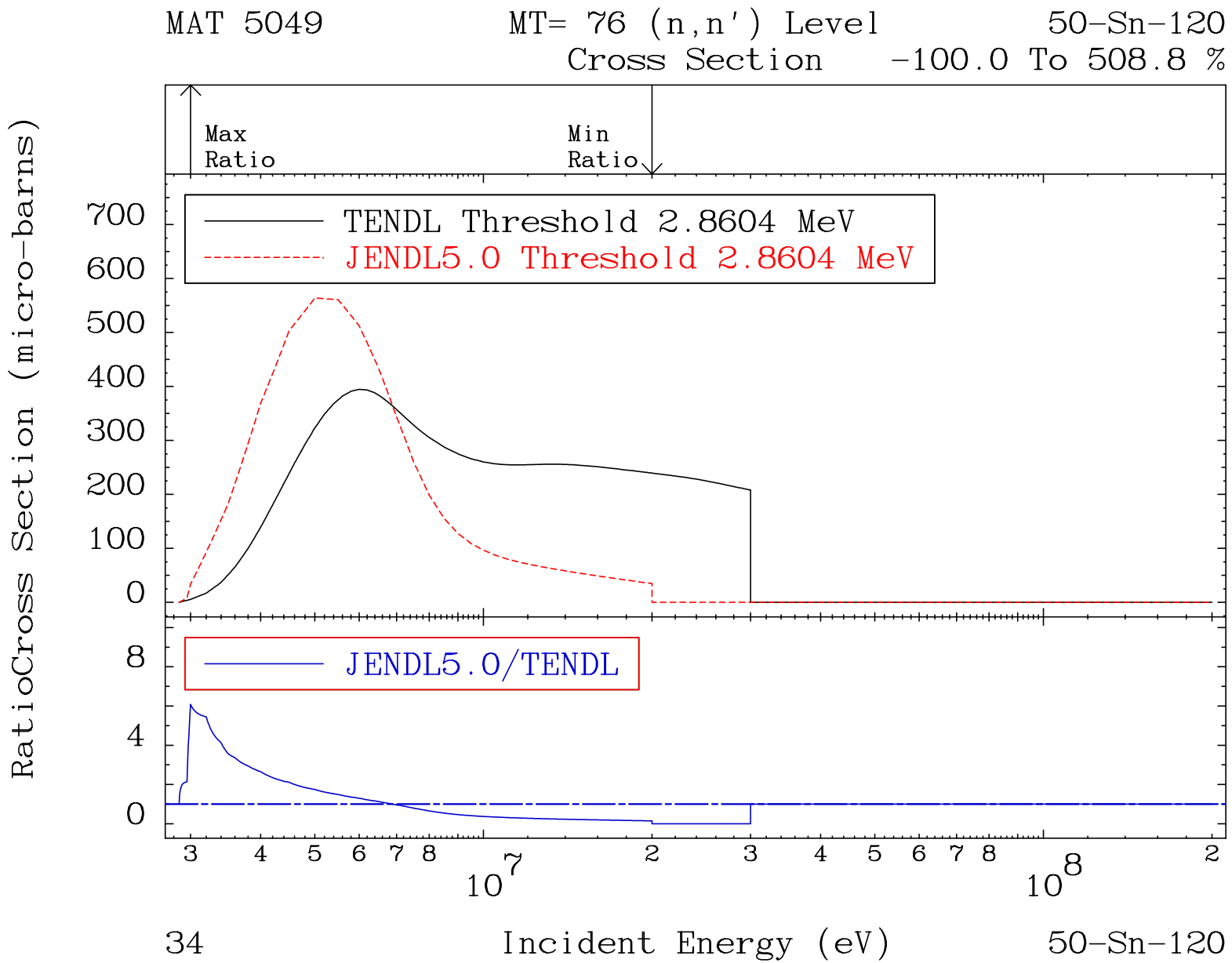

MAT 5049
MT= 71 (n,n') Level
50-Sn-120
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.7728 MeV
JENDL5.0 Threshold 2.7728 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
29
50-Sn-120

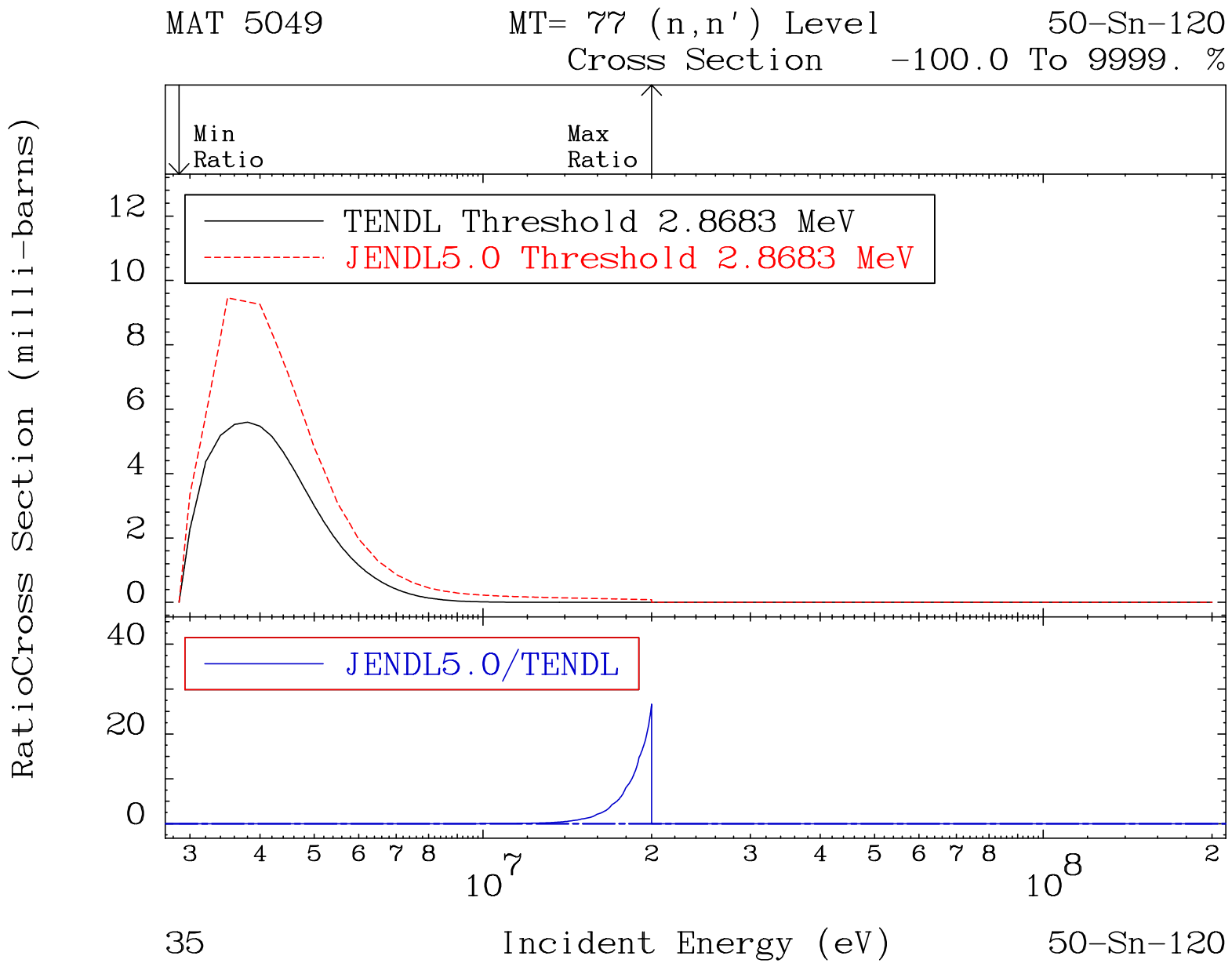

MAT 5049
MT= 72 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 139.0 %
Max Ratio
Min Ratio
TENDL Threshold 2.7741 MeV
JENDL5.0 Threshold 2.7741 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
30
Incident Energy (eV)
50-Sn-120

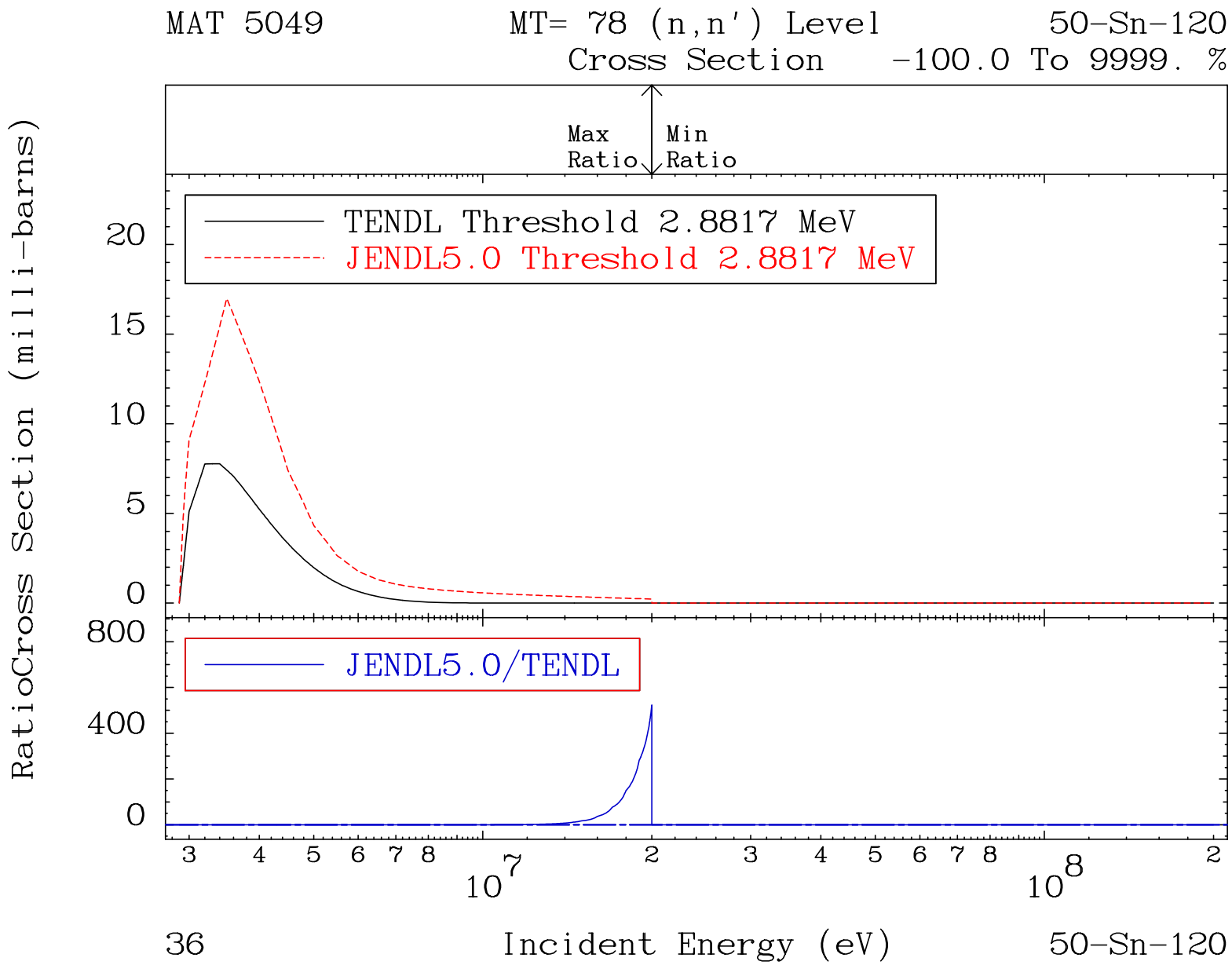

MAT 5049
MT= 73 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 79.40 %
Max
Ratio
TENDL Threshold 2.8236 MeV
JENDL5.0 Threshold 2.8236 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
31
Incident Energy (eV)
50-Sn-120

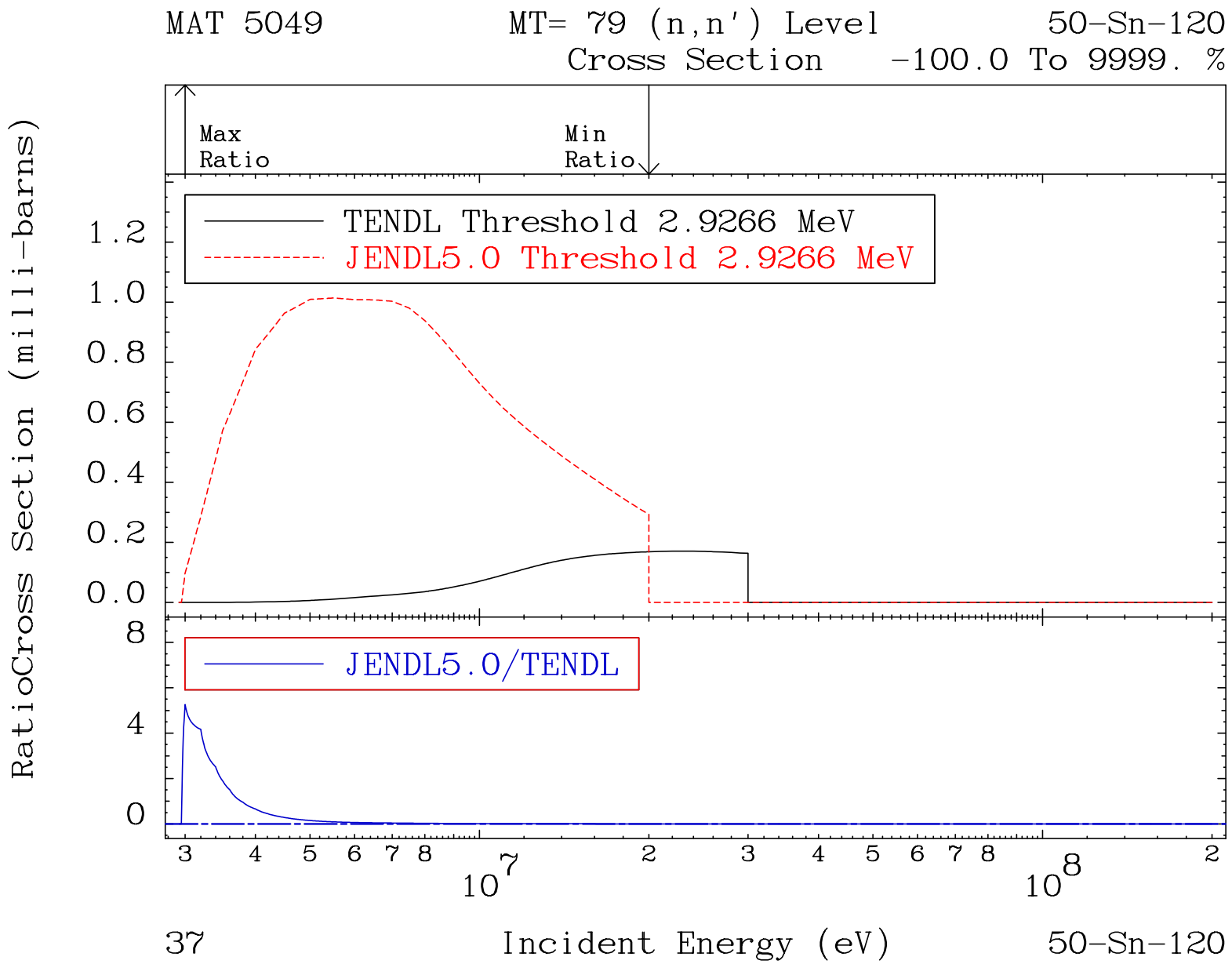

MAT 5049
MT= 74 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 141.3 %
Max Ratio
Min Ratio
TENDL Threshold 2.8256 MeV
JENDL5.0 Threshold 2.8256 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
50-Sn-120

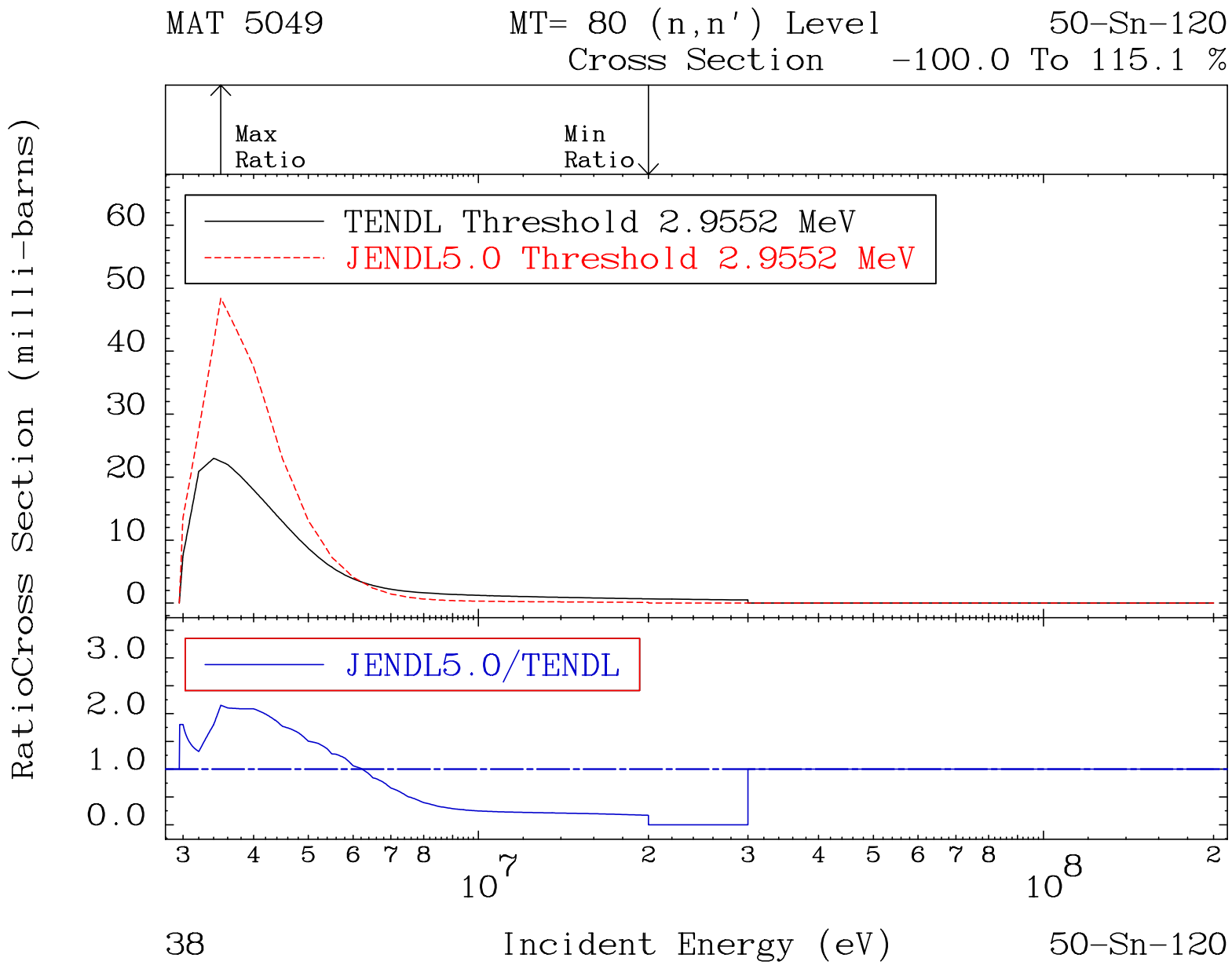

MAT 5049
MT= 75 (n,n') Level
50-Sn-120
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.8592 MeV
JENDL5.0 Threshold 2.8592 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
120
60
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
50-Sn-120

