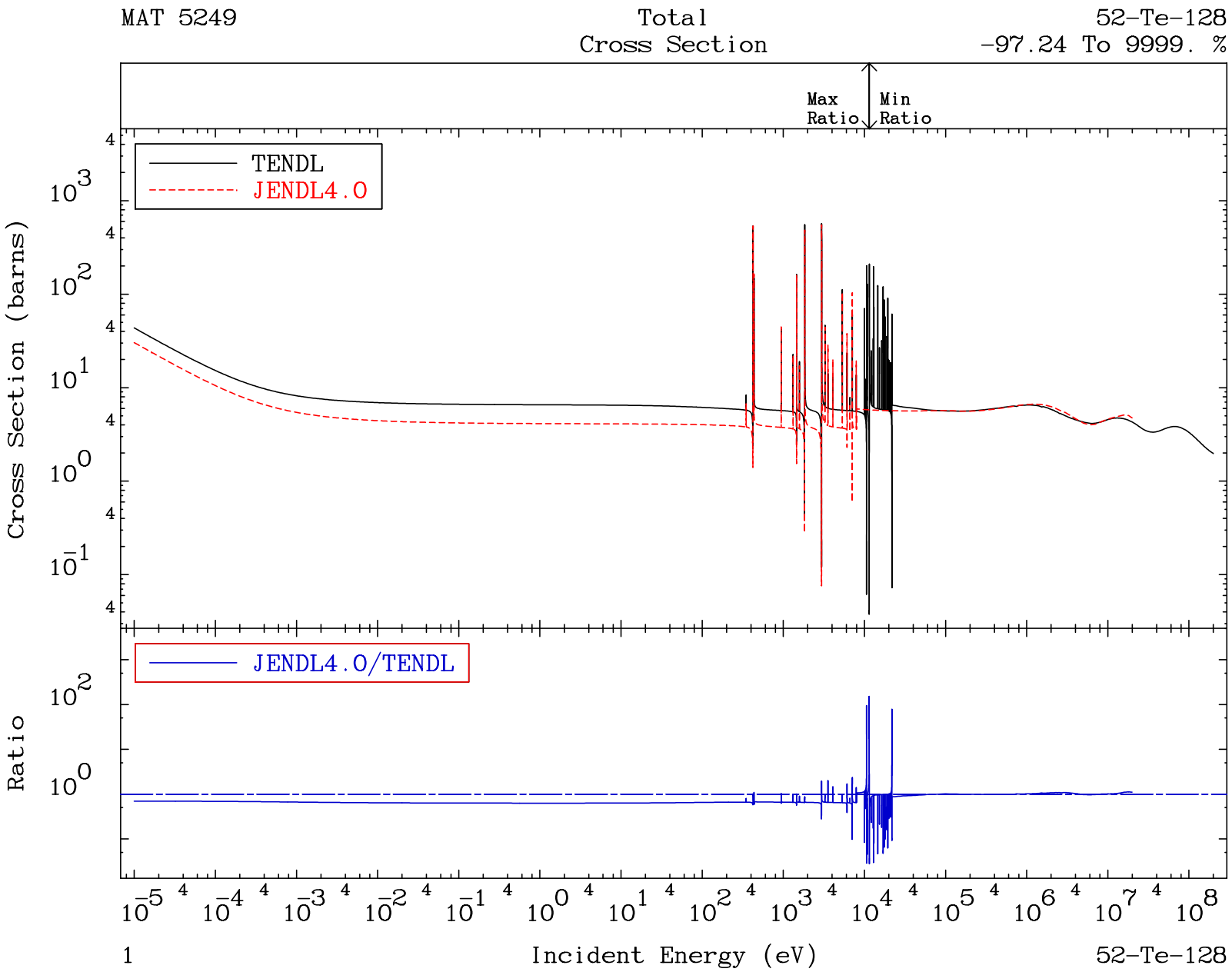
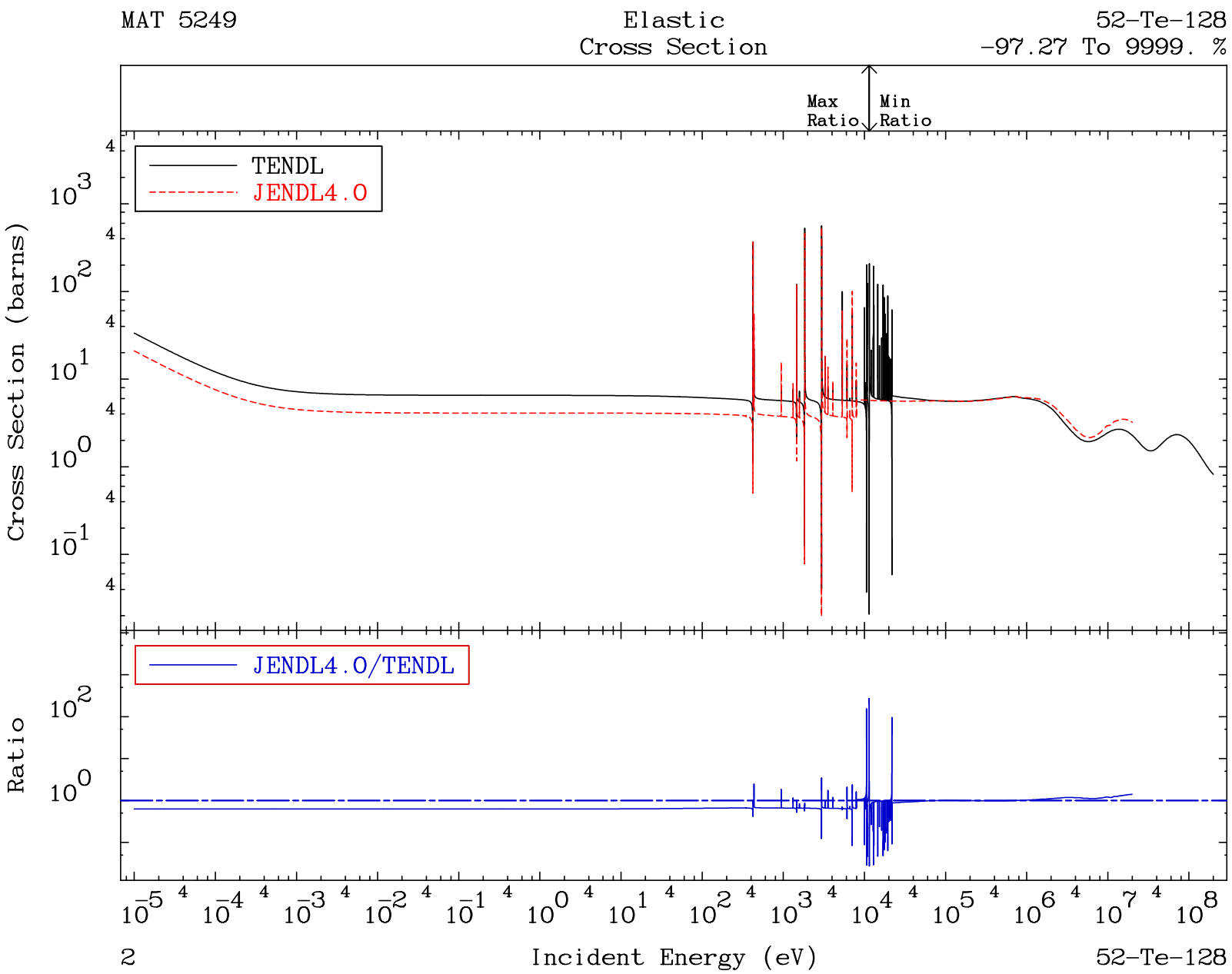
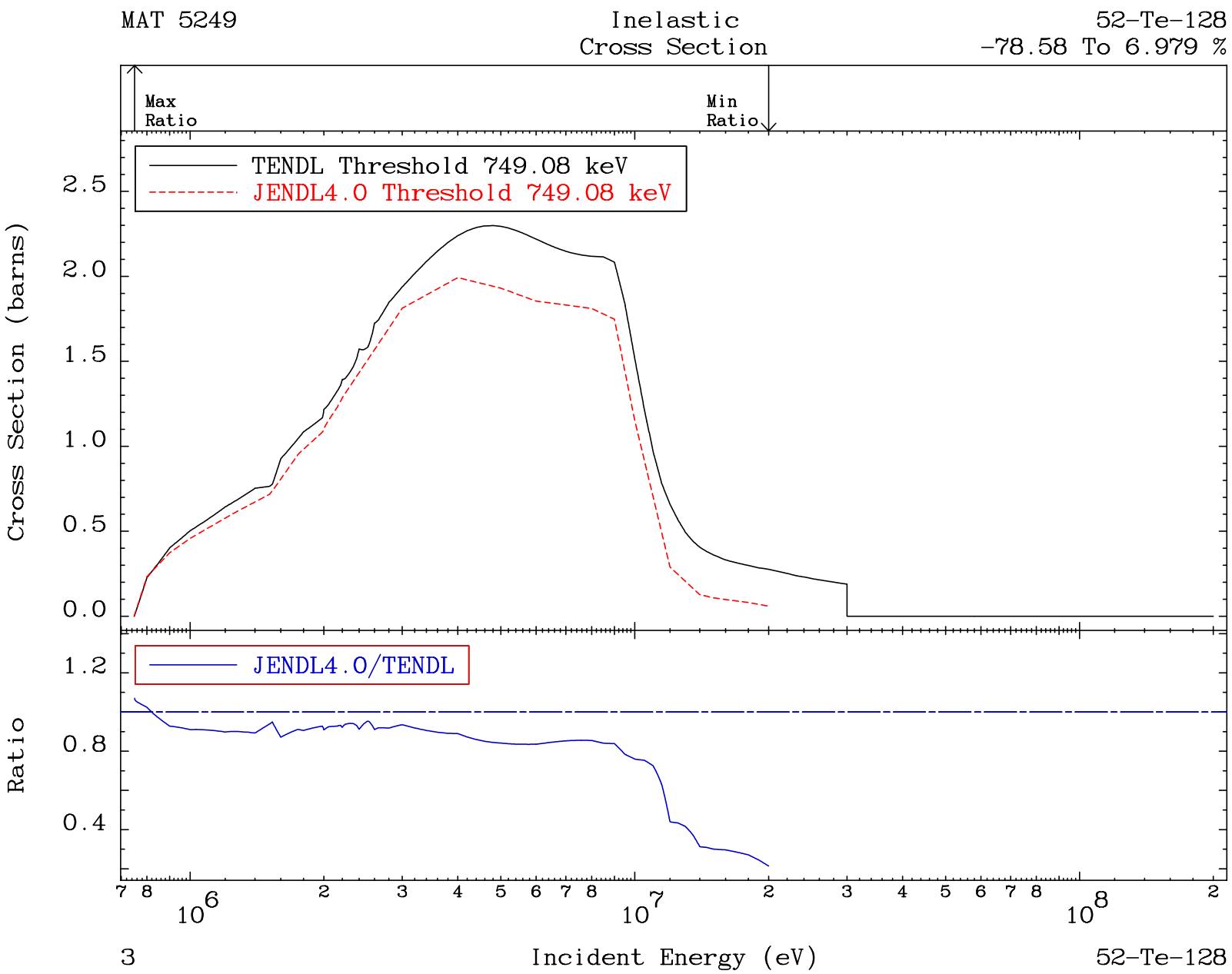