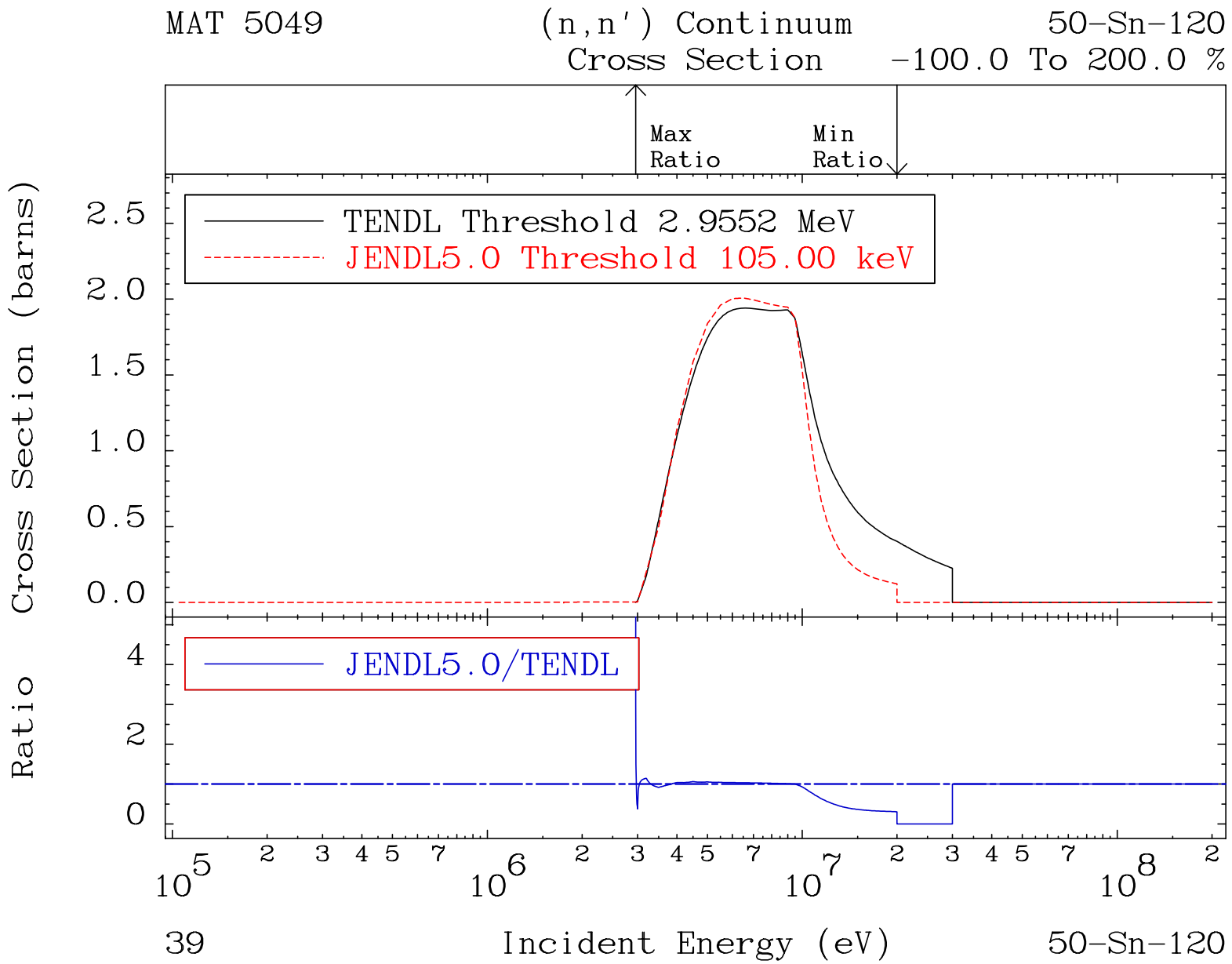

MAT 5049
MT= 76 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 508.8 %
Max Ratio
Min Ratio
TENDL Threshold 2.8604 MeV
JENDL5.0 Threshold 2.8604 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
700
600
500
400
300
200
100
0
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
50-Sn-120

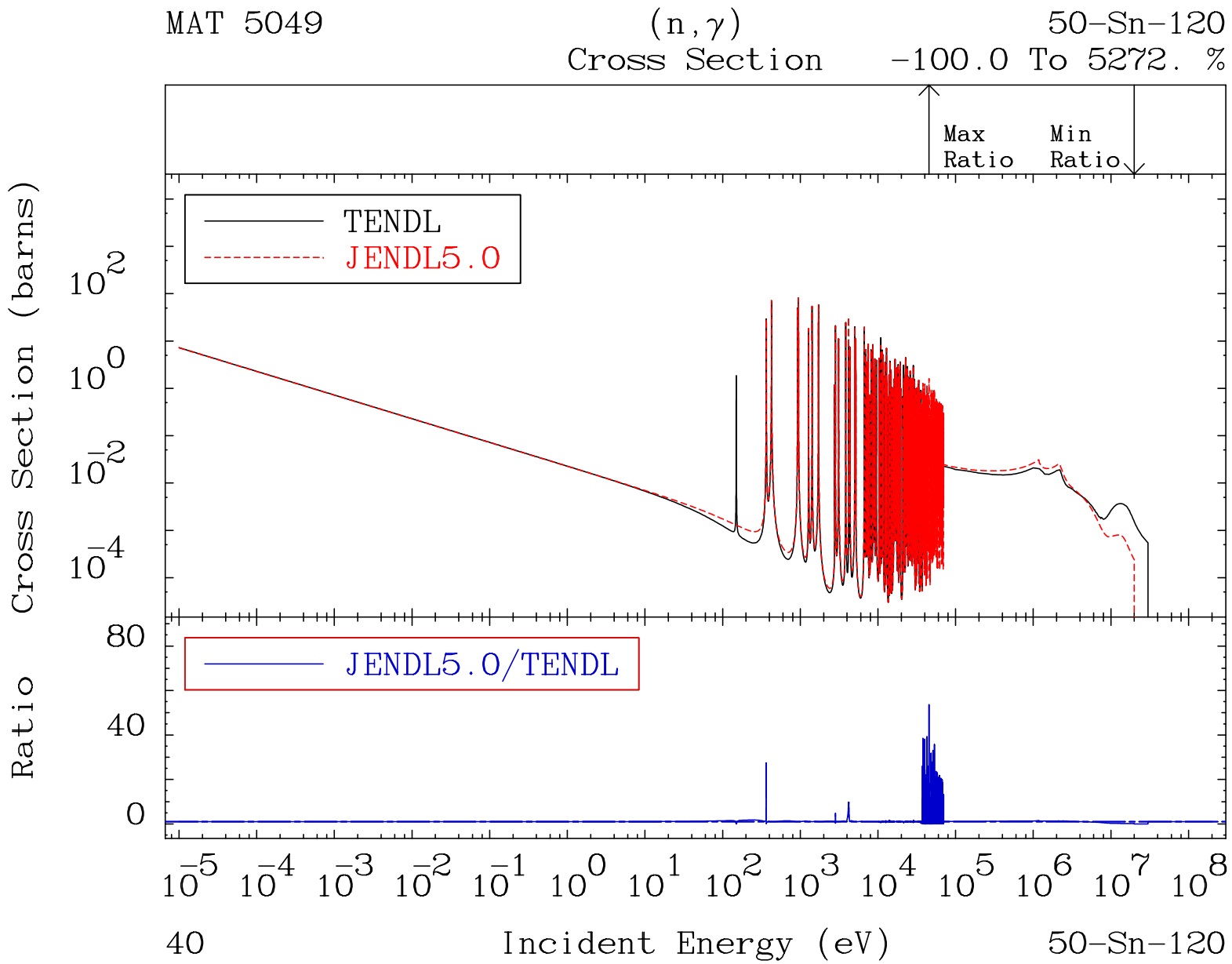

MAT 5049
MT= 77 (n,n') Level
50-Sn-120
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.8683 MeV
JENDL5.0 Threshold 2.8683 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
35
50-Sn-120

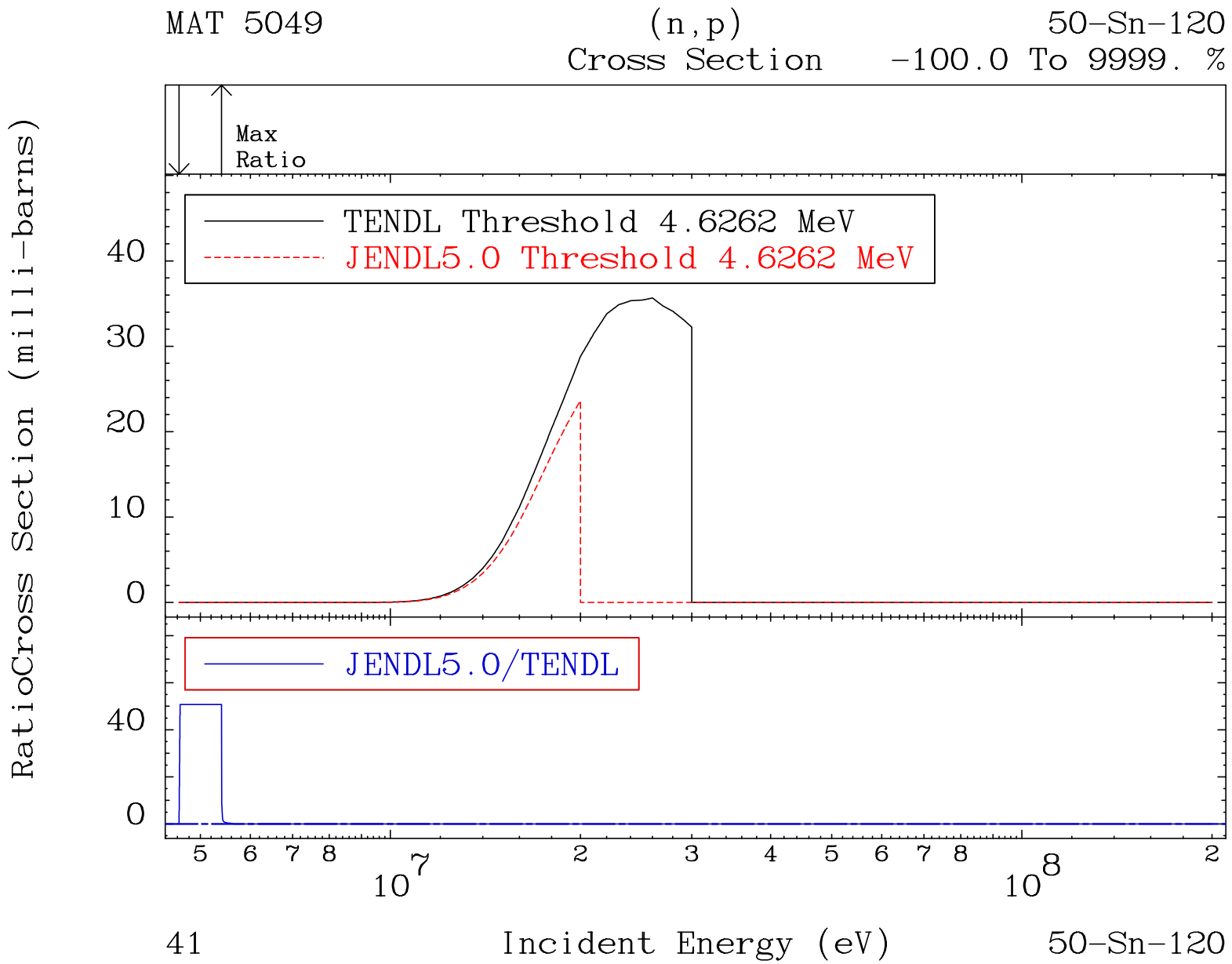

MAT 5049
MT= 78 (n,n') Level
50-Sn-120
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.8817 MeV
JENDL5.0 Threshold 2.8817 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
800
400
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
36
Incident Energy (eV)
50-Sn-120

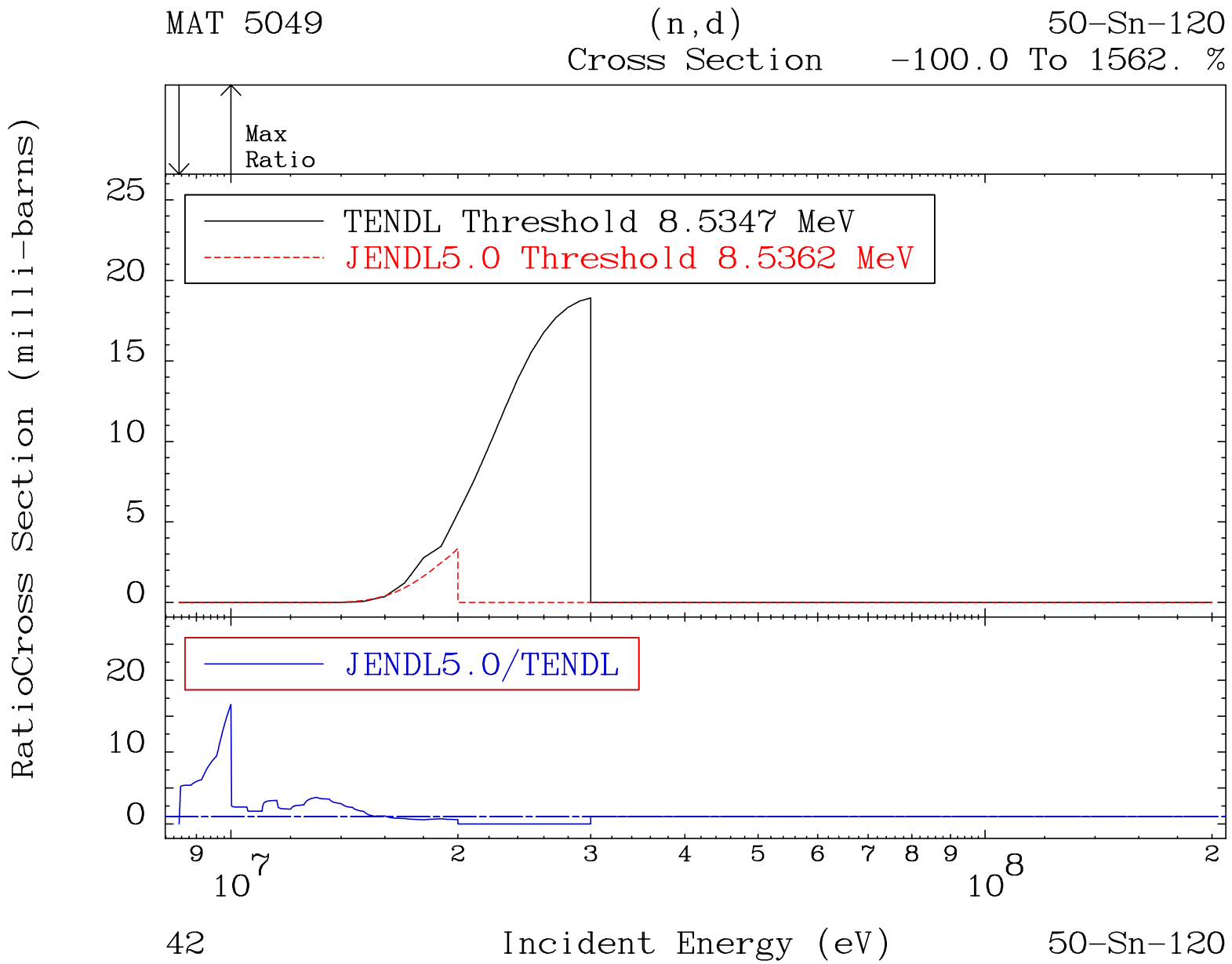

MAT 5049
MT= 79 (n,n') Level
50-Sn-120
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.9266 MeV
JENDL5.0 Threshold 2.9266 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
8
4
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
37
Incident Energy (eV)
50-Sn-120

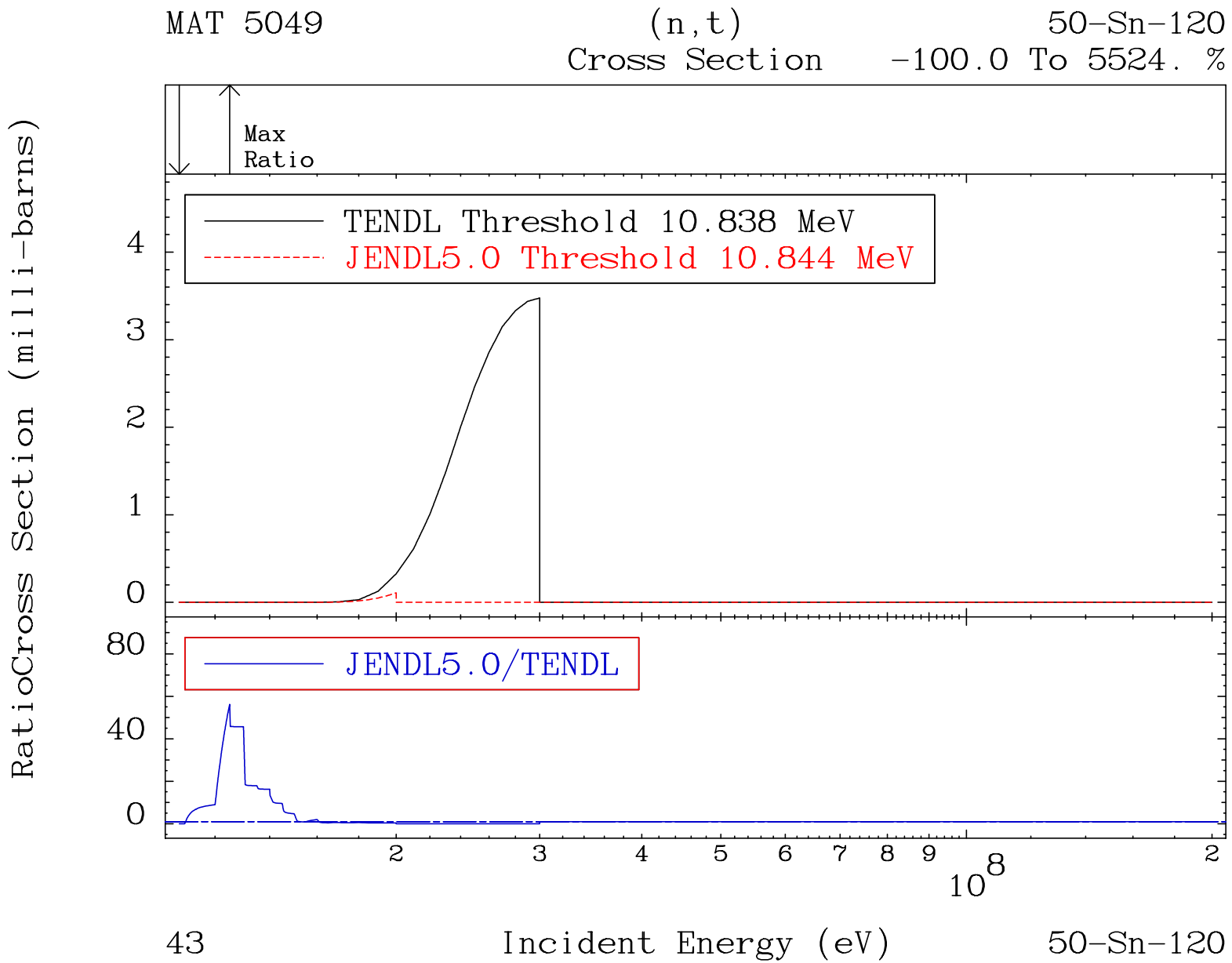

MAT 5049
MT= 80 (n,n') Level
50-Sn-120
Cross Section -100.0 To 115.1 %
Max Ratio
Min Ratio
TENDL Threshold 2.9552 MeV
JENDL5.0 Threshold 2.9552 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
38
Incident Energy (eV)
50-Sn-120