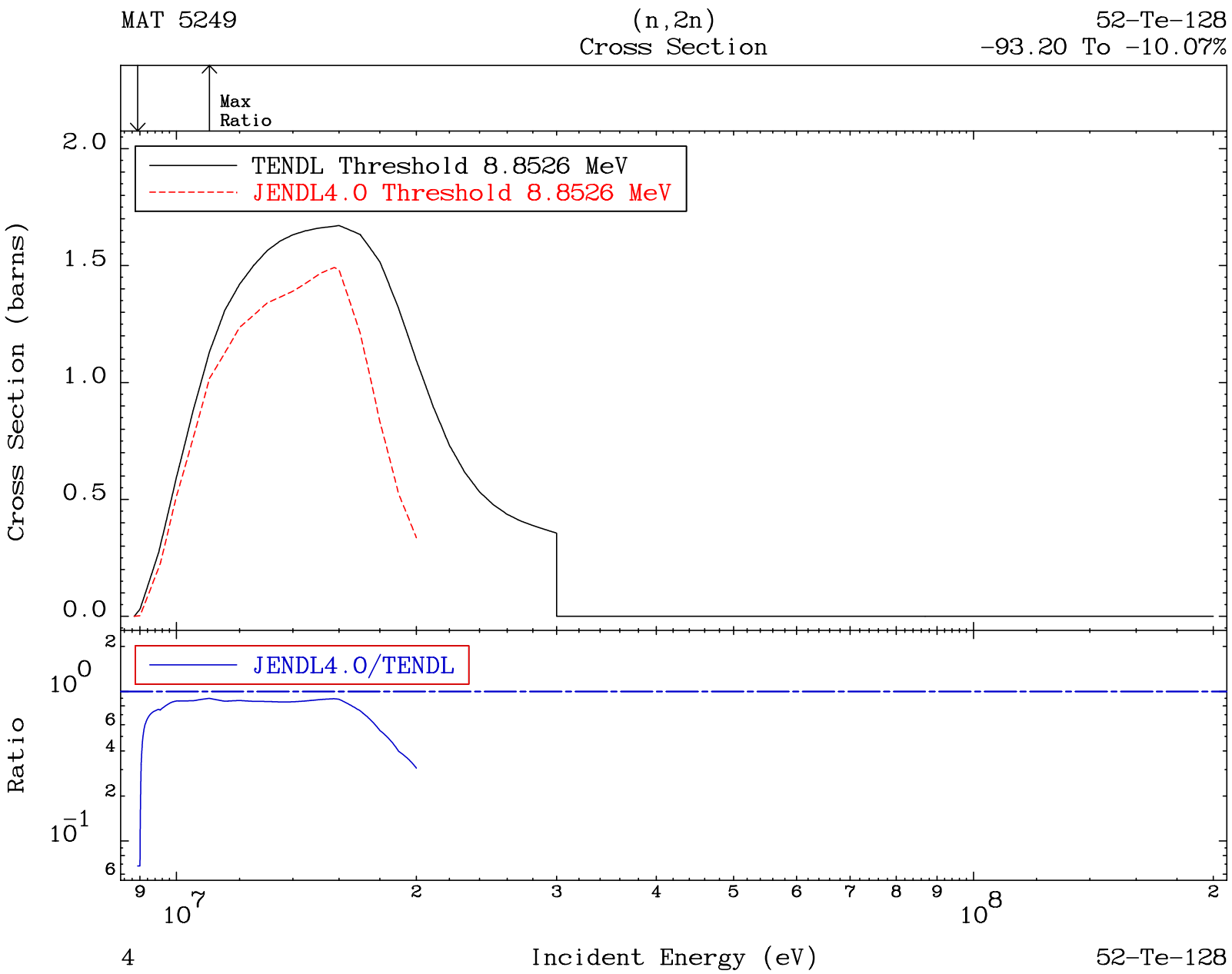
Program Complot
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