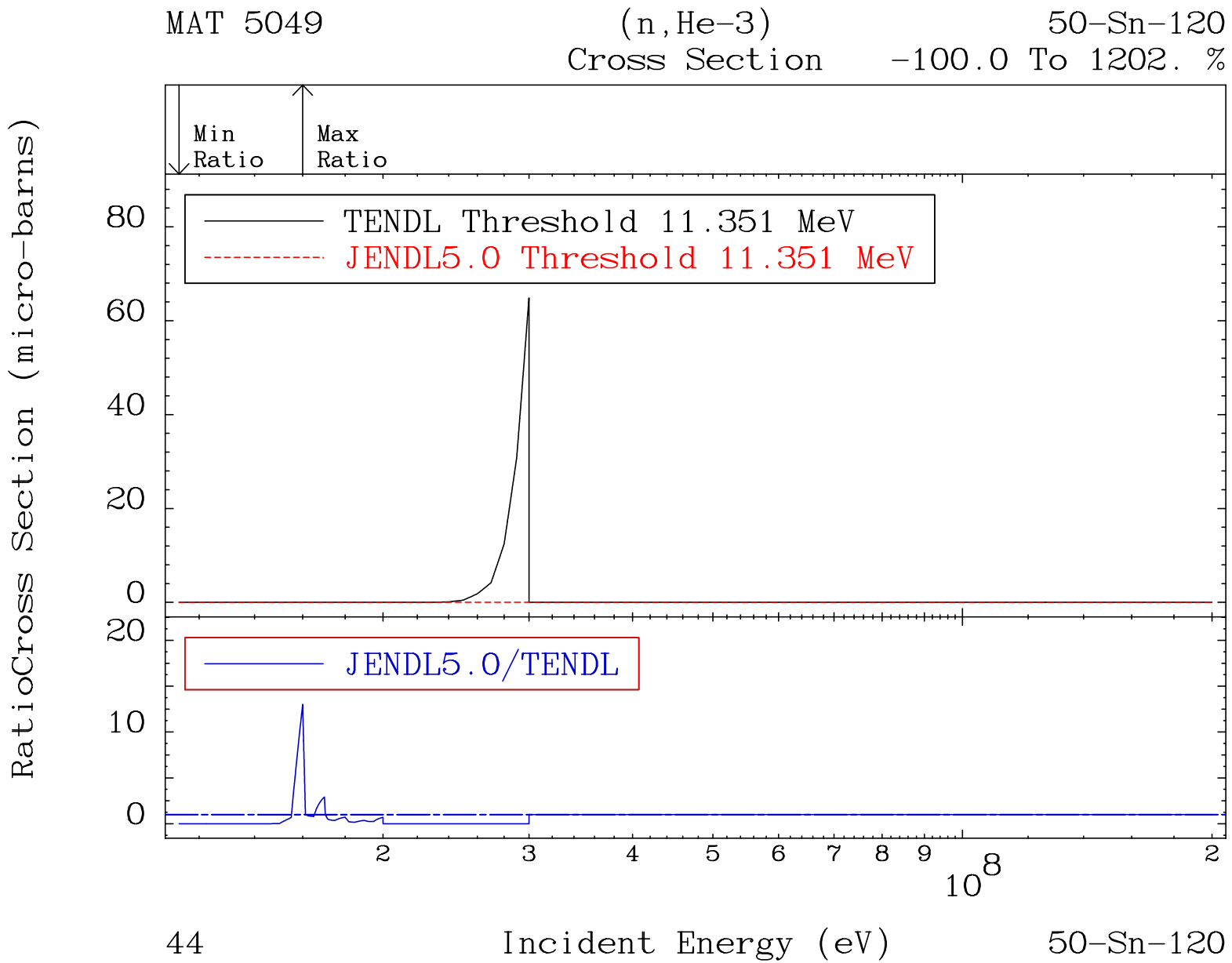

MAT 5049
(n,n') Continuum
Cross Section
50-Sn-120
-100.0 To 200.0 %
Max Ratio
Min Ratio
TENDL Threshold 2.9552 MeV
JENDL5.0 Threshold 105.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
39
50-Sn-120

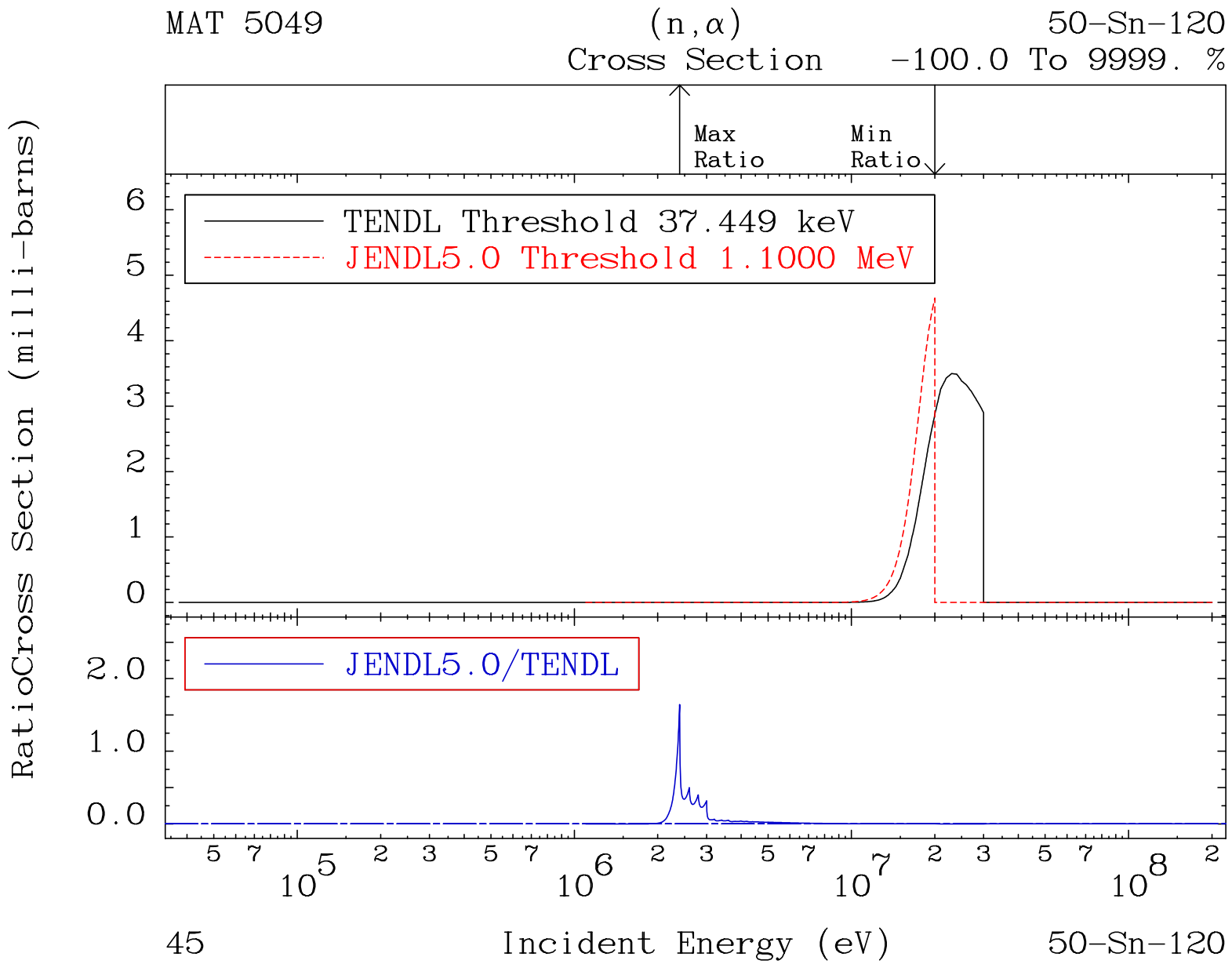

MAT 5049
(n,γ)
Cross Section
50-Sn-120
-100.0 To 5272. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
40
50-Sn-120

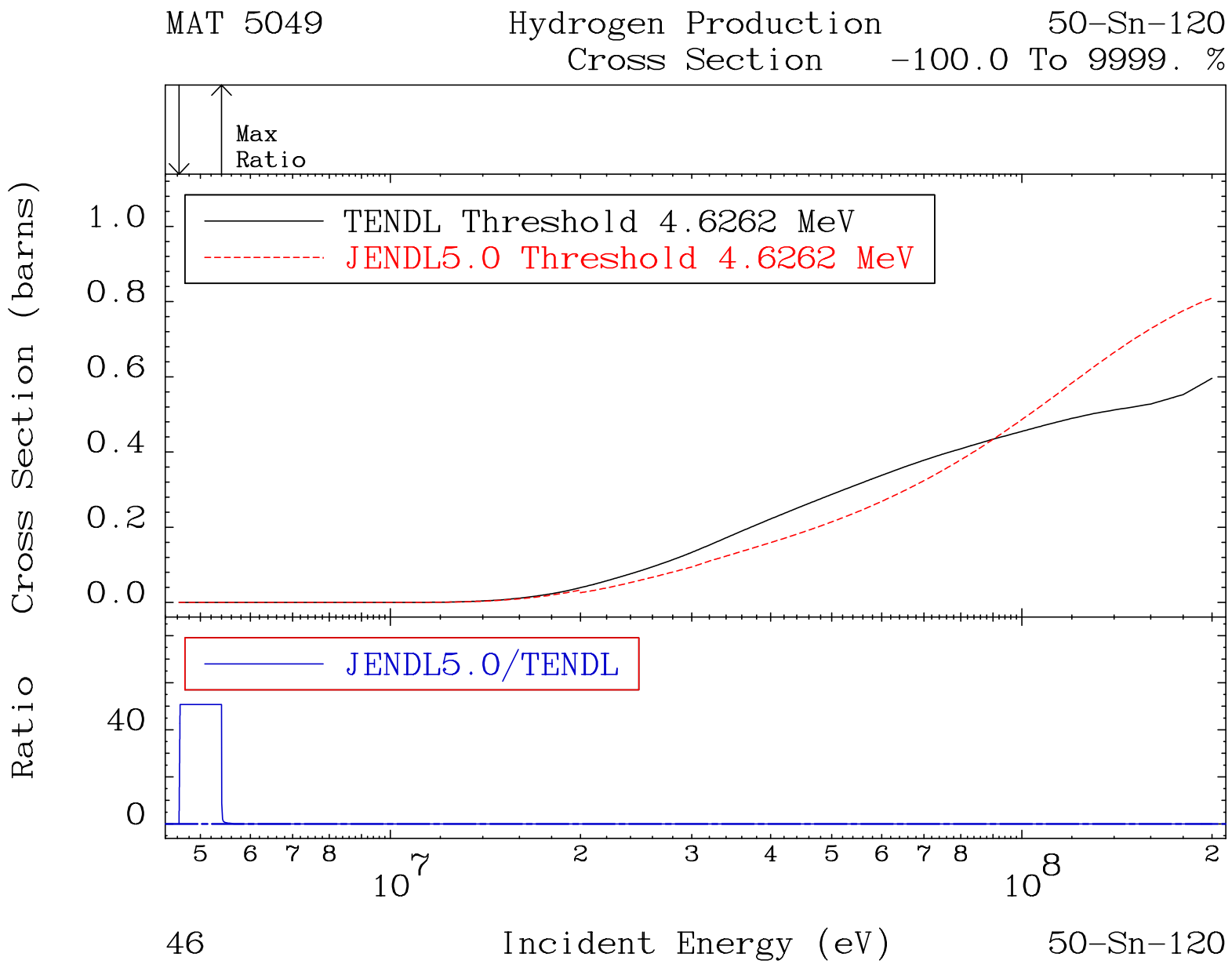

MAT 5049
(n,p)
50-Sn-120
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 4.6262 MeV
JENDL5.0 Threshold 4.6262 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
40
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
50-Sn-120

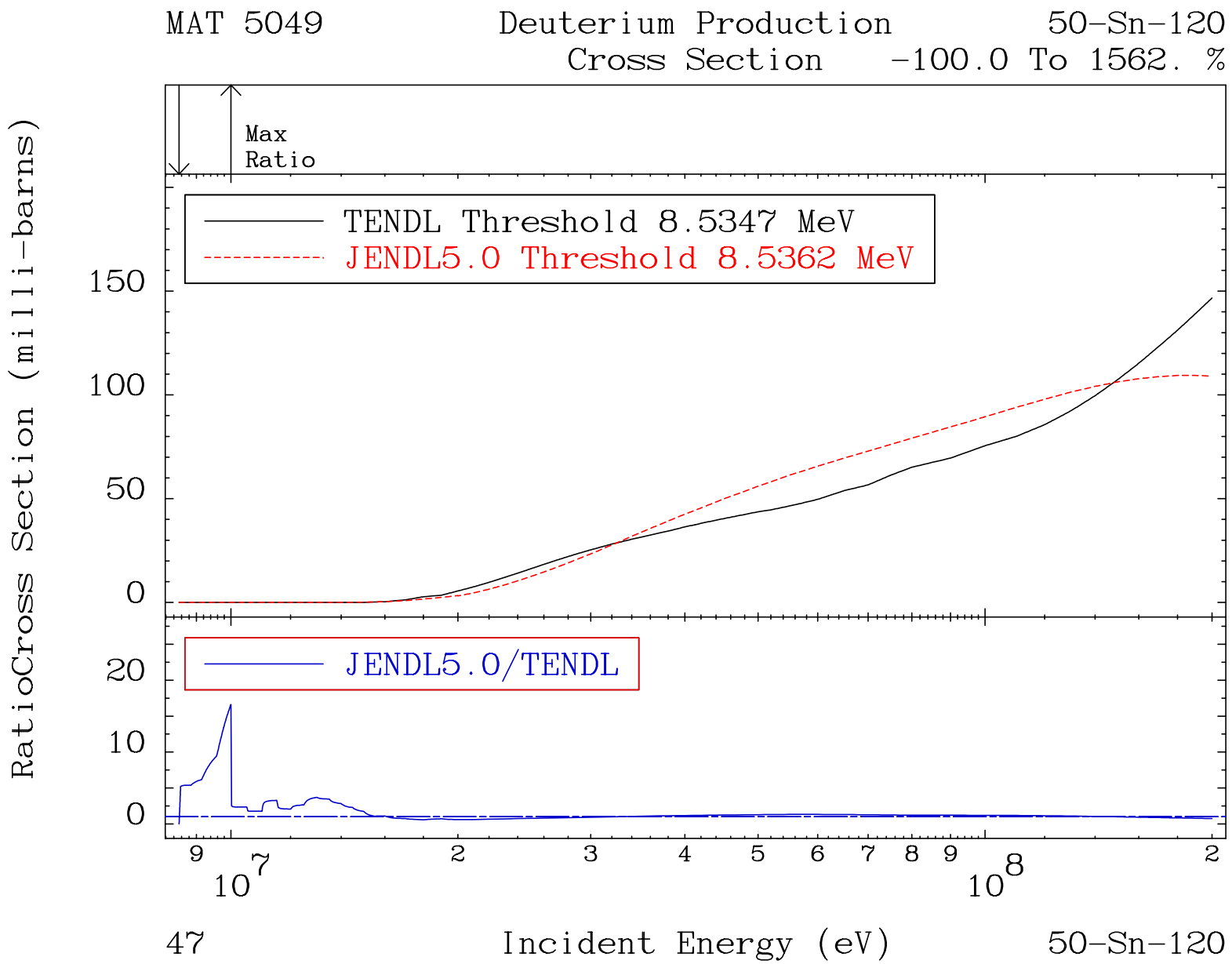

MAT 5049
(n,d)
50-Sn-120
Cross Section
-100.0 To 1562. %
Max
Ratio
TENDL Threshold 8.5347 MeV
JENDL5.0 Threshold 8.5362 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
20
10
0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
42
Incident Energy (eV)
50-Sn-120

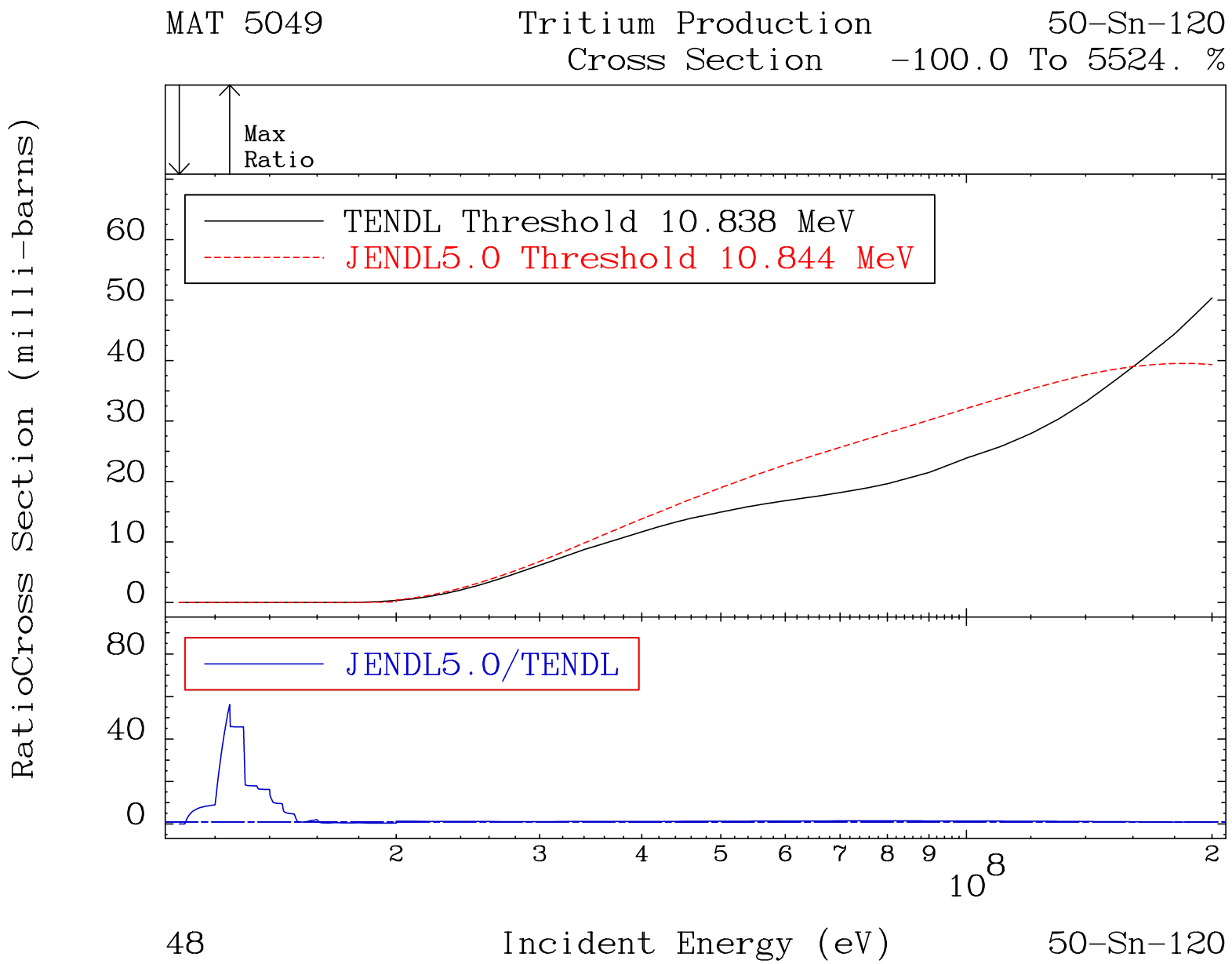

MAT 5049
(n,t)
50-Sn-120
Cross Section
-100.0 To 5524. %
Max
Ratio
TENDL Threshold 10.838 MeV
JENDL5.0 Threshold 10.844 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
4
3
2
1
0
80
40
0
2
3
4
5
6
7
8
9
10^8
2
43
Incident Energy (eV)
50-Sn-120