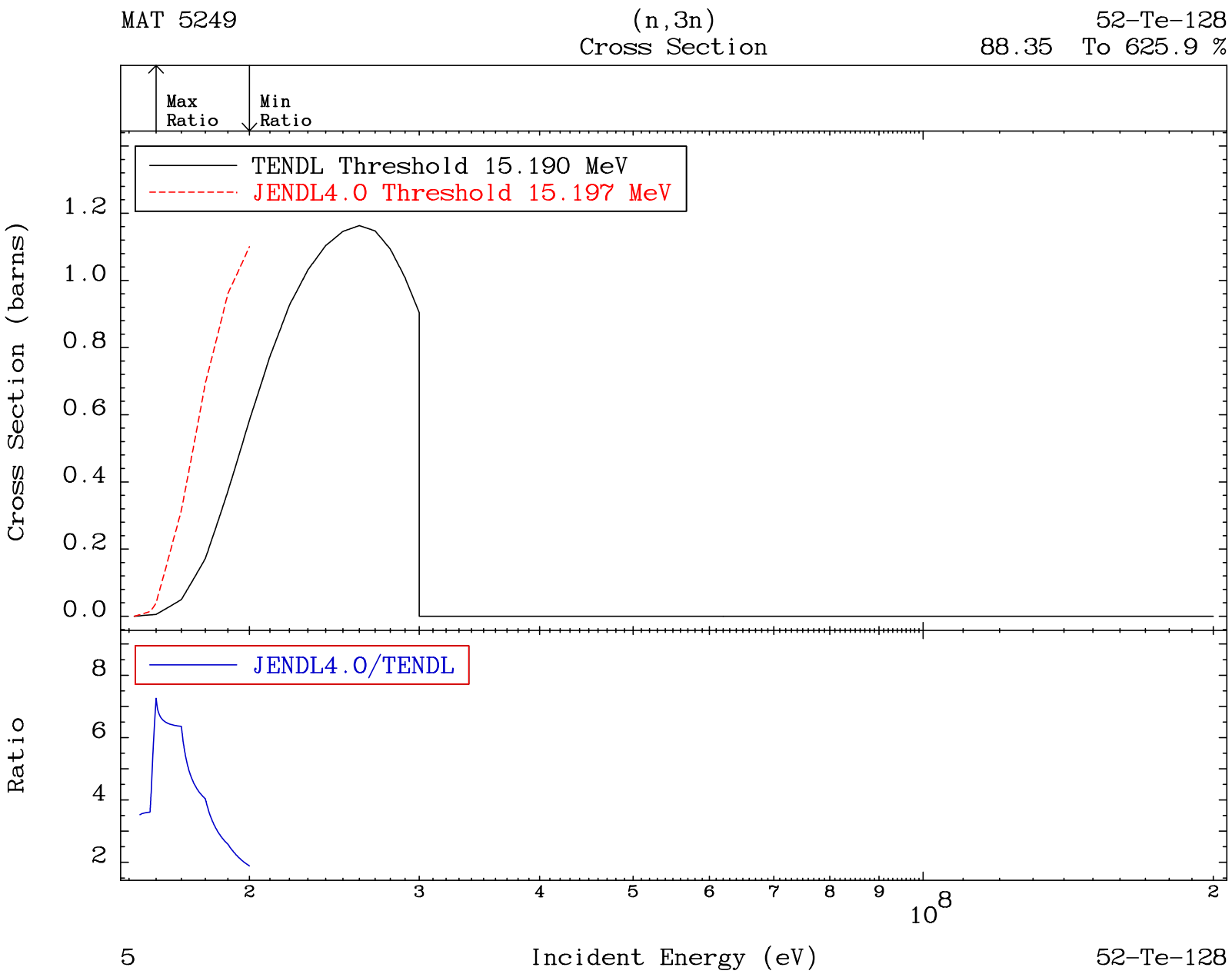
Press Mouse Button to Start

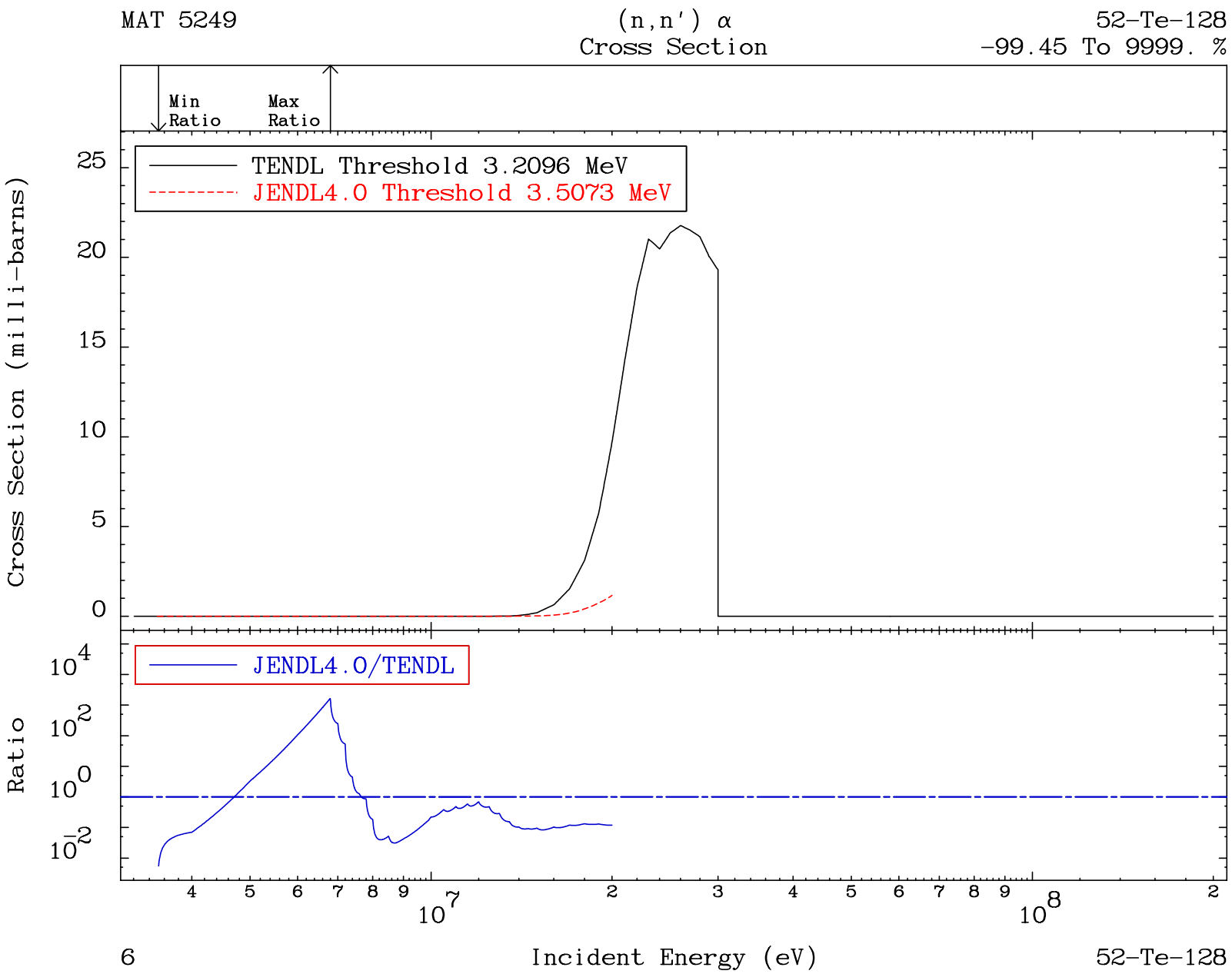

MAT 5249
Total
Cross Section
52-Te-128
-97.24 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
1
52-Te-128

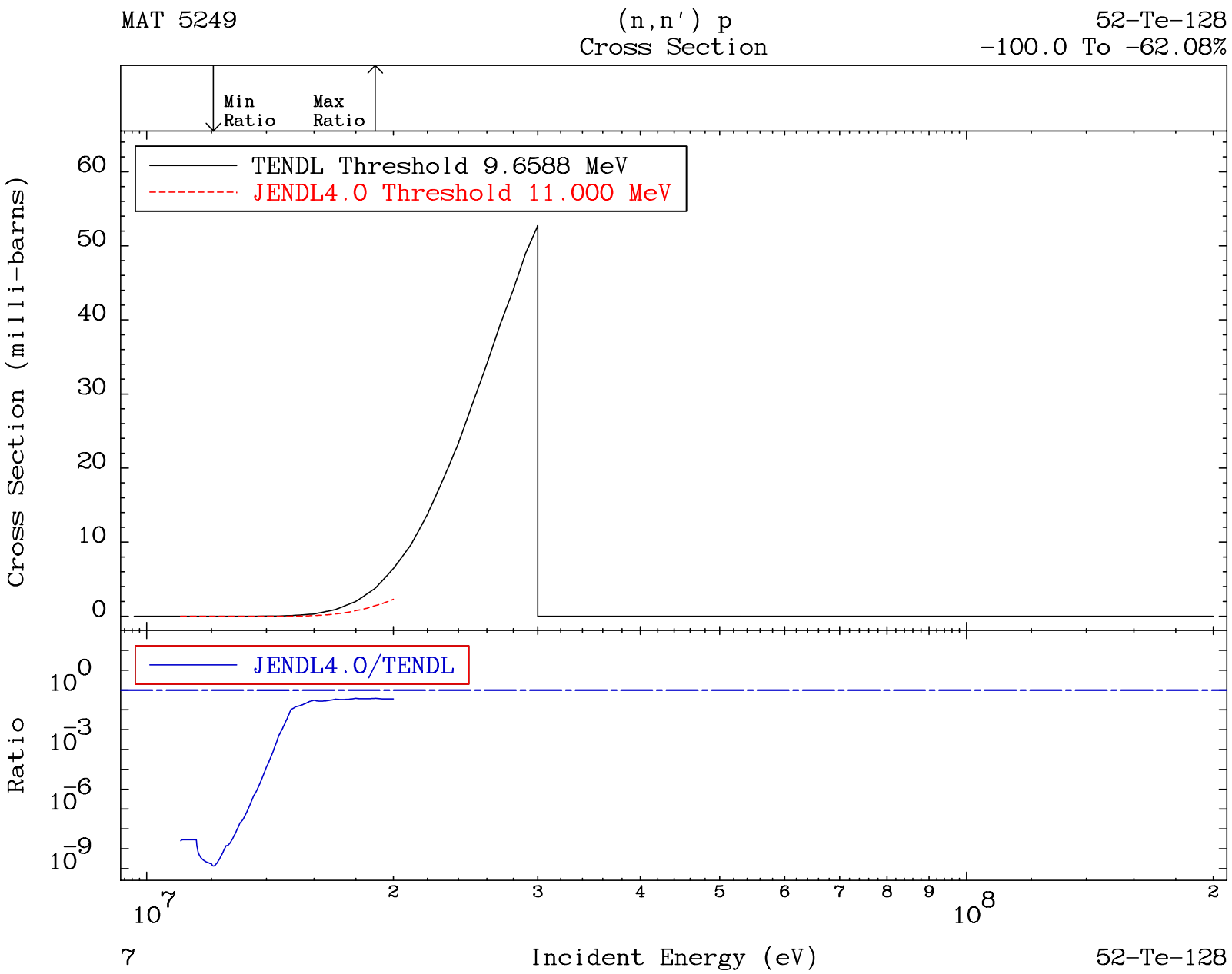

MAT 5249
Elastic
Cross Section
52-Te-128
-97.27 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
2
52-Te-128

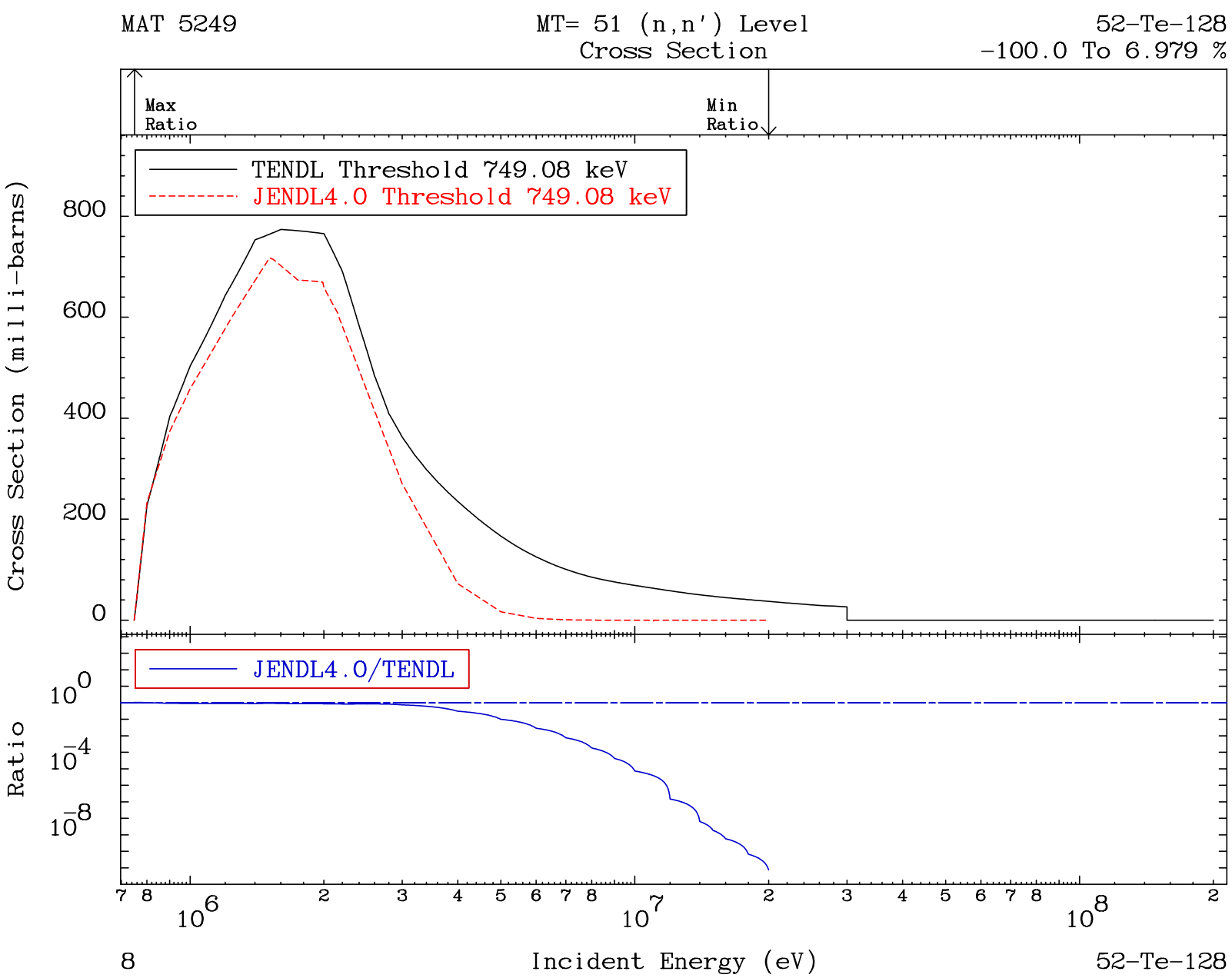

MAT 5249
Inelastic
Cross Section
52-Te-128
-78.58 To 6.979 %
Max
Ratio
Min
Ratio
TENDL Threshold 749.08 keV
JENDL4.0 Threshold 749.08 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
1.2
0.8
0.4
7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
52-Te-128