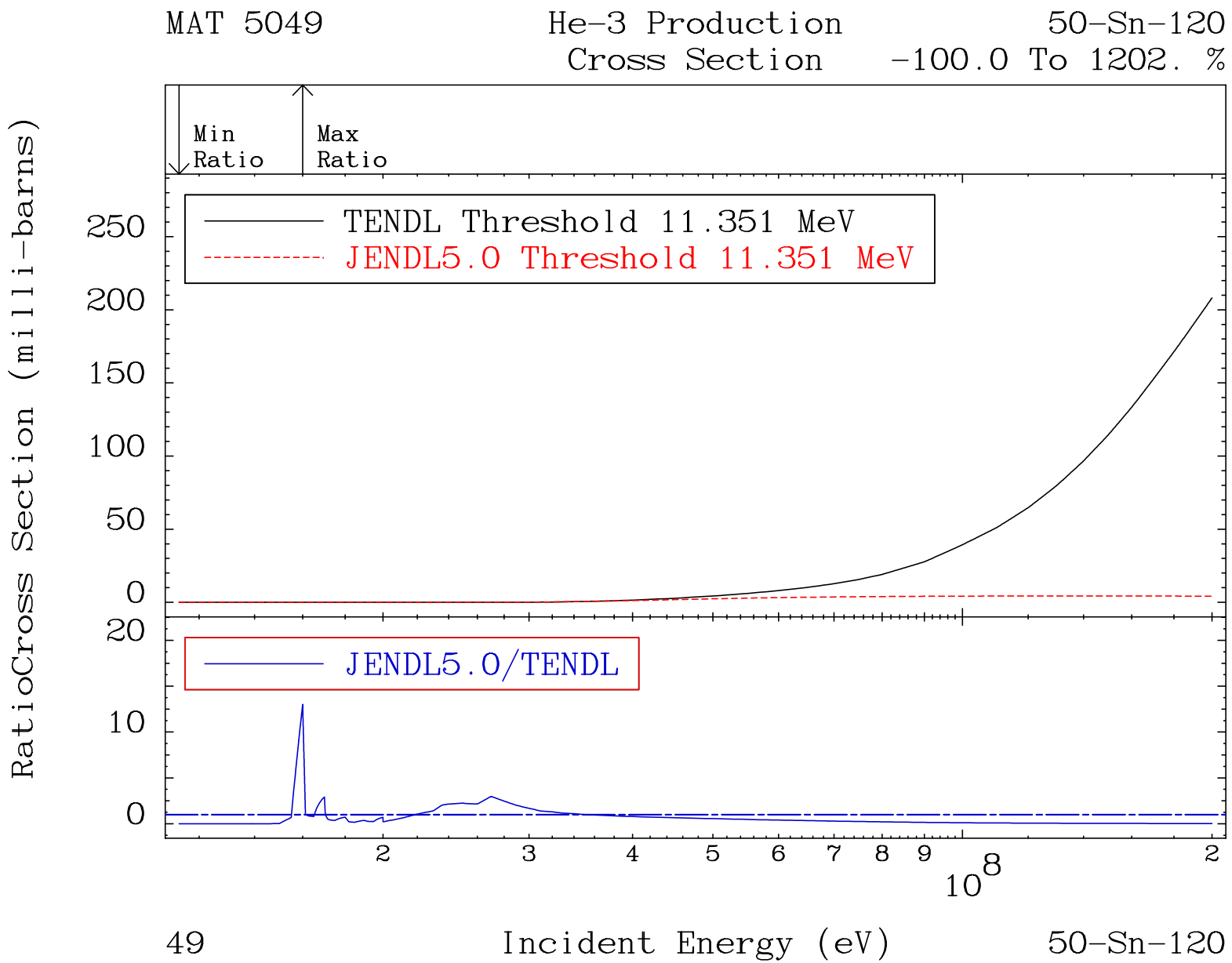

MAT 5049
(n,He-3)
50-Sn-120
Cross Section
-100.0 To 1202. %
Min Ratio
Max Ratio
TENDL Threshold 11.351 MeV
JENDL5.0 Threshold 11.351 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
80
60
40
20
0
20
10
0
2
3
4
5
6
7
8
9
2
10^8
44
Incident Energy (eV)
50-Sn-120

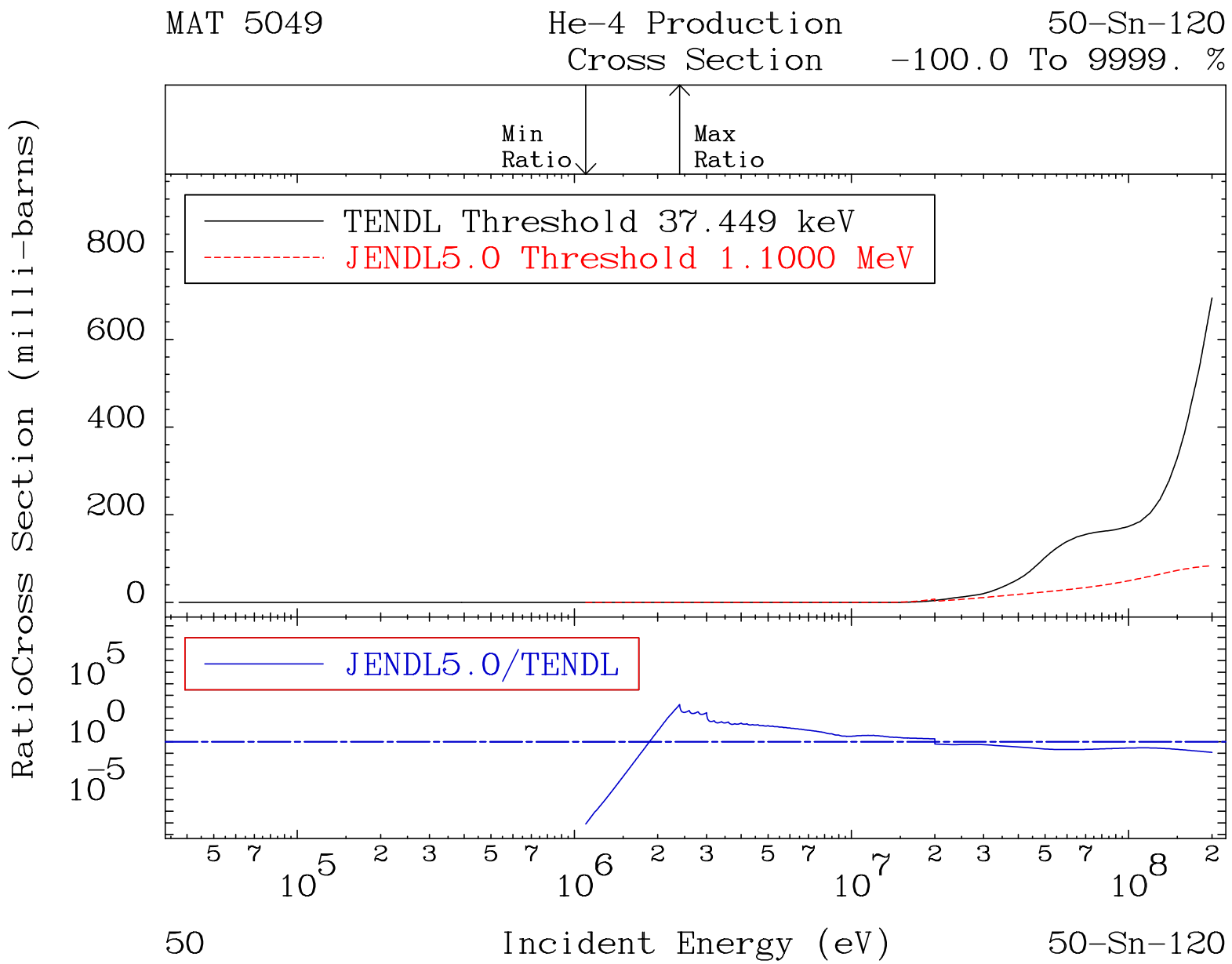

MAT 5049
(n,α)
Cross Section
50-Sn-120
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 37.449 keV
JENDL5.0 Threshold 1.1000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
45
50-Sn-120

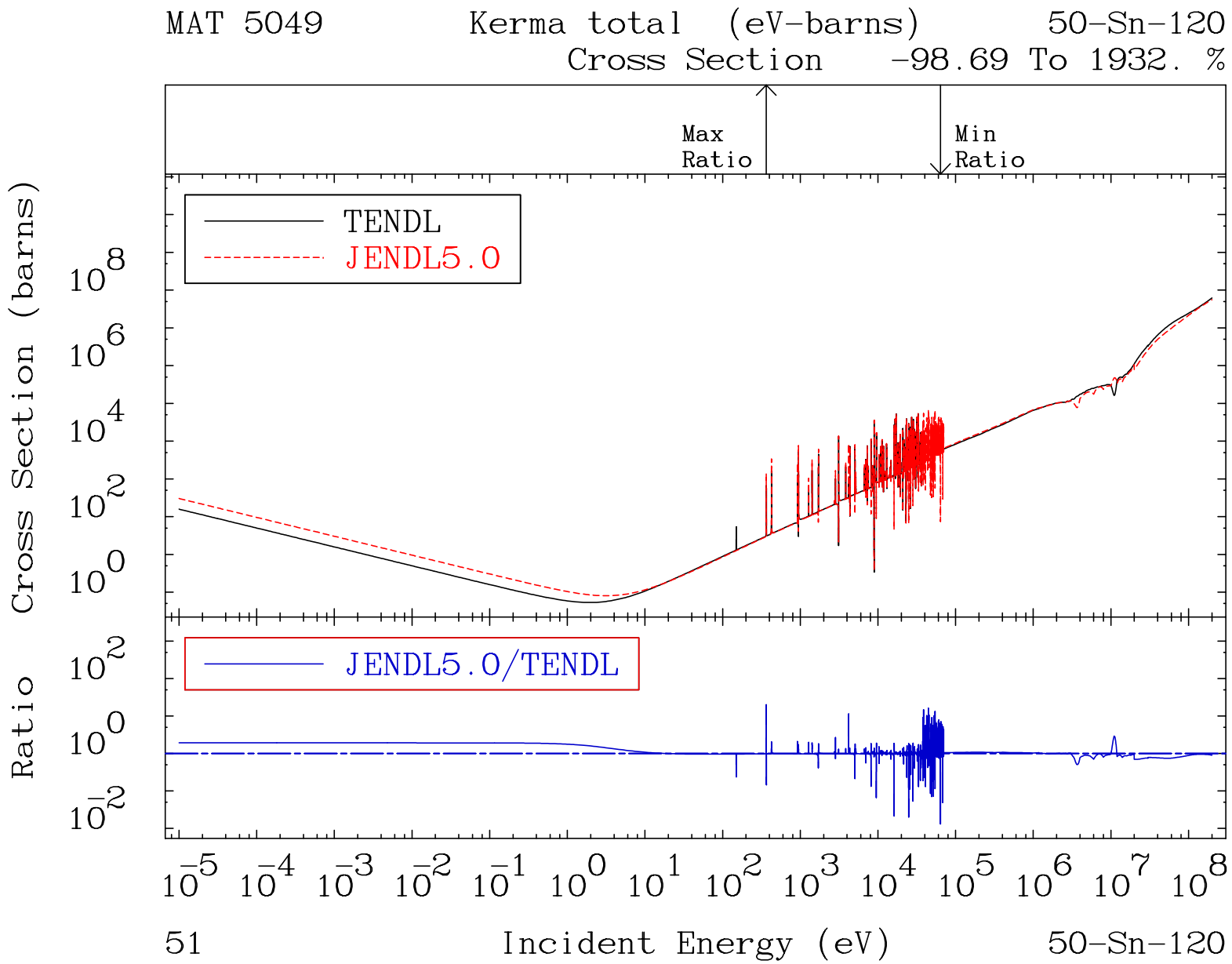

MAT 5049
Hydrogen Production
50-Sn-120
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 4.6262 MeV
JENDL5.0 Threshold 4.6262 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
40
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
50-Sn-120

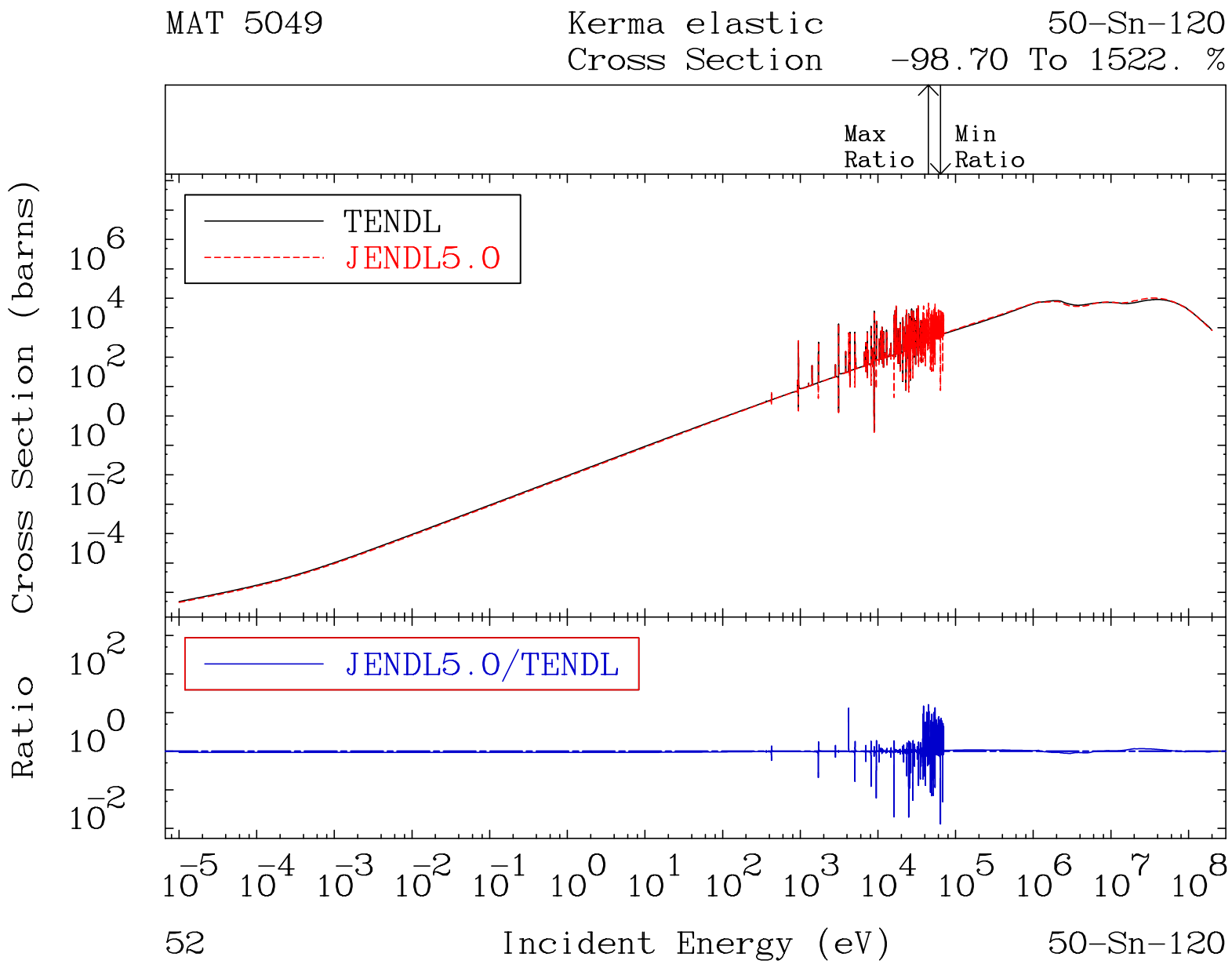

MAT 5049
Deuterium Production
50-Sn-120
Cross Section
-100.0 To 1562. %
Max
Ratio
TENDL Threshold 8.5347 MeV
JENDL5.0 Threshold 8.5362 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
150
100
50
0
20
10
0
9
2
3
4
5
6
7
8
9
2
10^7
10^8
47
Incident Energy (eV)
50-Sn-120

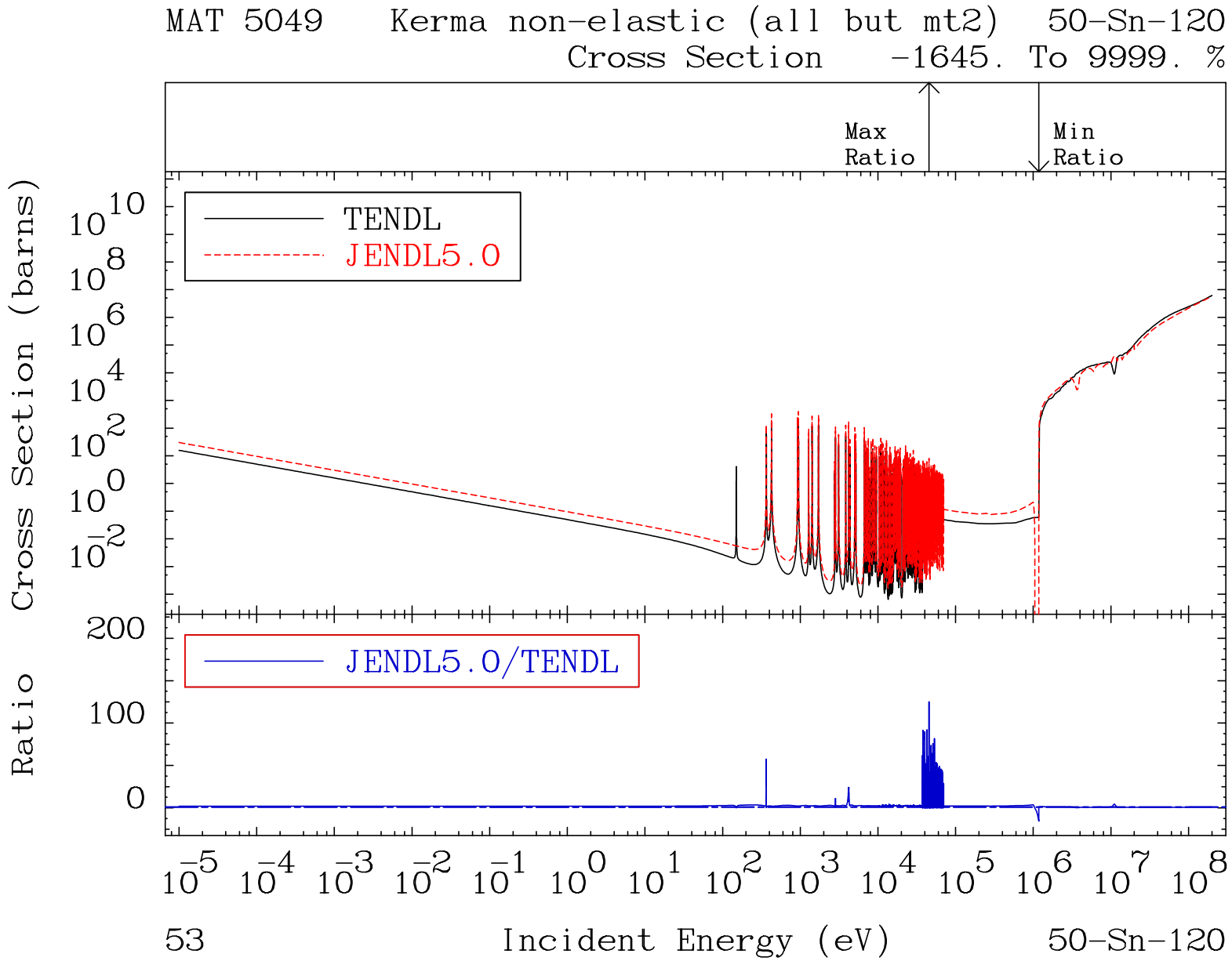

MAT 5049
Tritium Production
50-Sn-120
Cross Section
-100.0 To 5524. %
Max
Ratio
TENDL Threshold 10.838 MeV
JENDL5.0 Threshold 10.844 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
80
40
0
2
3
4
5
6
7
8
9
2
10^8
48
Incident Energy (eV)
50-Sn-120

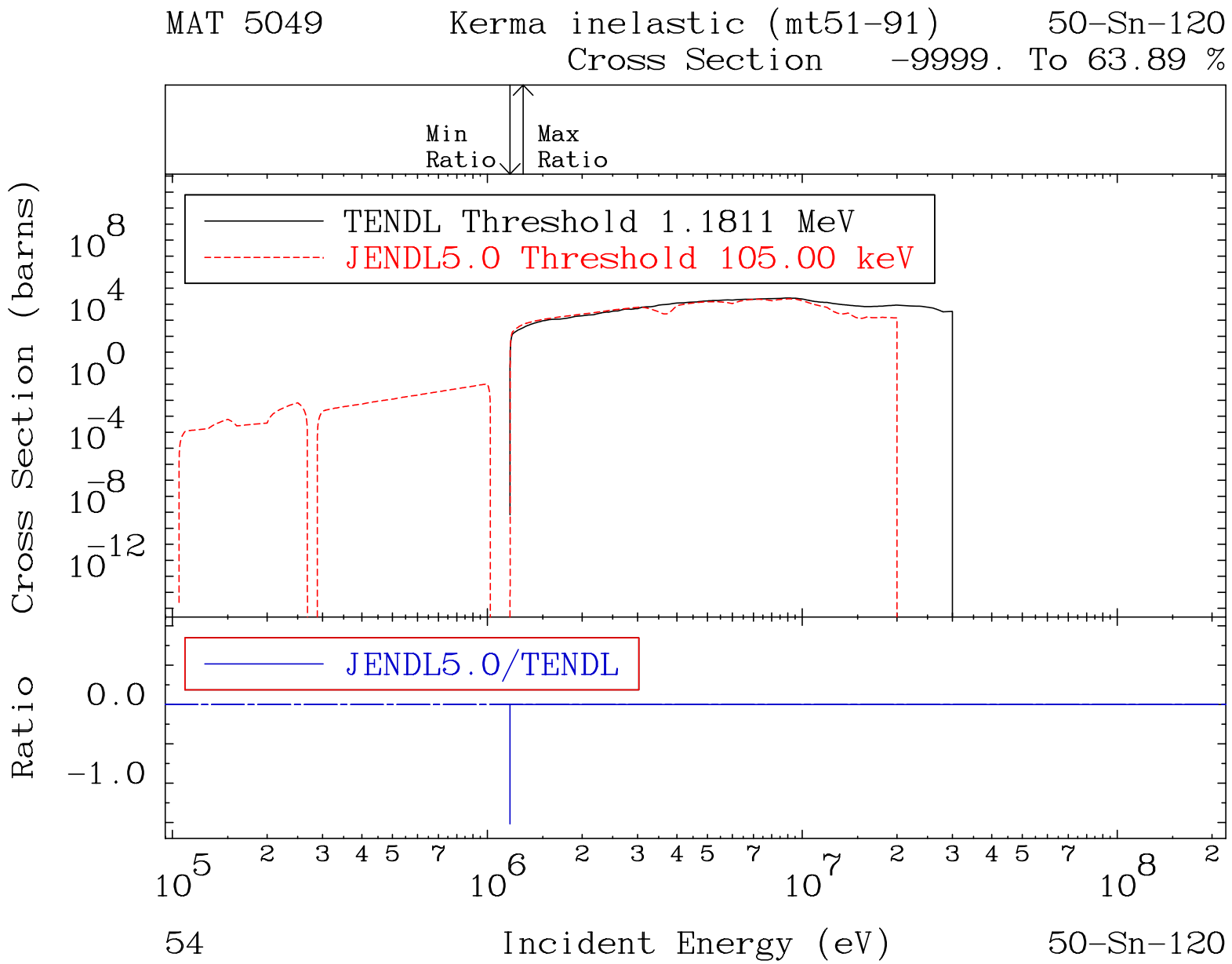

MAT 5049
He-3 Production
Cross Section
50-Sn-120
-100.0 To 1202. %
Min Ratio
Max Ratio
TENDL Threshold 11.351 MeV
JENDL5.0 Threshold 11.351 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
20
10
0
2
3
4
5
6
7
8
9
2
10^8
49
Incident Energy (eV)
50-Sn-120