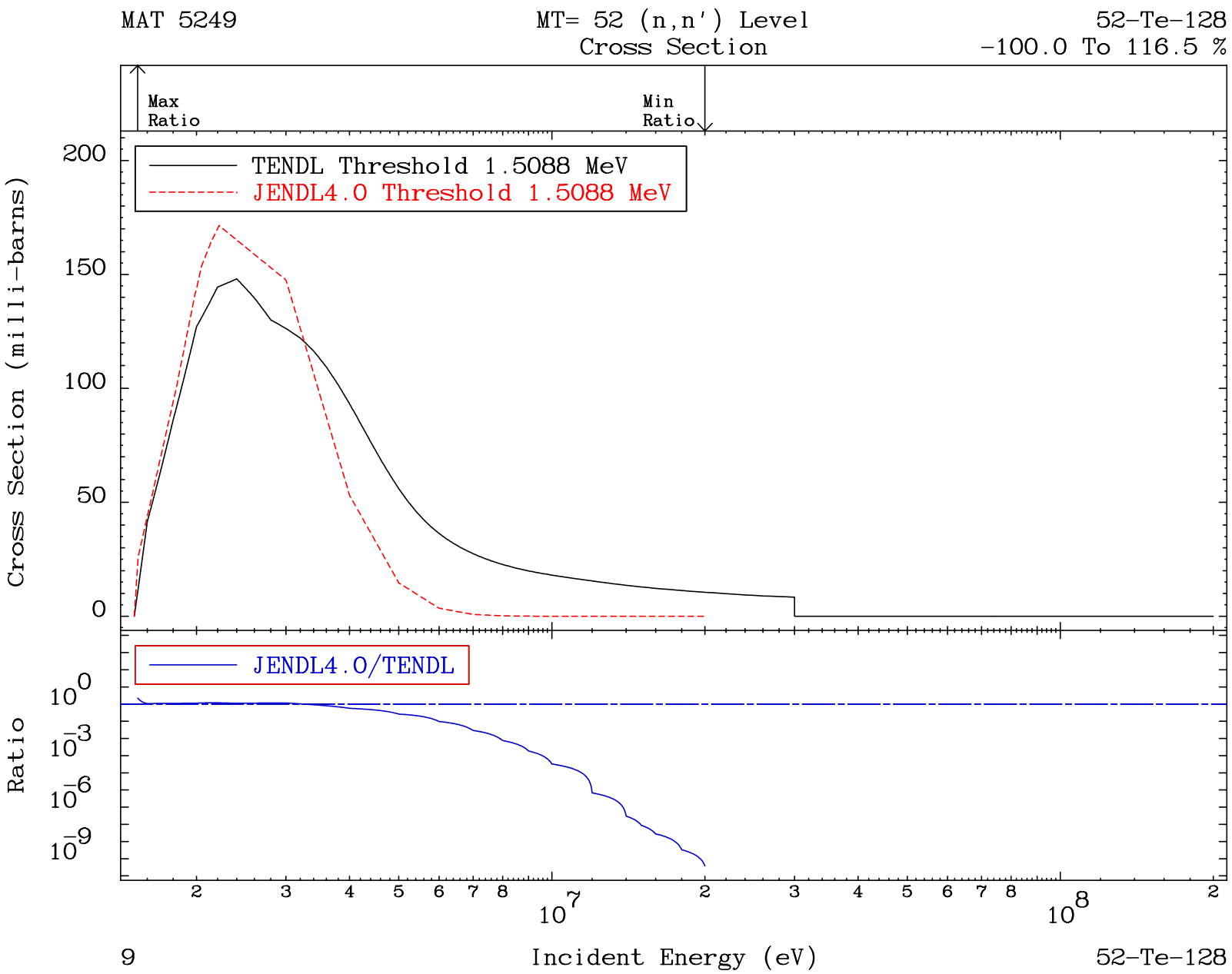

MAT 5249
(n,2n)
Cross Section
52-Te-128
-93.20 To -10.07%
Max
Ratio
TENDL Threshold 8.8526 MeV
JENDL4.0 Threshold 8.8526 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^0
10^-1
9
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
52-Te-128

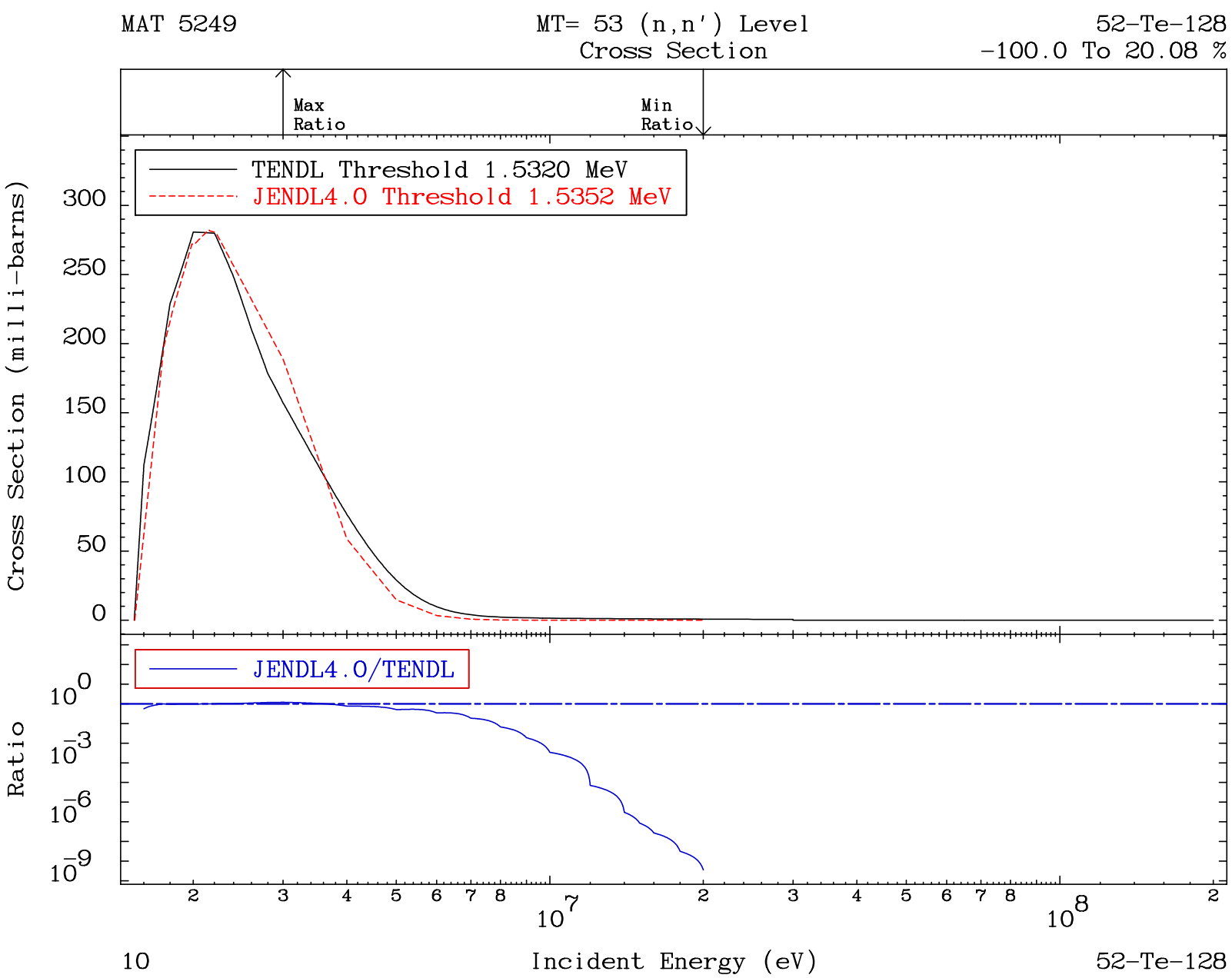

MAT 5249
(n,3n)
Cross Section
52-Te-128
88.35 To 625.9 %
Max Ratio
Min Ratio
TENDL Threshold 15.190 MeV
JENDL4.0 Threshold 15.197 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
8
6
4
2
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
52-Te-128