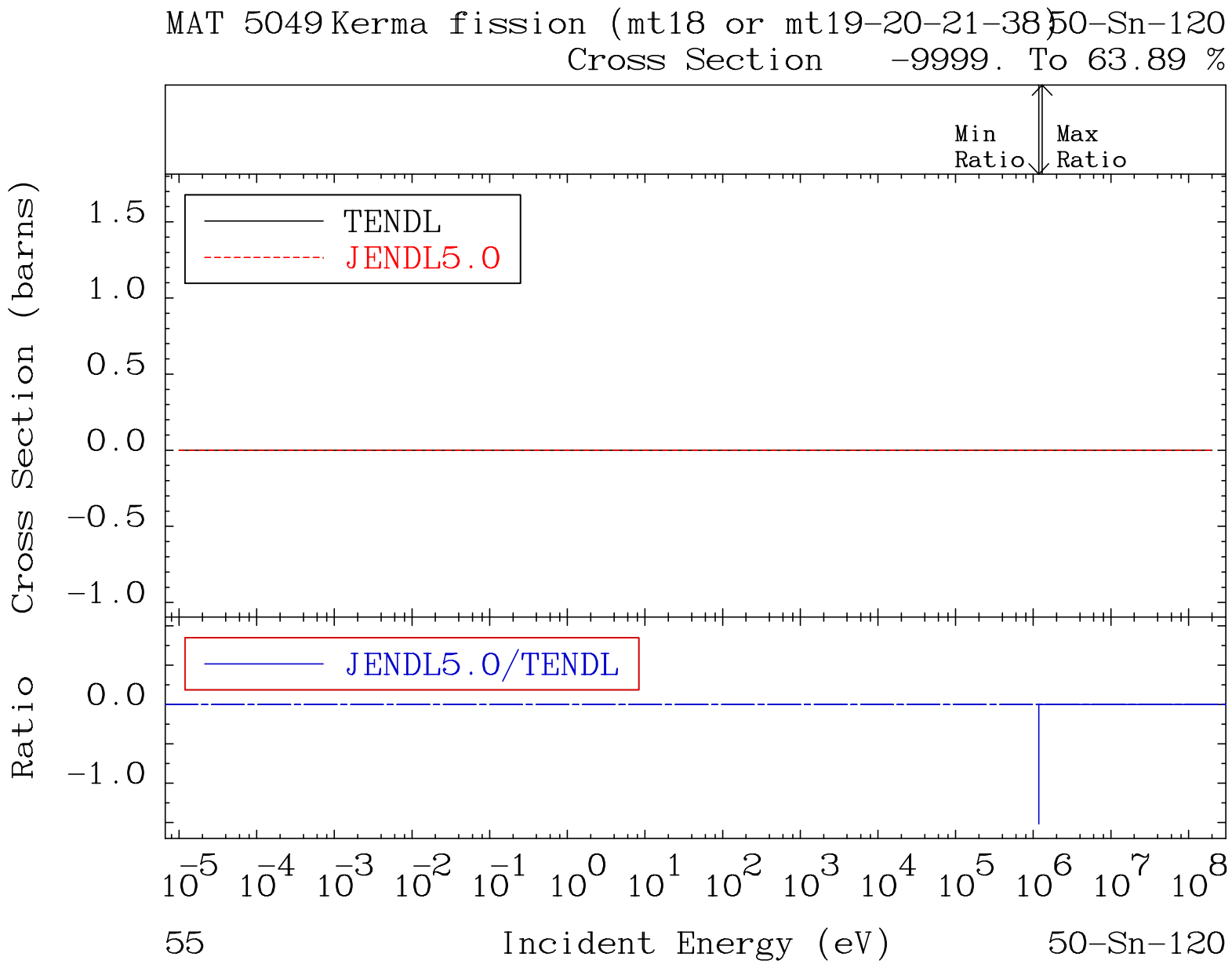

MAT 5049
He-4 Production
Cross Section
50-Sn-120
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 37.449 keV
JENDL5.0 Threshold 1.1000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
10^5
10^0
10^-5
5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
50
Incident Energy (eV)
50-Sn-120

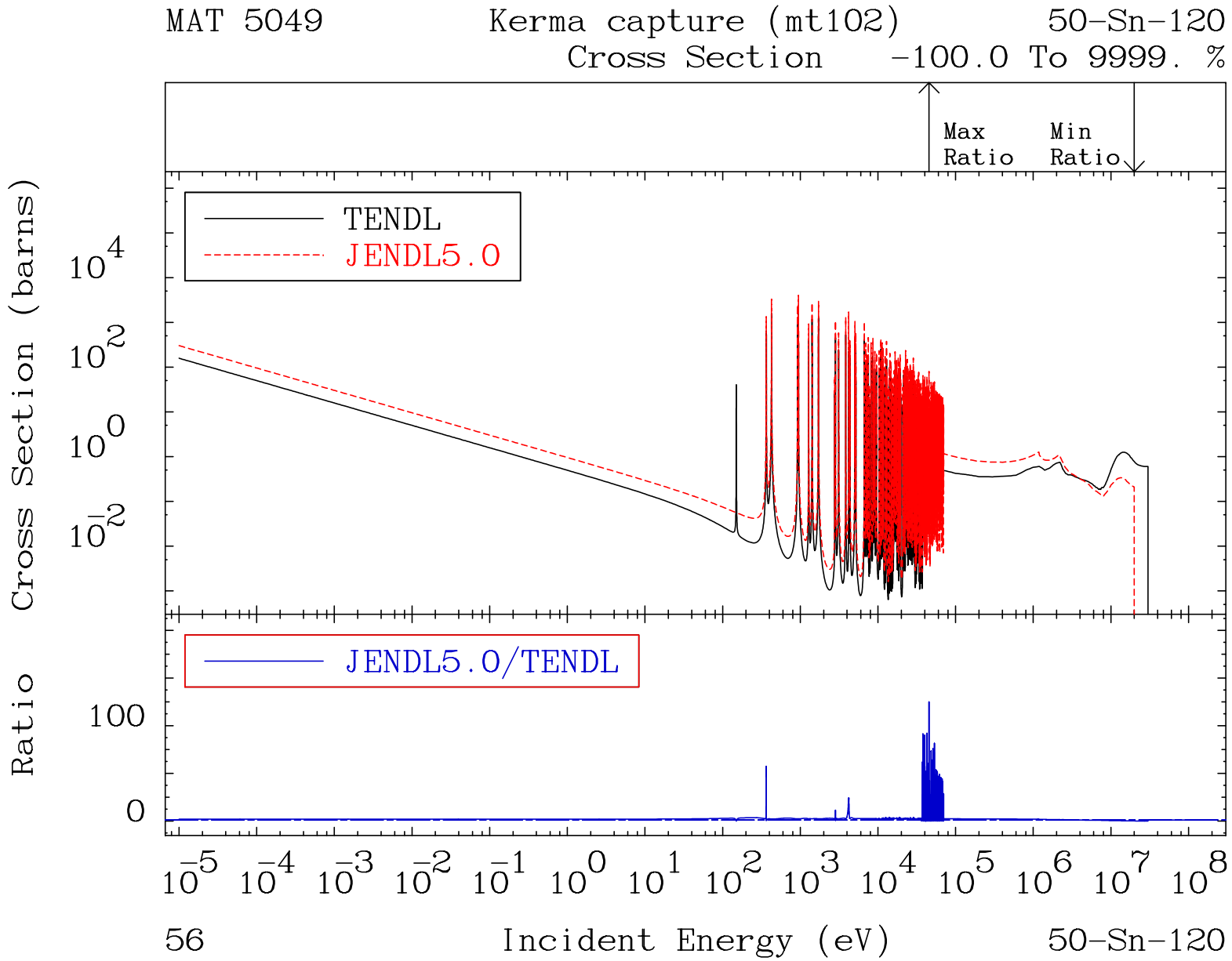

MAT 5049
Kerma total (eV-barns)
50-Sn-120
Cross Section -98.69 To 1932. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
50-Sn-120

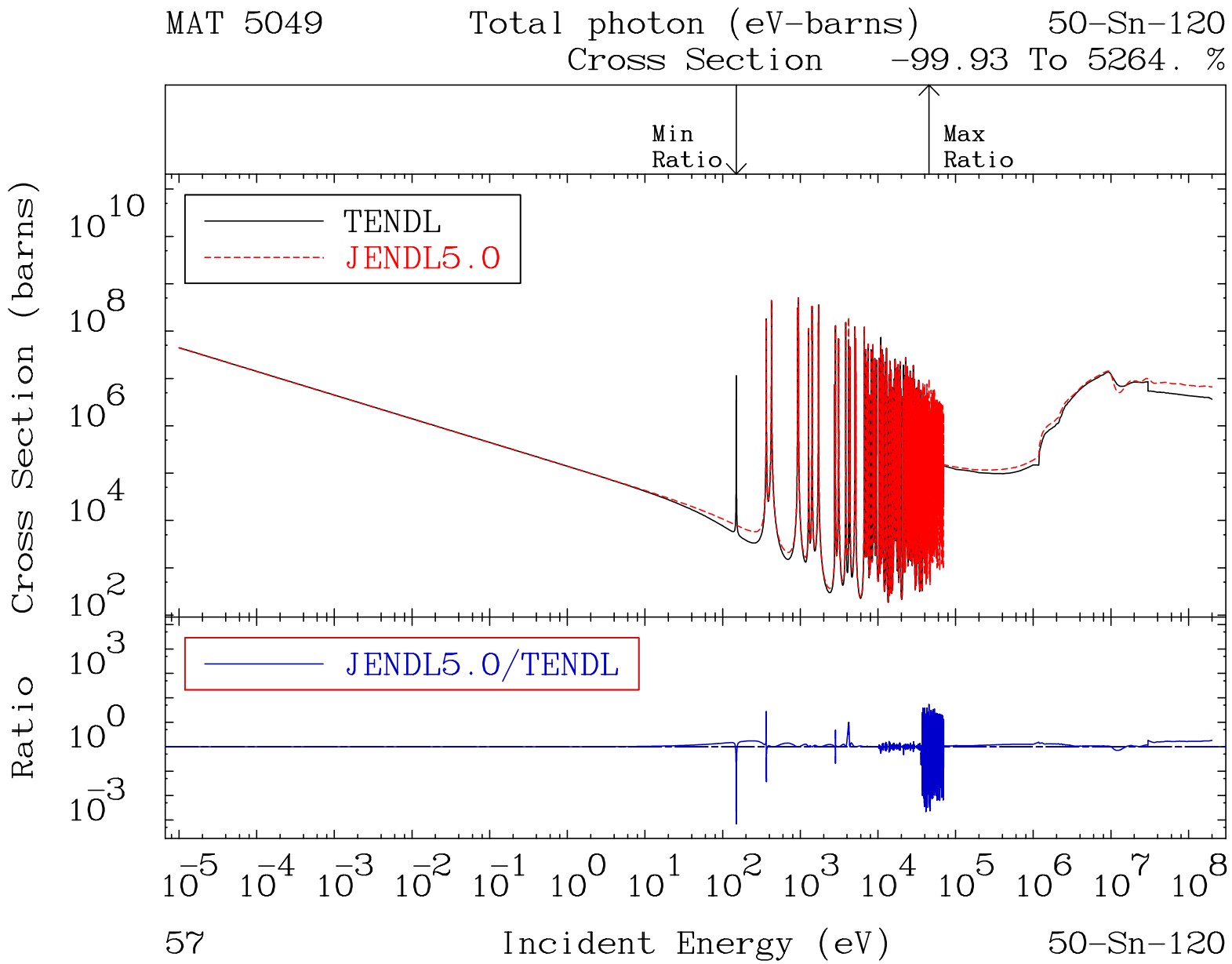

MAT 5049
Kerma elastic
Cross Section
50-Sn-120
-98.70 To 1522. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
50-Sn-120

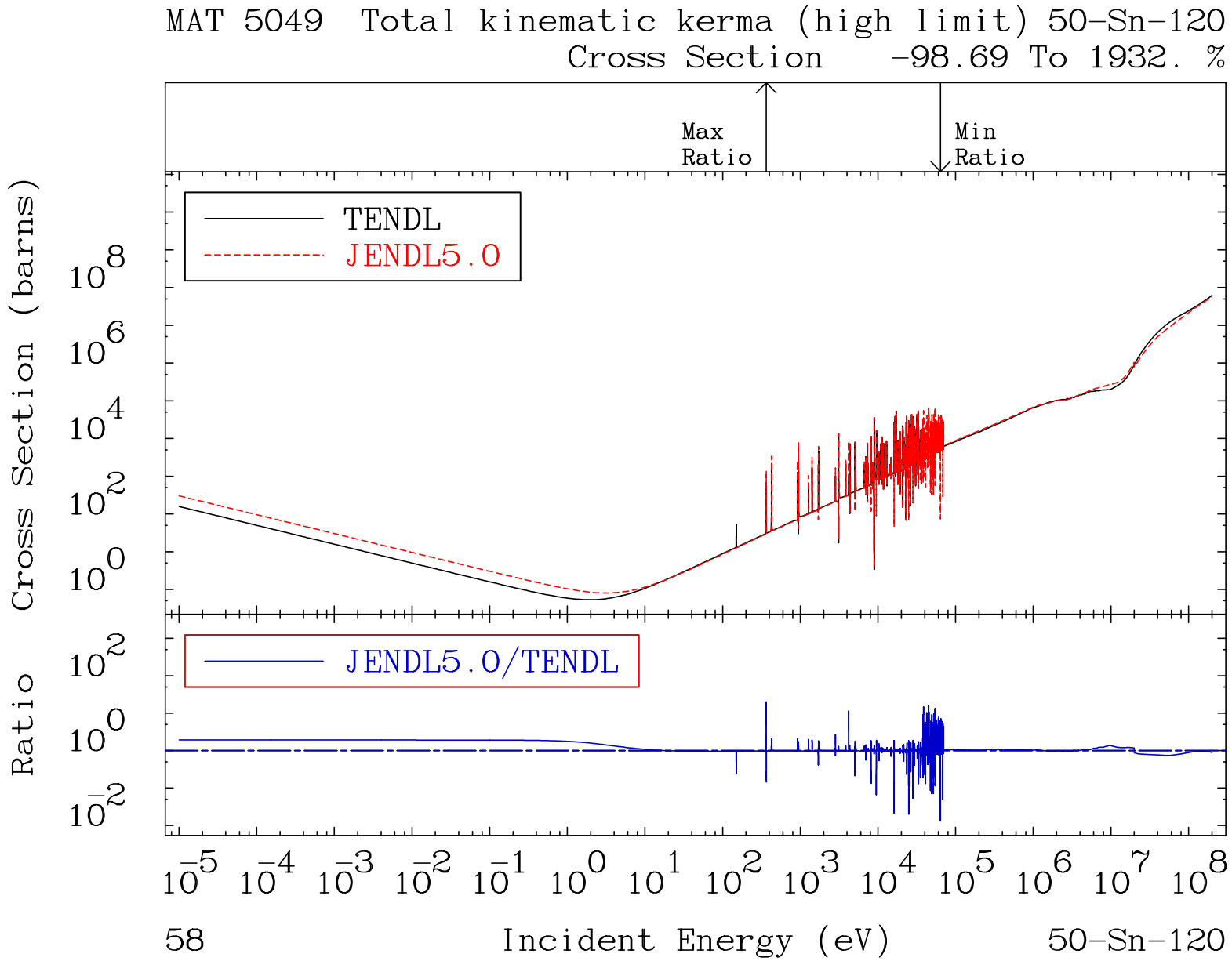

MAT 5049 Kerma non-elastic (all but mt2) 50-Sn-120
Cross Section -1645. To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
50-Sn-120

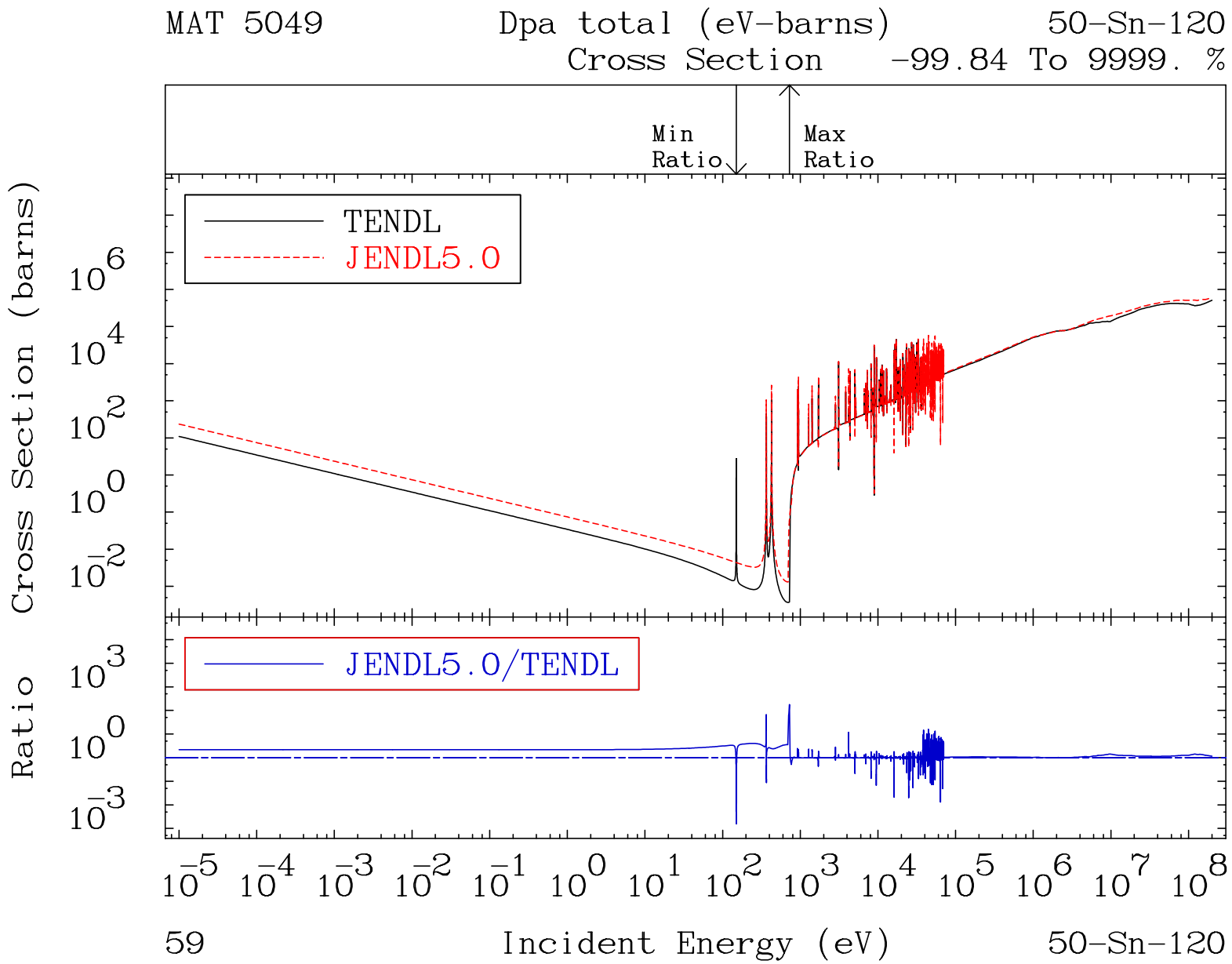

MAT 5049
Kerma inelastic (mt51-91)
50-Sn-120
Cross Section -9999. To 63.89 %
Min Ratio
Max Ratio
TENDL Threshold 1.1811 MeV
JENDL5.0 Threshold 105.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
54
50-Sn-120

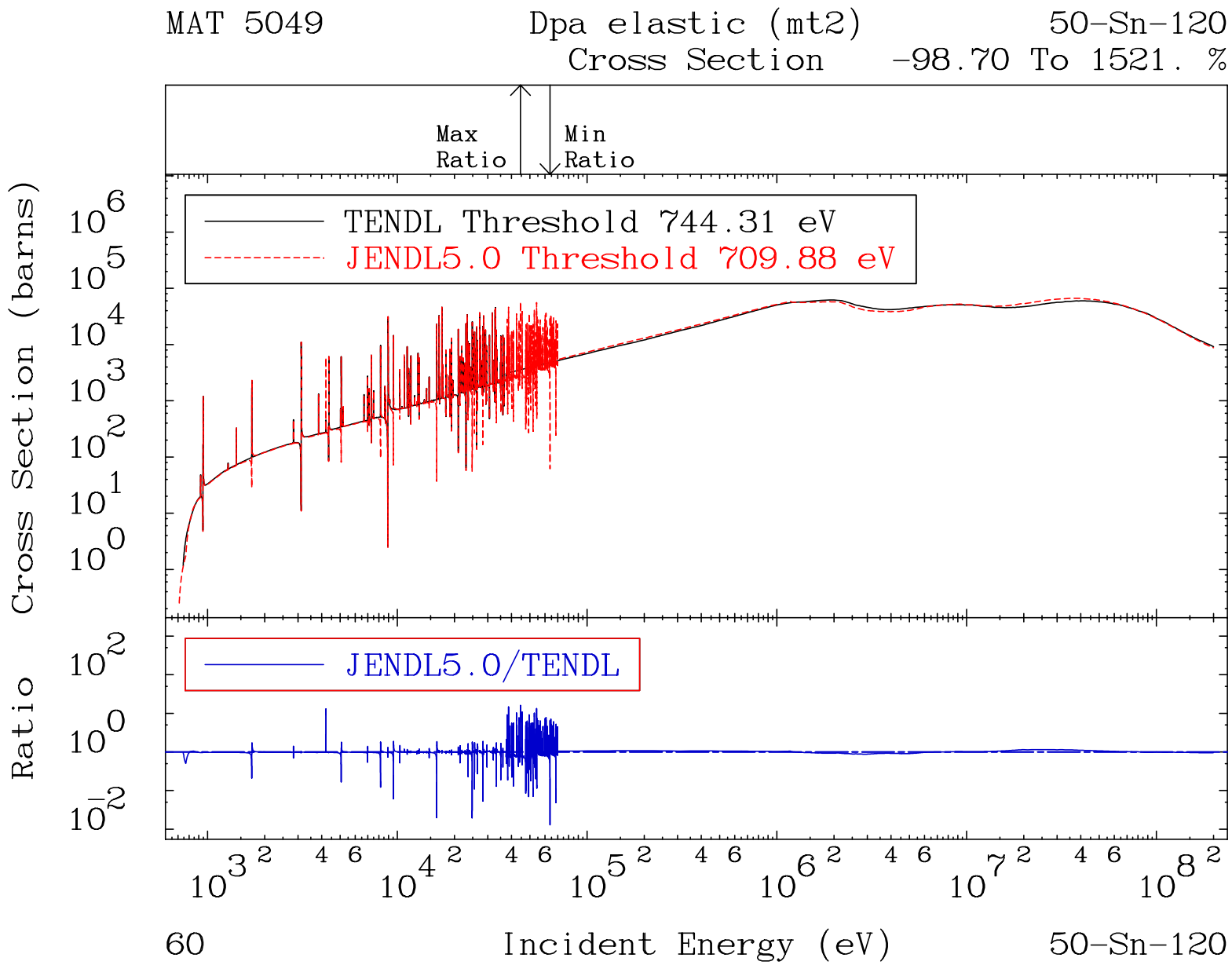

MAT 5049 Kerma fission (mt18 or mt19-20-21-38) 50-Sn-120
Cross Section -9999. To 63.89 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
0.0
-1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
55
Incident Energy (eV)
50-Sn-120

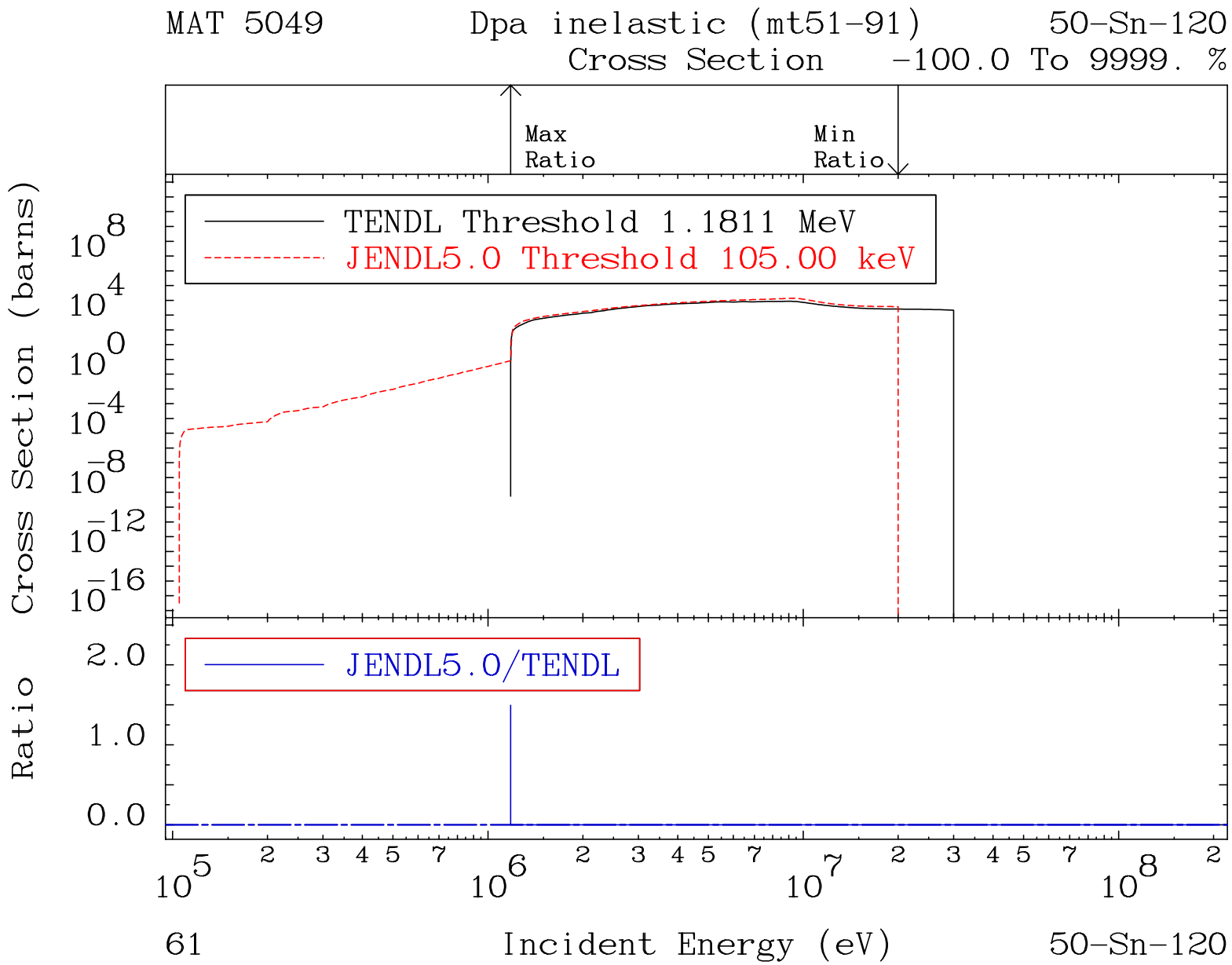

MAT 5049
Kerma capture (mt102)
50-Sn-120
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
56
50-Sn-120

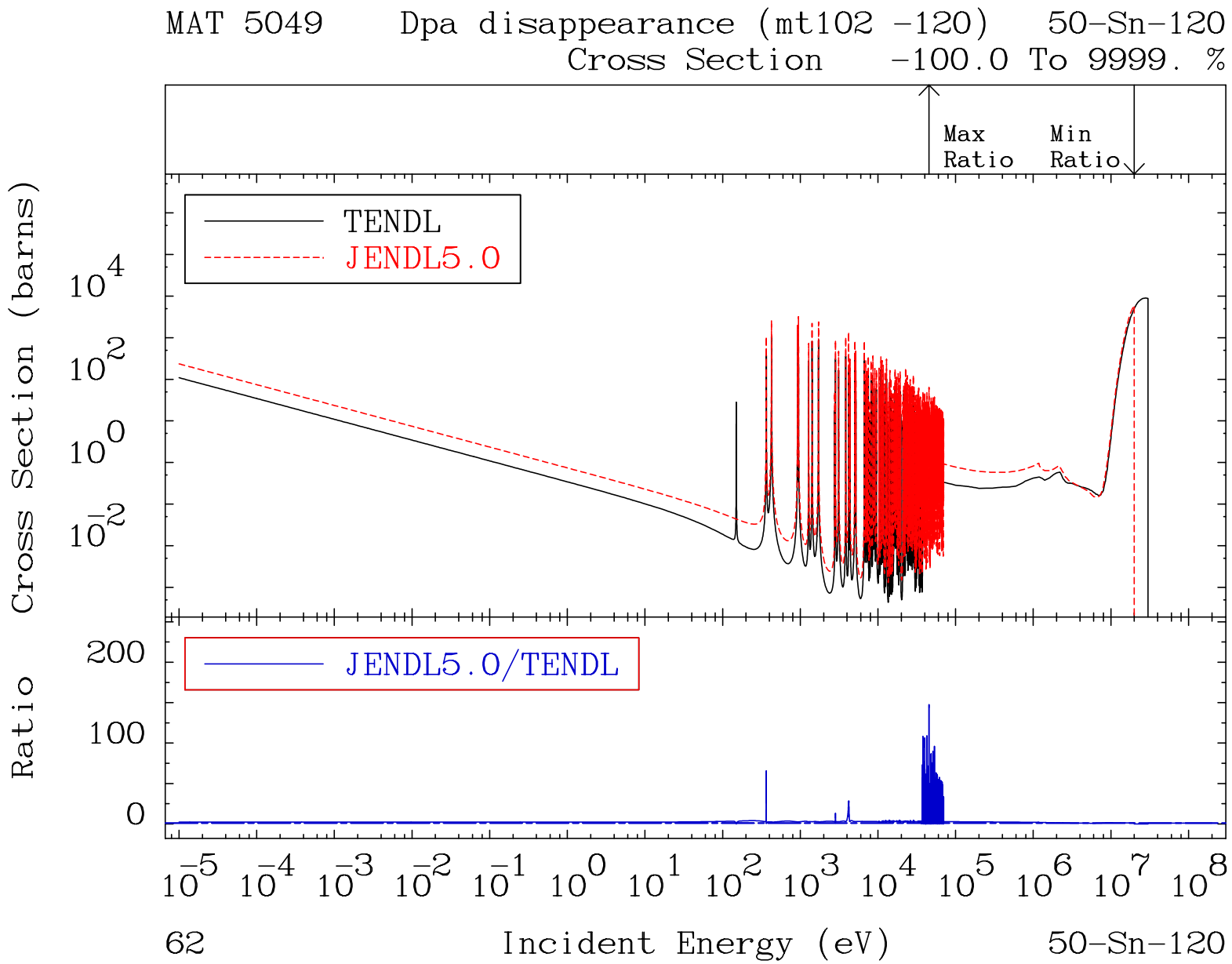

MAT 5049
Total photon (eV-barns)
50-Sn-120
Cross Section -99.93 To 5264. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
50-Sn-120

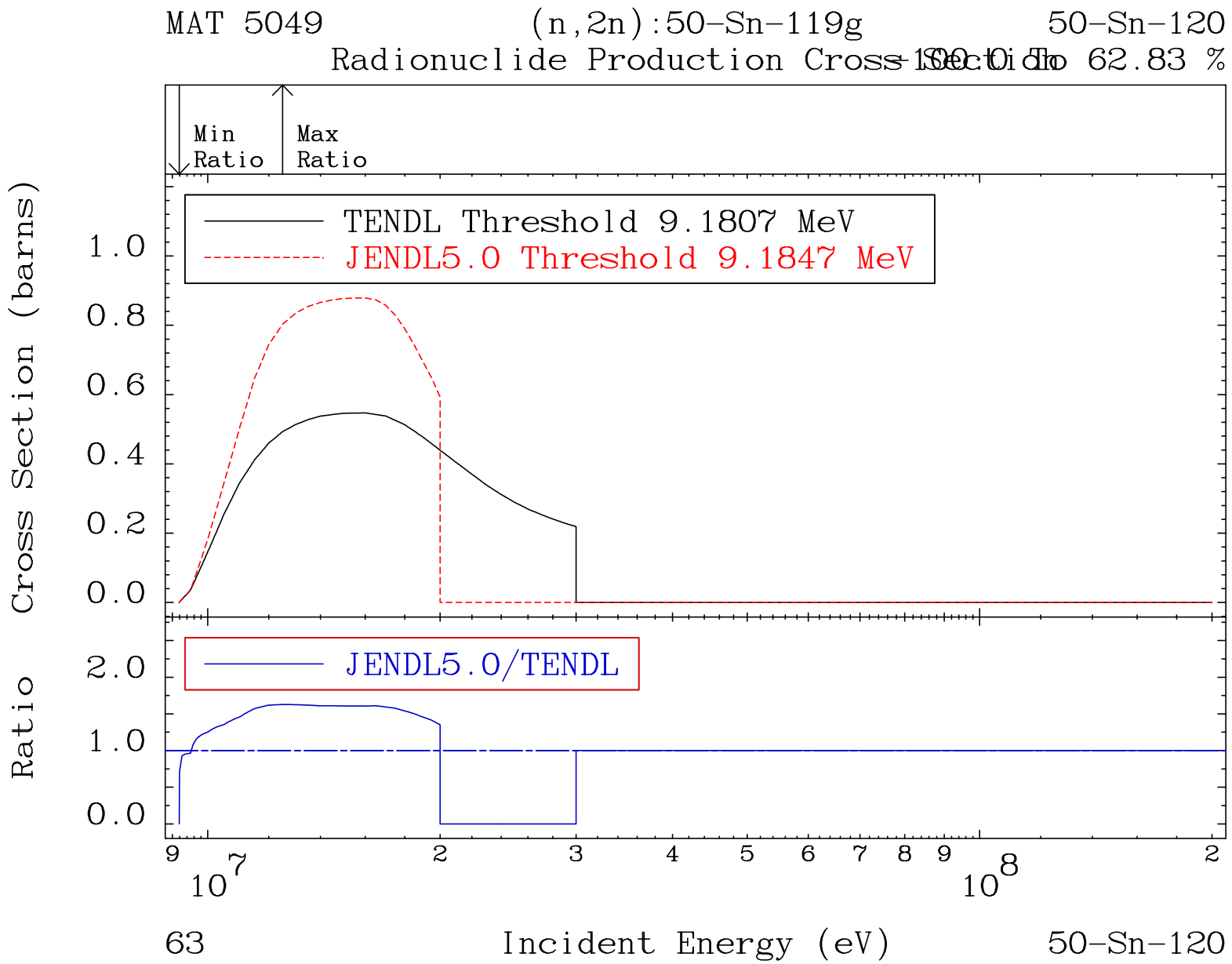

MAT 5049 Total kinematic kerma (high limit) 50-Sn-120
Cross Section -98.69 To 1932. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
50-Sn-120

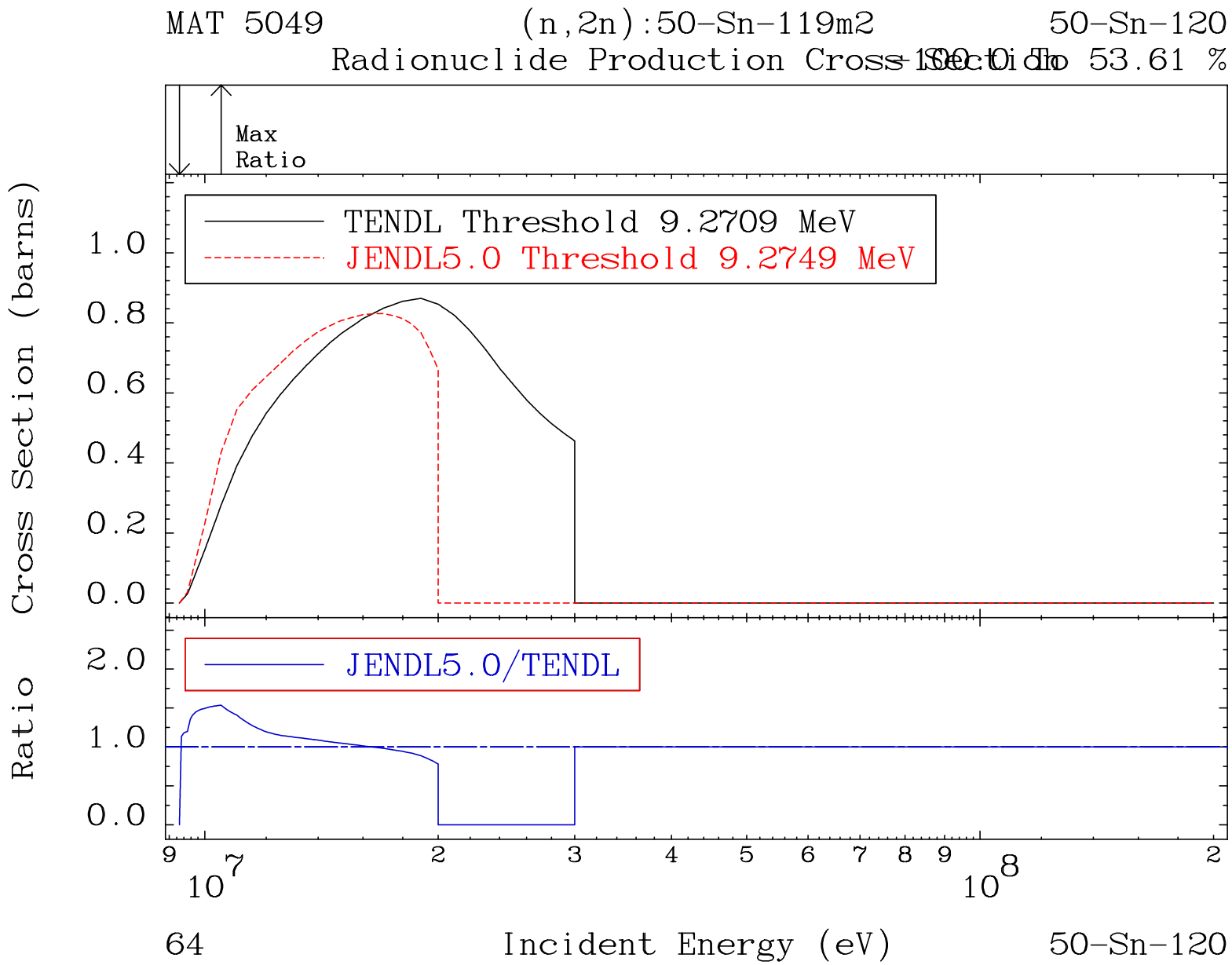

MAT 5049
Dpa total (eV-barns)
50-Sn-120
Cross Section -99.84 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
50-Sn-120