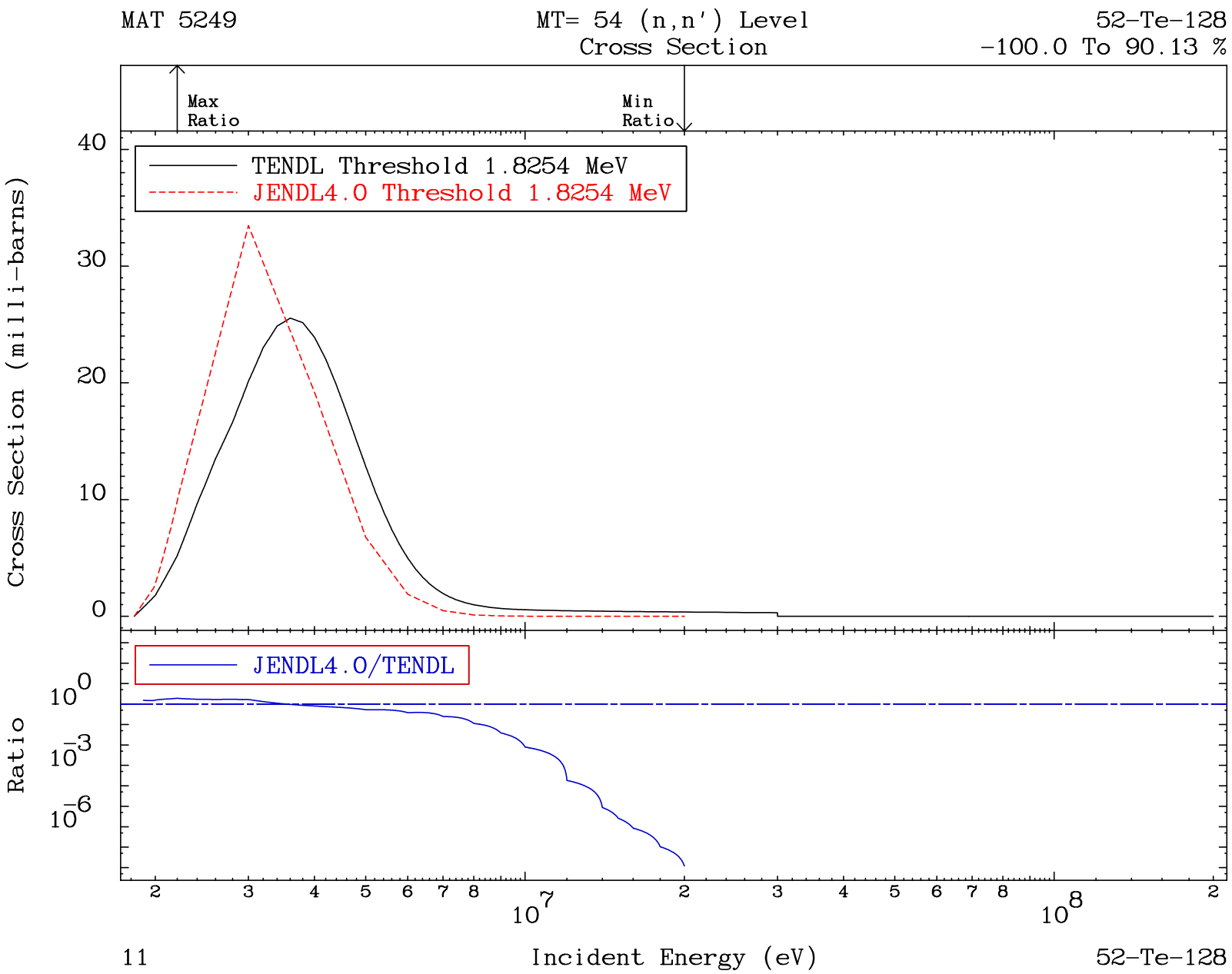

MAT 5249
(n,n') α
Cross Section
52-Te-128
-99.45 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 3.2096 MeV
JENDL4.0 Threshold 3.5073 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^4
10^2
10^0
10^-2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
52-Te-128

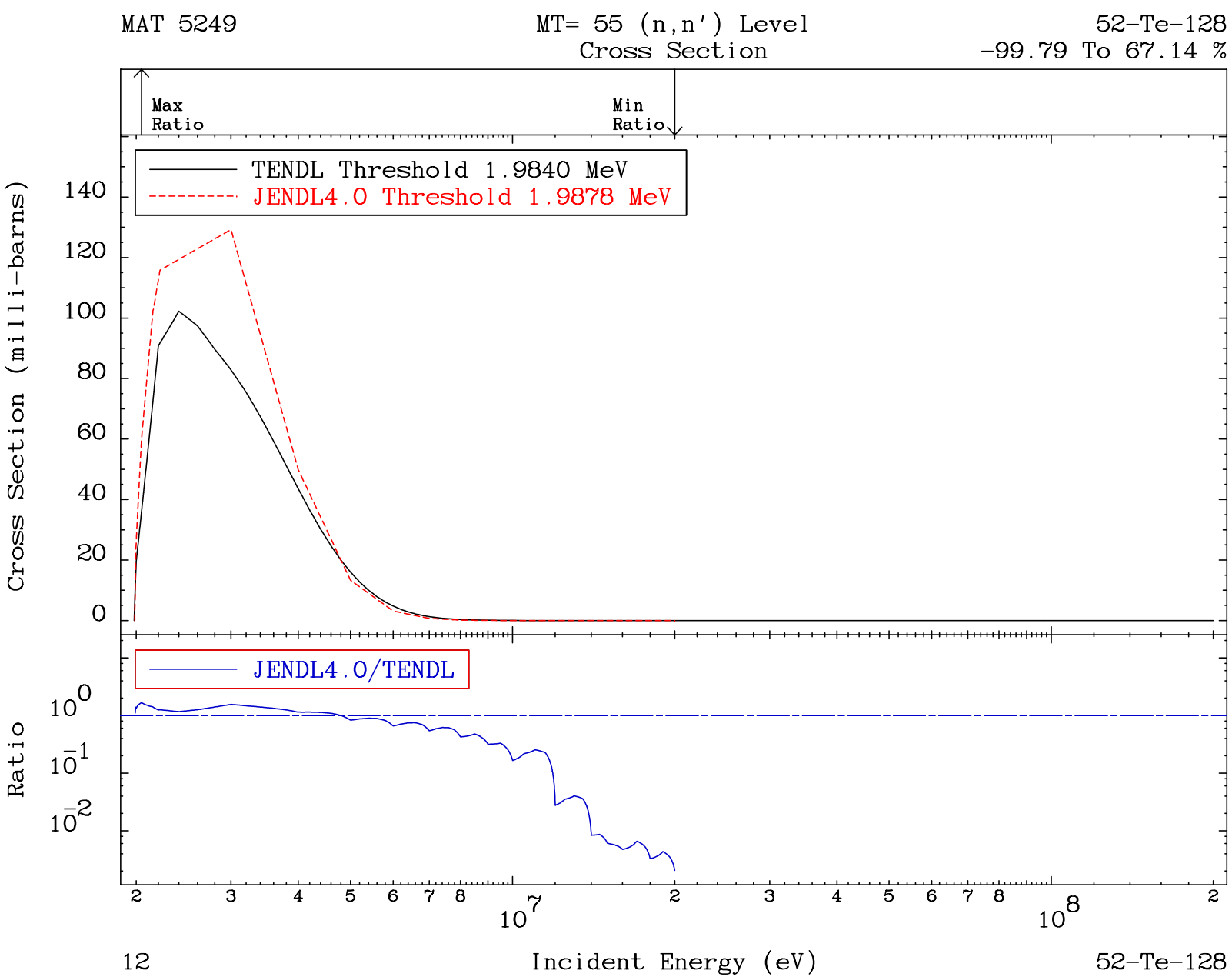

MAT 5249
(n,n') p
Cross Section
52-Te-128
-100.0 To -62.08%
Min Ratio
Max Ratio
TENDL Threshold 9.6588 MeV
JENDL4.0 Threshold 11.000 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
52-Te-128