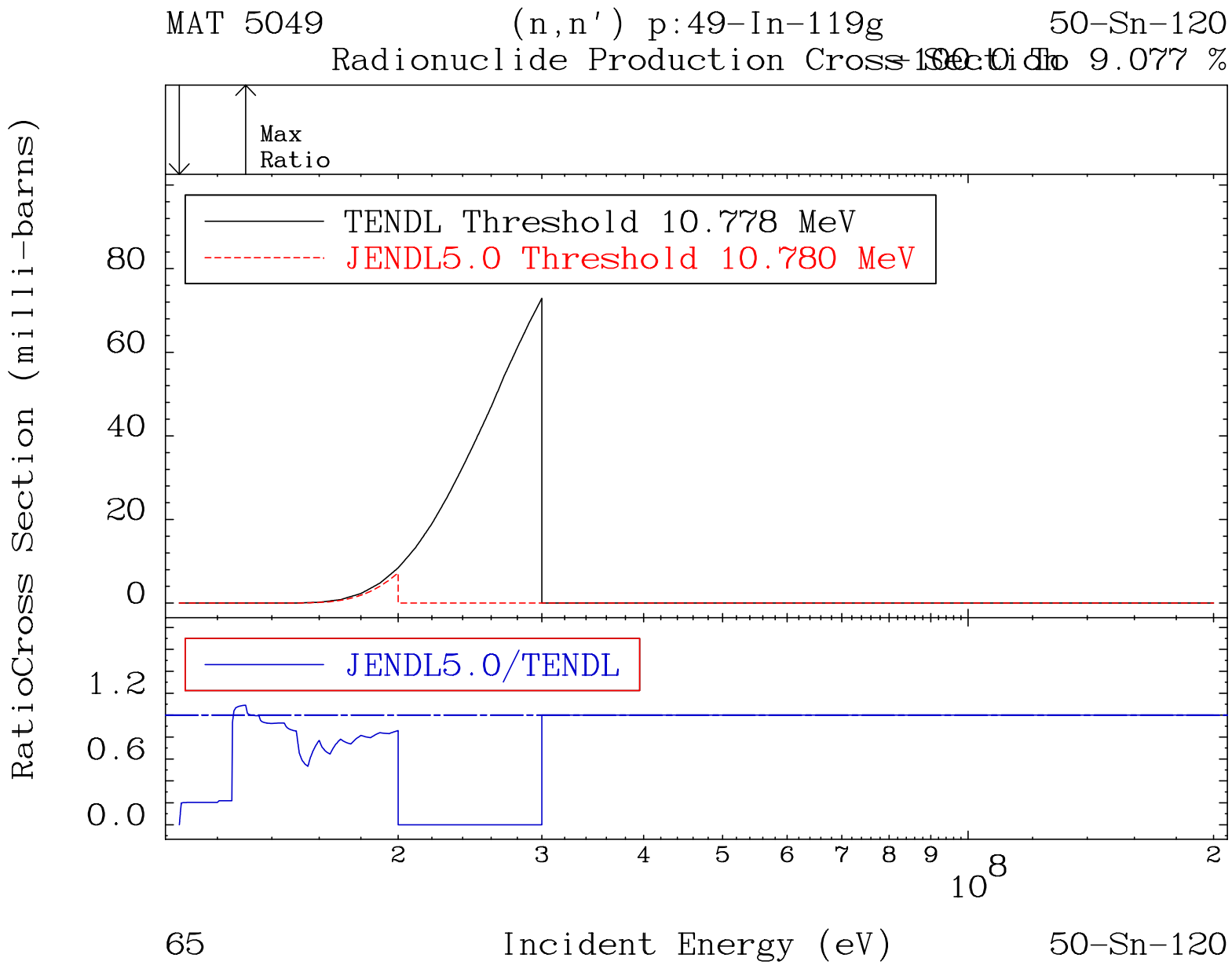

MAT 5049
Dpa elastic (mt2)
Cross Section
50-Sn-120
-98.70 To 1521. %
Max Ratio
Min Ratio
TENDL Threshold 744.31 eV
JENDL5.0 Threshold 709.88 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
50-Sn-120

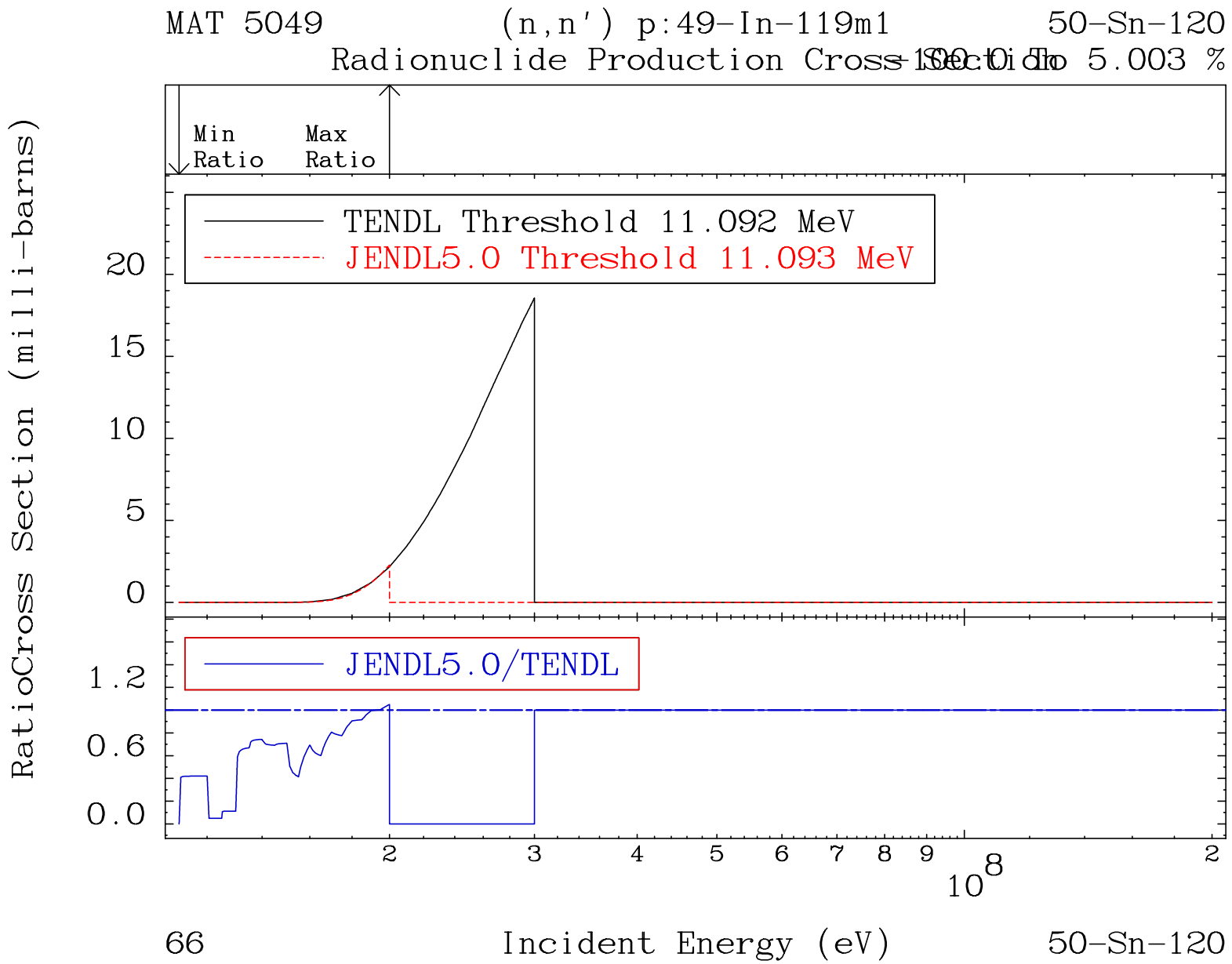

MAT 5049
Dpa inelastic (mt51-91)
50-Sn-120
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.1811 MeV
JENDL5.0 Threshold 105.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
61
50-Sn-120

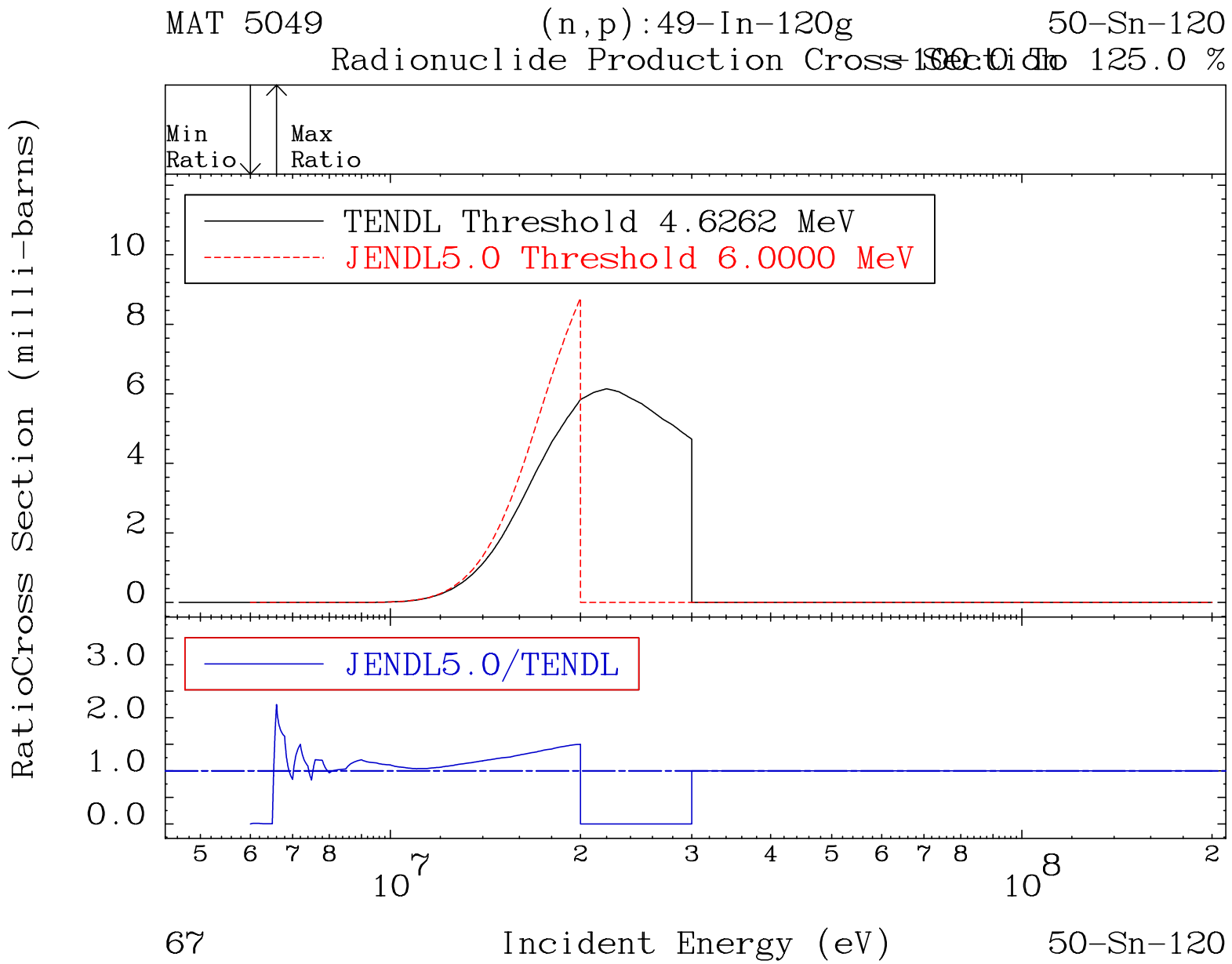

MAT 5049 Dpa disappearance (mt102 -120) 50-Sn-120
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
62
50-Sn-120

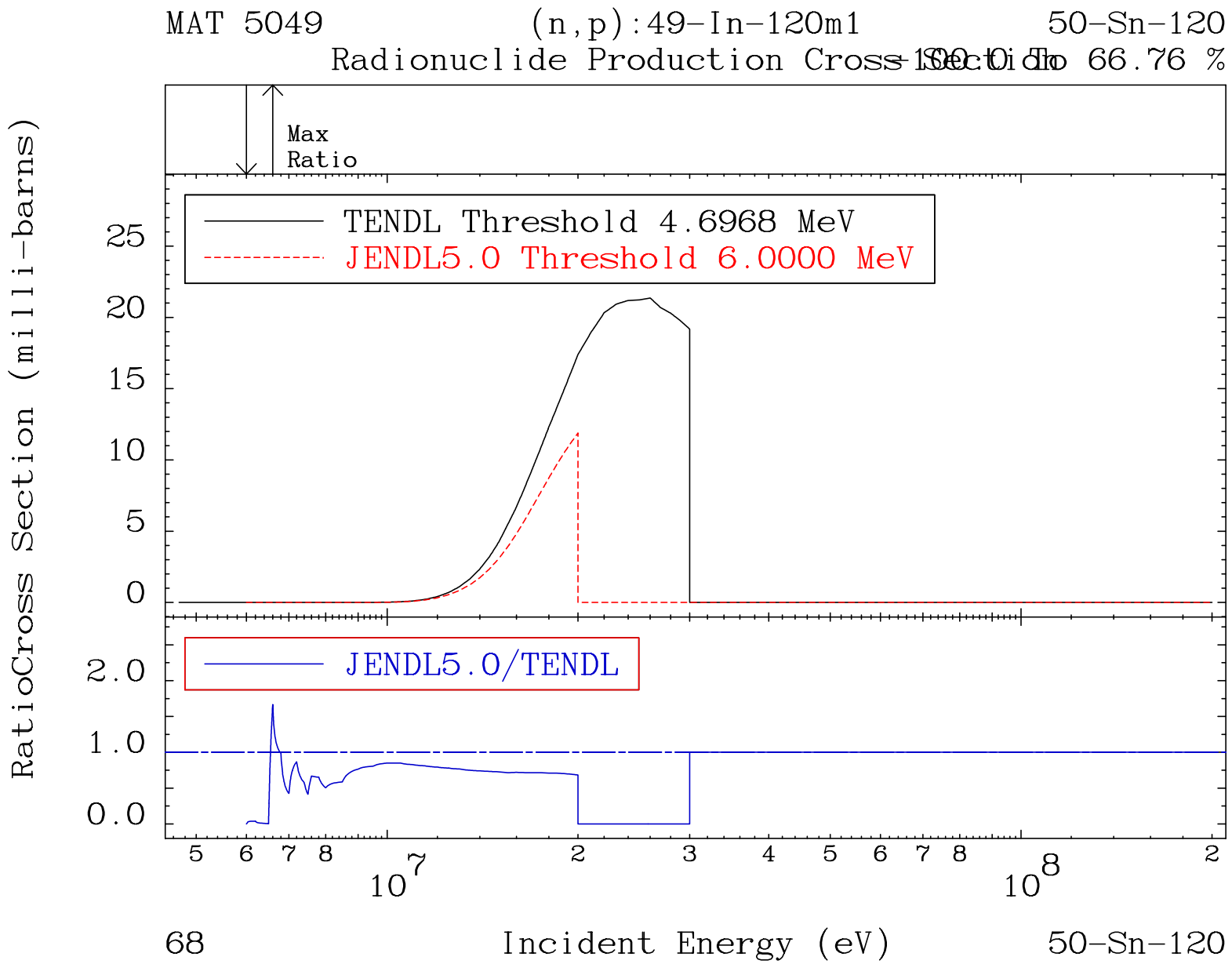

MAT 5049
(n,2n):50-Sn-119g
50-Sn-120
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 9.1807 MeV
JENDL5.0 Threshold 9.1847 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
50-Sn-120

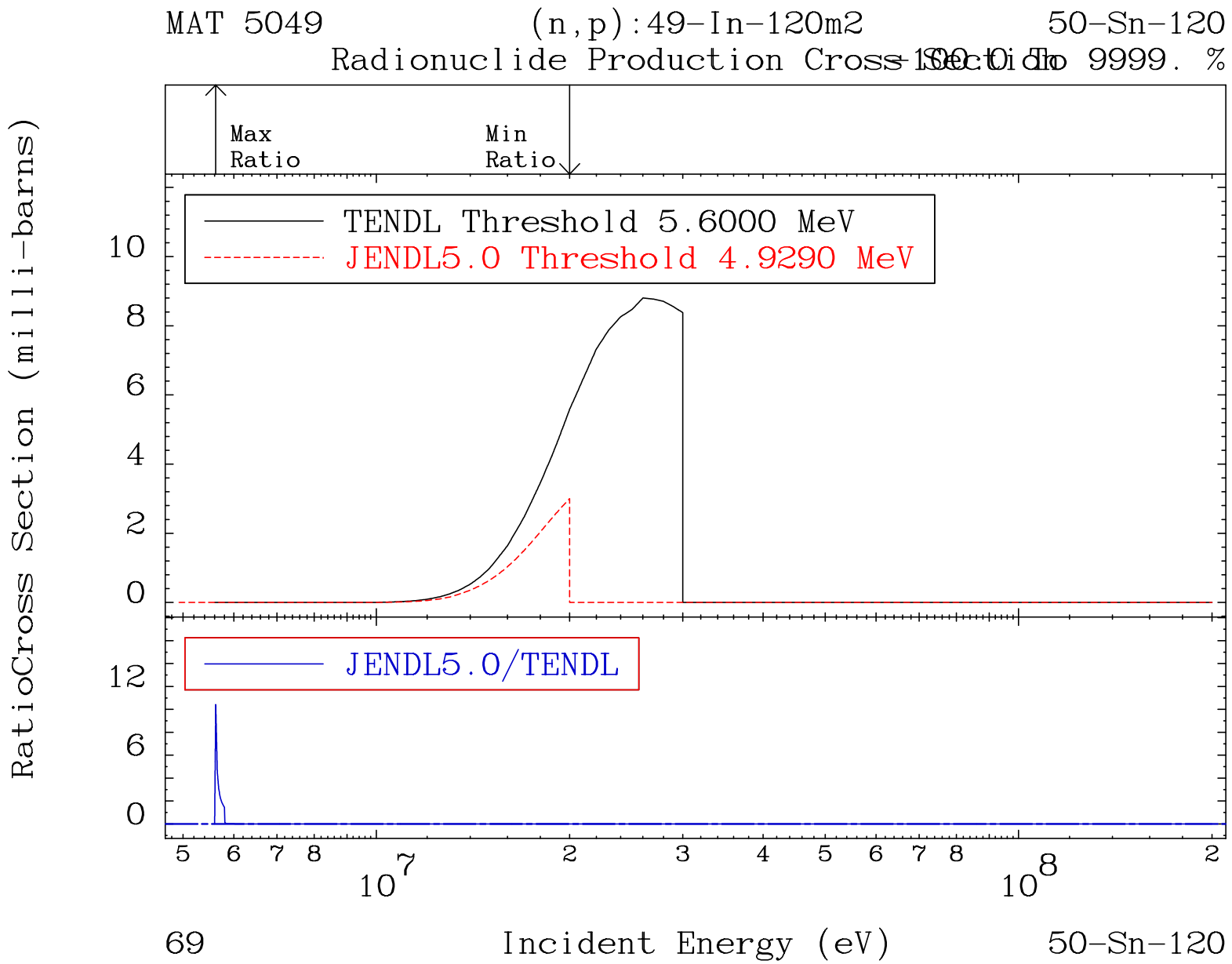

MAT 5049
(n,2n):50-Sn-119m2
50-Sn-120
Radionuclide Production Cross Section To 53.61 %
Max
Ratio
TENDL Threshold 9.2709 MeV
JENDL5.0 Threshold 9.2749 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
64
Incident Energy (eV)
50-Sn-120