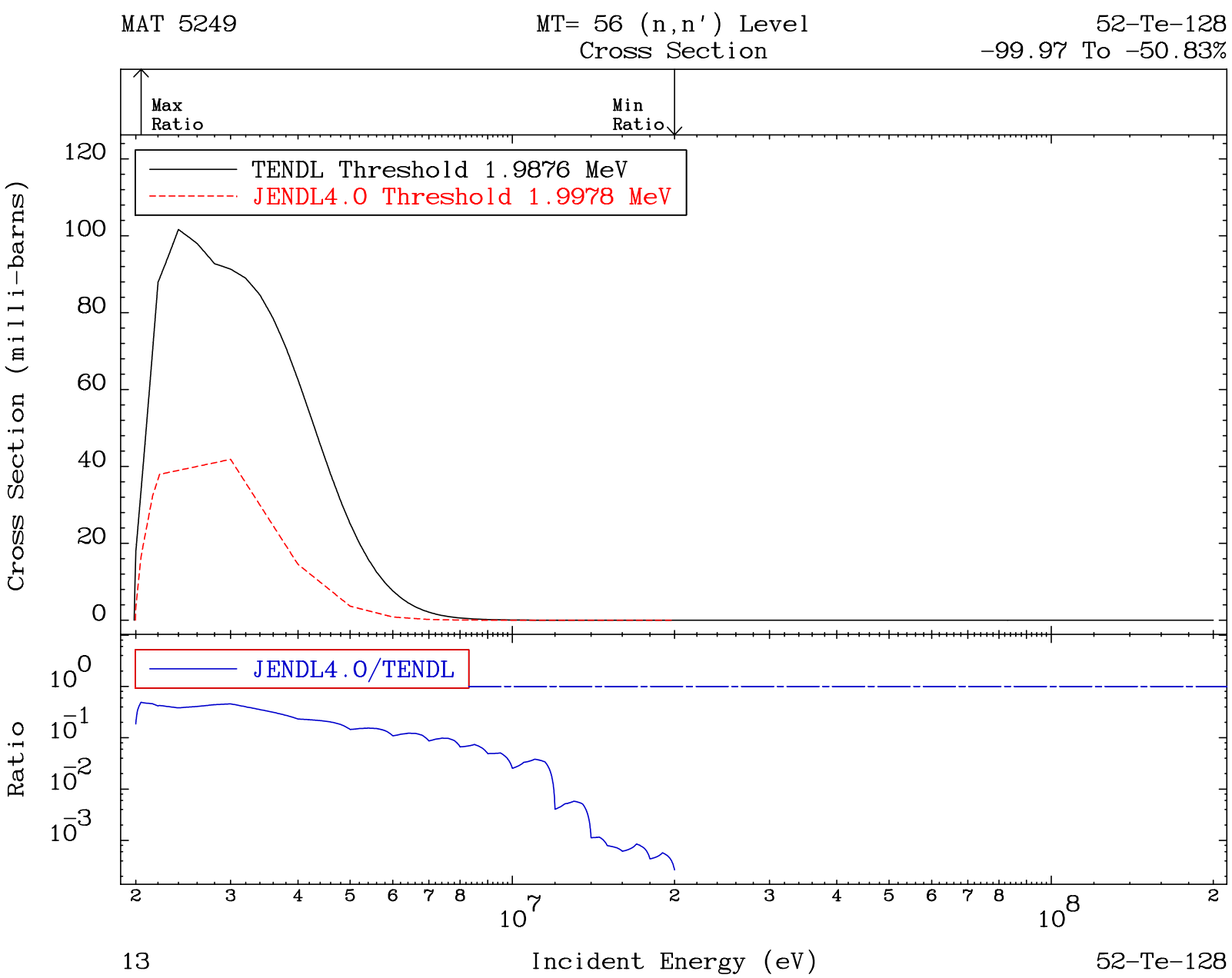

MAT 5249
MT= 51 (n,n') Level
Cross Section
52-Te-128
-100.0 To 6.979 %
Max
Ratio
Min
Ratio
TENDL Threshold 749.08 keV
JENDL4.0 Threshold 749.08 keV
Cross Section (milli-barns)
800
600
400
200
0
JENDL4.0/TENDL
Ratio
10^0
10^-4
10^-8
7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
52-Te-128

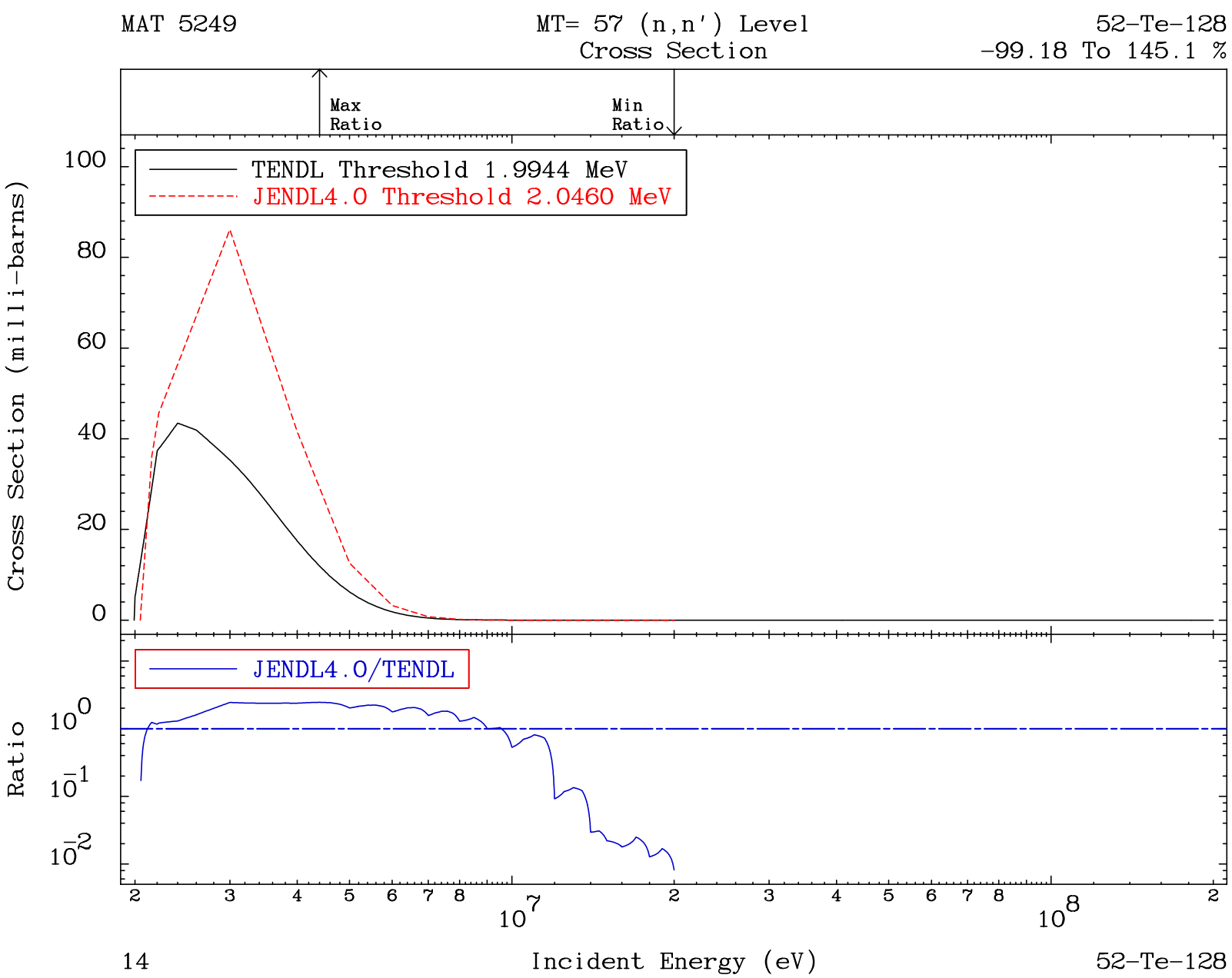

MAT 5249
MT= 52 (n,n') Level
Cross Section
52-Te-128
-100.0 To 116.5 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.5088 MeV
JENDL4.0 Threshold 1.5088 MeV
Cross Section (milli-barns)
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
52-Te-128