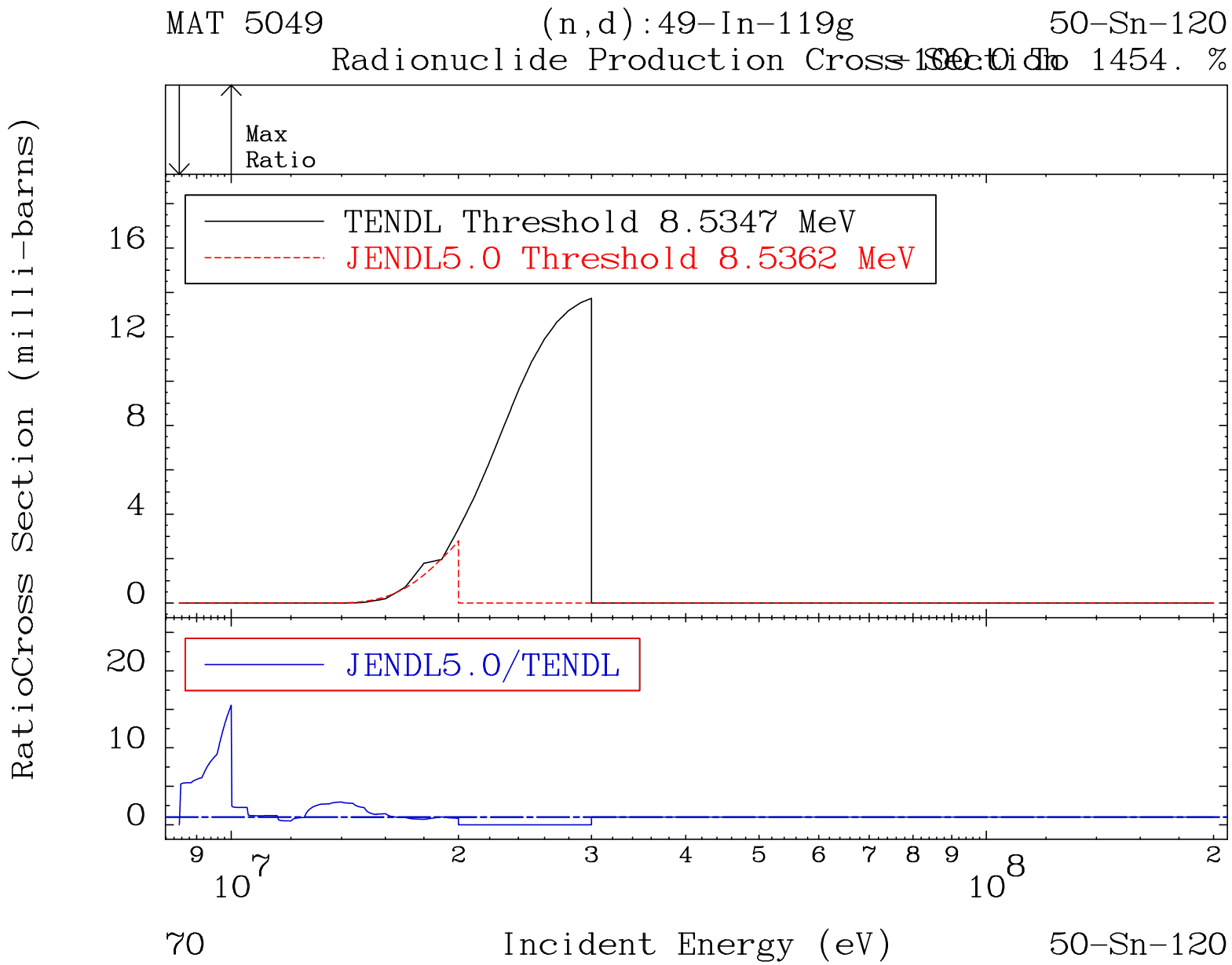

MAT 5049
(n,n') p:49-In-119g
50-Sn-120
Radionuclide Production Cross Section To 9.077 %
Max
Ratio
TENDL Threshold 10.778 MeV
JENDL5.0 Threshold 10.780 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
2
10^8
65
Incident Energy (eV)
50-Sn-120

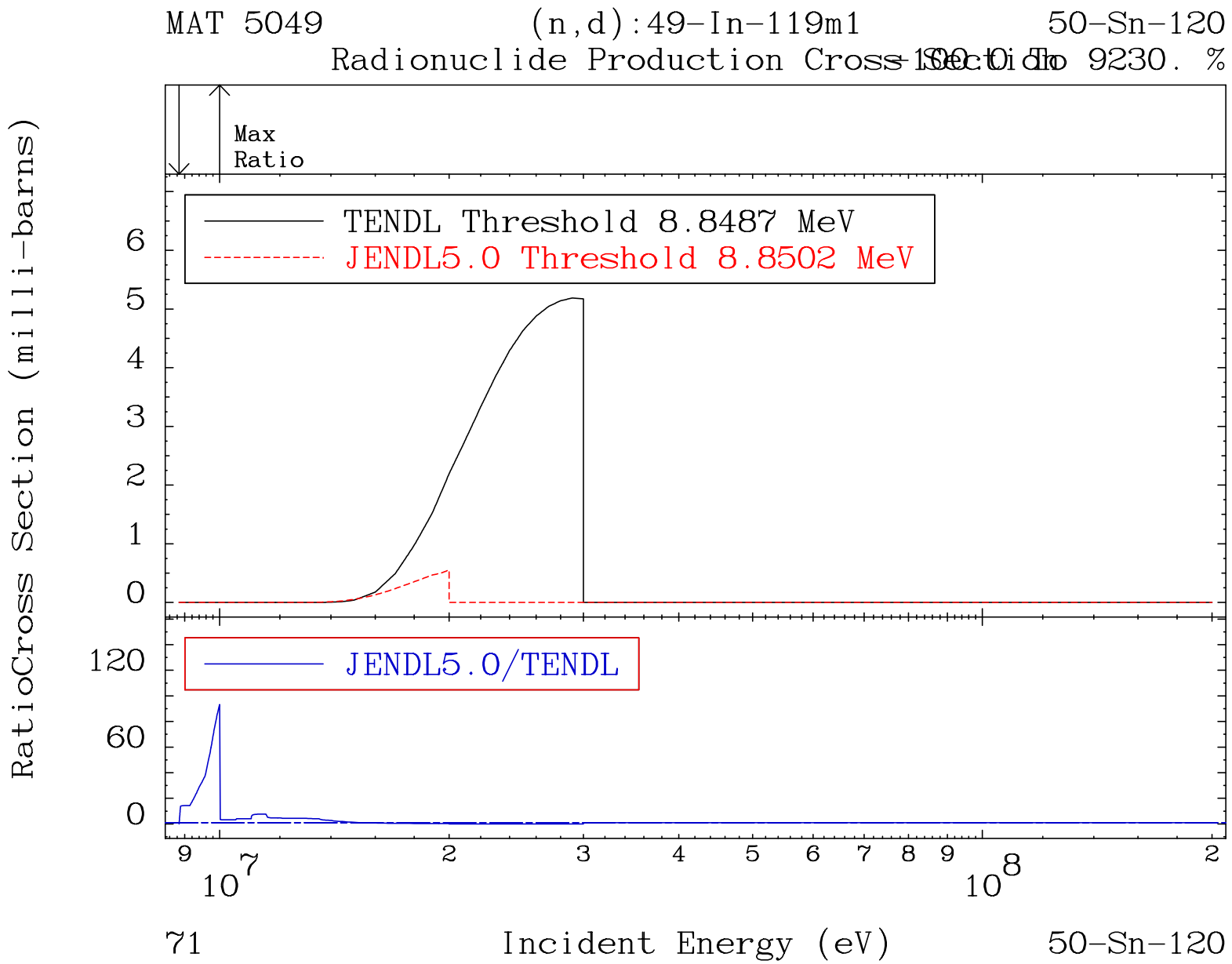

MAT 5049
(n,n') p:49-In-119m1
50-Sn-120
Radionuclide Production Cross Section To 5.003 %
Min Ratio
Max Ratio
TENDL Threshold 11.092 MeV
JENDL5.0 Threshold 11.093 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
50-Sn-120

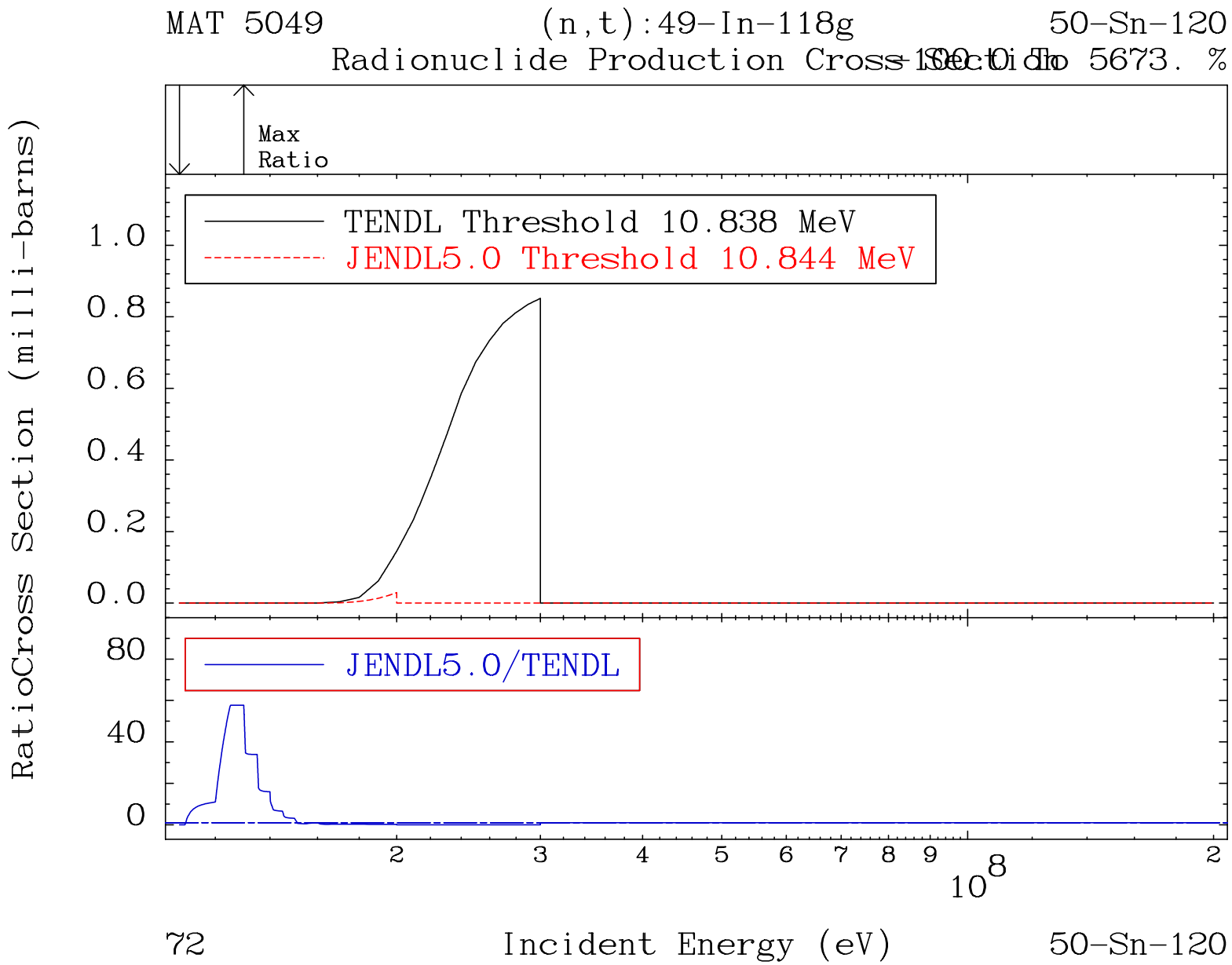

MAT 5049
(n,p):49-In-120g
50-Sn-120
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 4.6262 MeV
JENDL5.0 Threshold 6.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
67
50-Sn-120

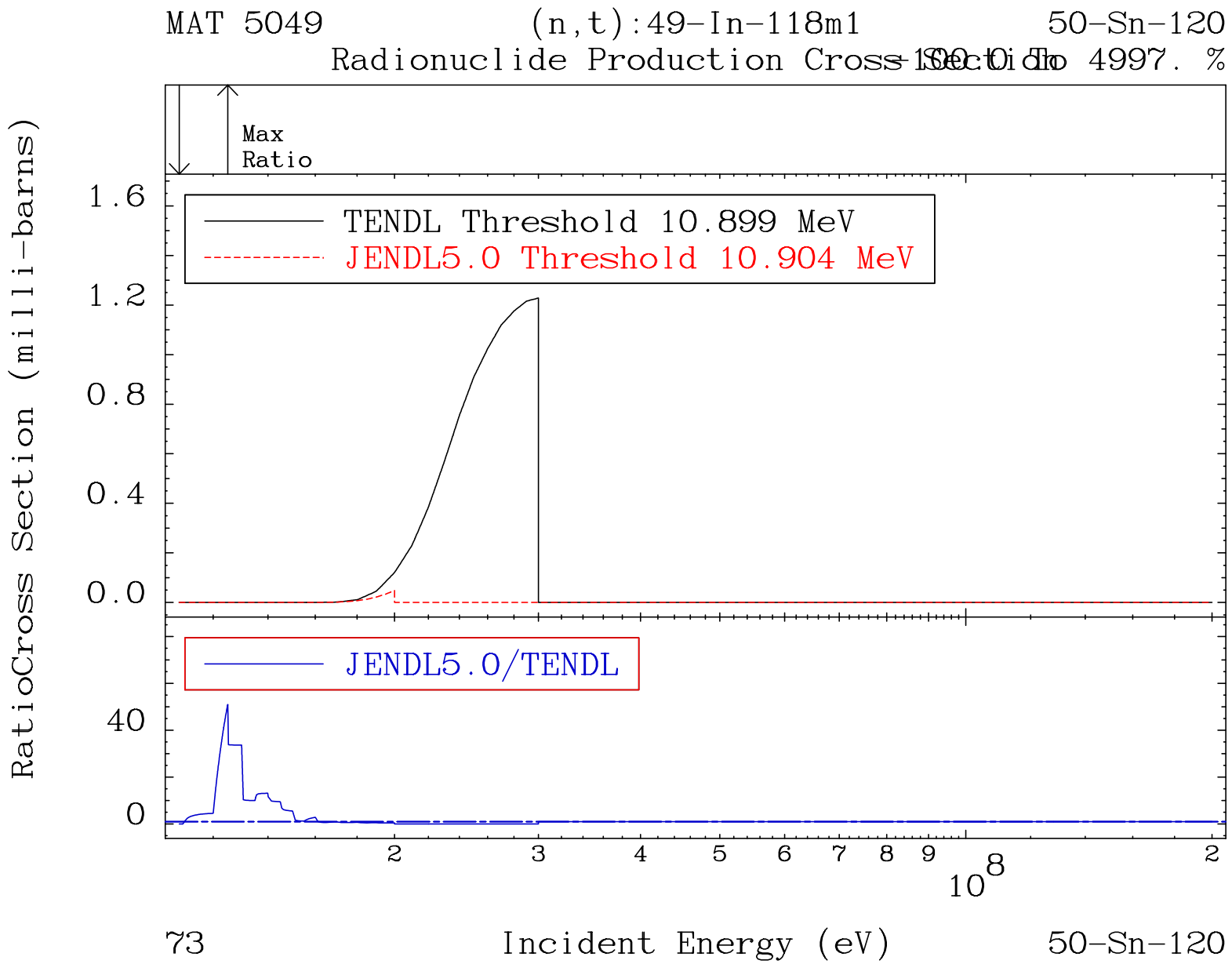

MAT 5049
(n,p):49-In-120m1
50-Sn-120
Radionuclide Production Cross Section To 66.76 %
Max
Ratio
TENDL Threshold 4.6968 MeV
JENDL5.0 Threshold 6.0000 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
2.0
1.0
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
68
Incident Energy (eV)
50-Sn-120


MAT 5049
(n,p):49-In-120m2
50-Sn-120
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 5.6000 MeV
JENDL5.0 Threshold 4.9290 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
69
50-Sn-120


MAT 5049
(n,d):49-In-119g
50-Sn-120
Radionuclide Production Cross Section To 1454. %
Max
Ratio
TENDL Threshold 8.5347 MeV
JENDL5.0 Threshold 8.5362 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
20
10
0
9
2
3
4
5
6
7
8
9
2
10^7
10^8
70
Incident Energy (eV)
50-Sn-120

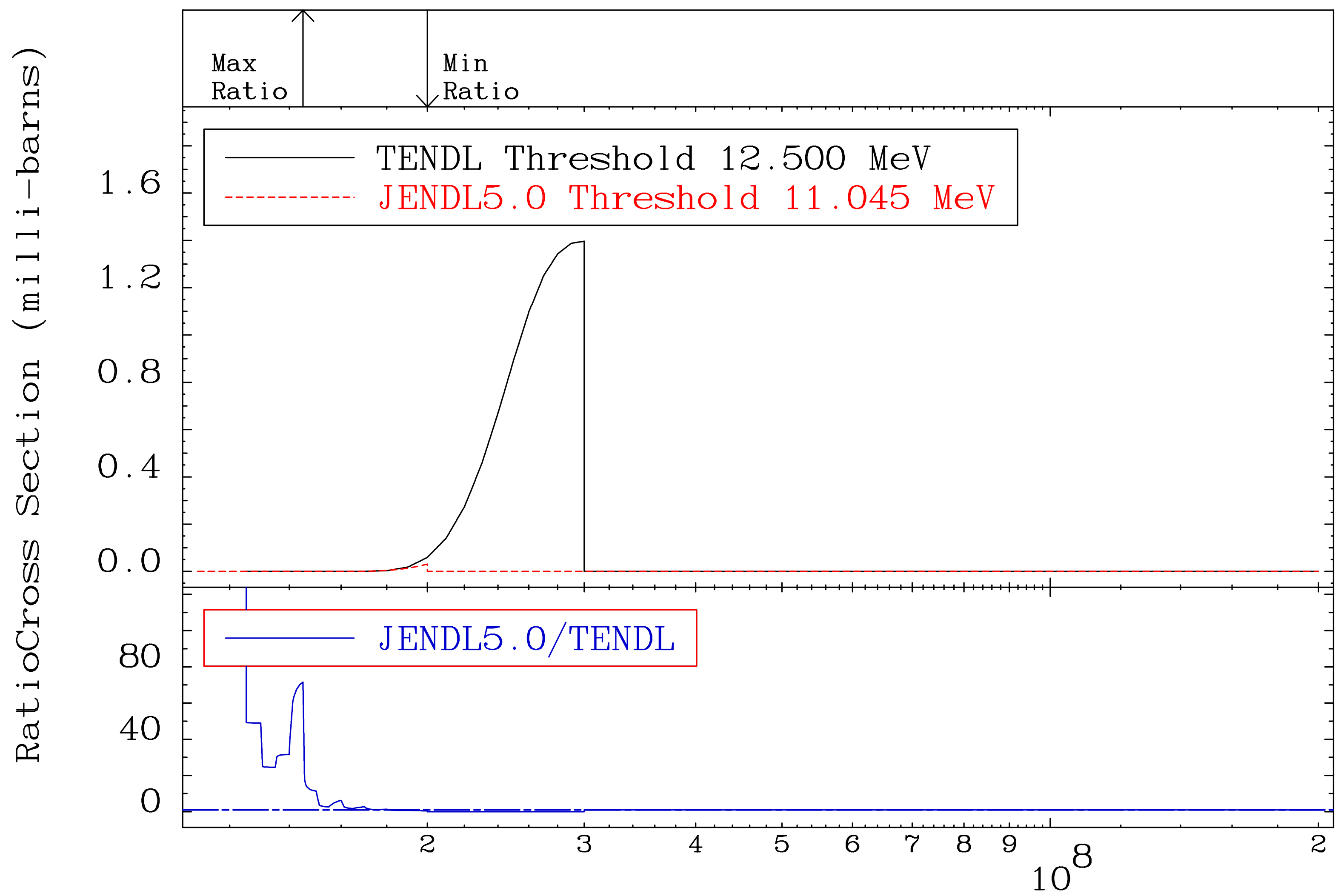

MAT 5049
(n,d):49-In-119m1
50-Sn-120
Radionuclide Production Cross Section To 9230. %
Max
Ratio
TENDL Threshold 8.8487 MeV
JENDL5.0 Threshold 8.8502 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
71
50-Sn-120


MAT 5049
(n,t):49-In-118g
50-Sn-120
Radionuclide Production Cross Section To 5673. %
Max
Ratio
TENDL Threshold 10.838 MeV
JENDL5.0 Threshold 10.844 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
80
40
0
2
3
4
5
6
7
8
9
2
10^8
72
Incident Energy (eV)
50-Sn-120


MAT 5049
(n,t):49-In-118m1
50-Sn-120
Radionuclide Production Cross Section
1.000 To 4997. %
Max
Ratio
1.6
1.2
0.8
0.4
0.0
TENDL Threshold 10.899 MeV
JENDL5.0 Threshold 10.904 MeV
JENDL5.0/TENDL
40
0
2
3
4
5
6
7
8
9
10^8
2
RatioCross Section (milli-barns)
73
Incident Energy (eV)
50-Sn-120

MAT 5049 (n,t):49-In-118m3 50-Sn-120

Radionuclide Production Cross Section



 50-Sn-120