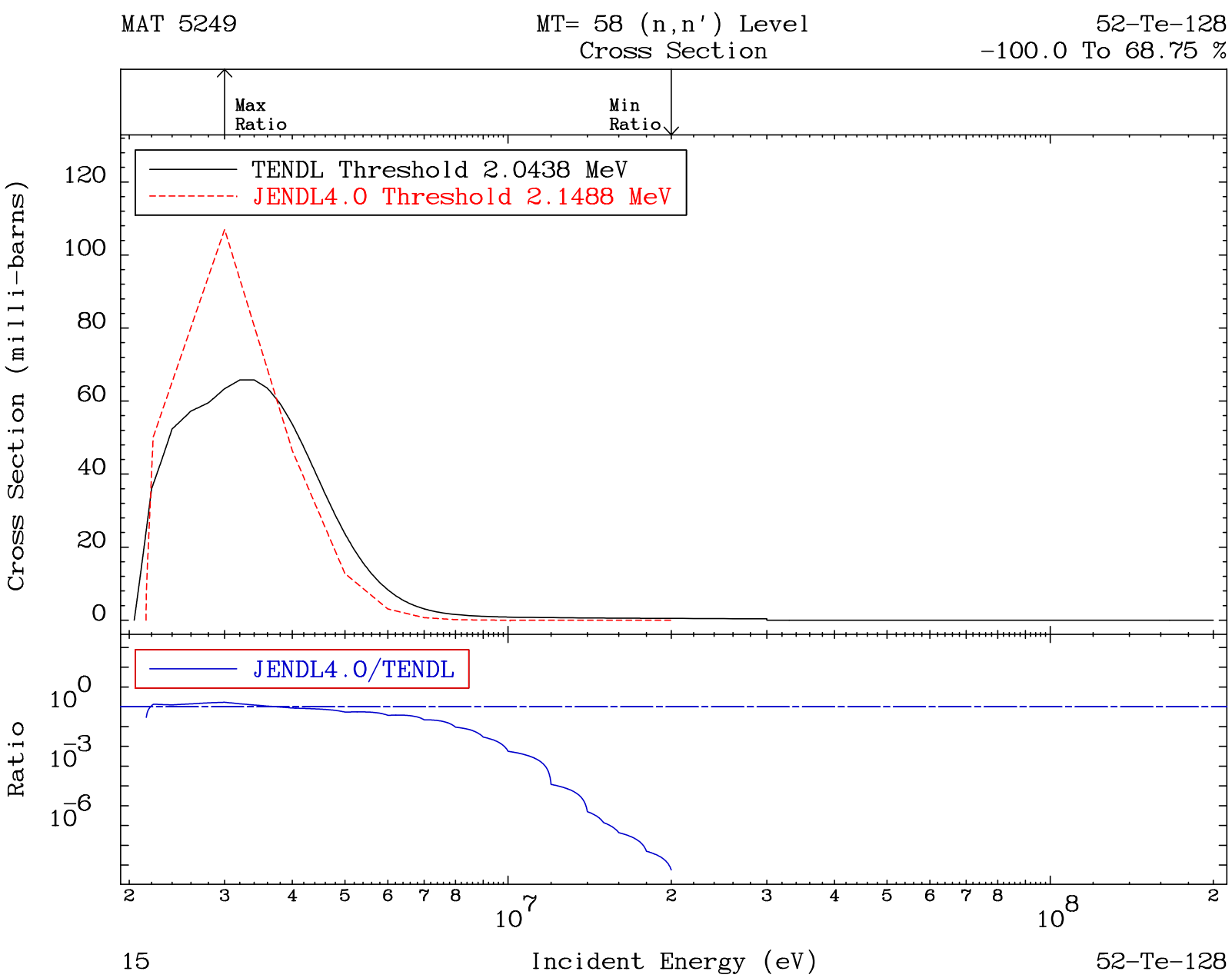

MAT 5249
MT= 53 (n,n') Level
Cross Section
52-Te-128
-100.0 To 20.08 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.5320 MeV
JENDL4.0 Threshold 1.5352 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
10^-9
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
10
Incident Energy (eV)
52-Te-128

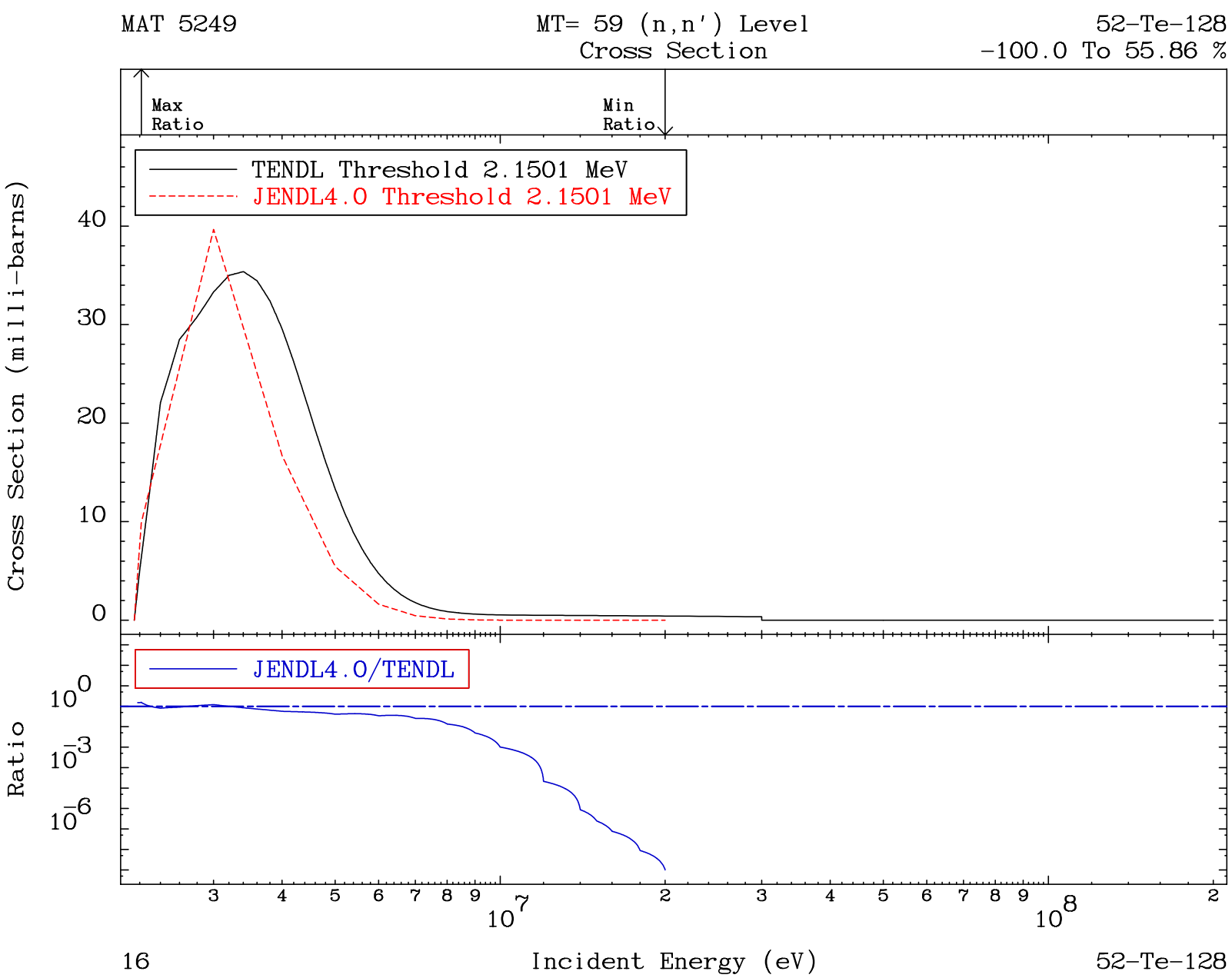

MAT 5249
MT= 54 (n,n') Level
Cross Section
52-Te-128
-100.0 To 90.13 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.8254 MeV
JENDL4.0 Threshold 1.8254 MeV
Cross Section (milli-barns)
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
11
Incident Energy (eV)
52-Te-128

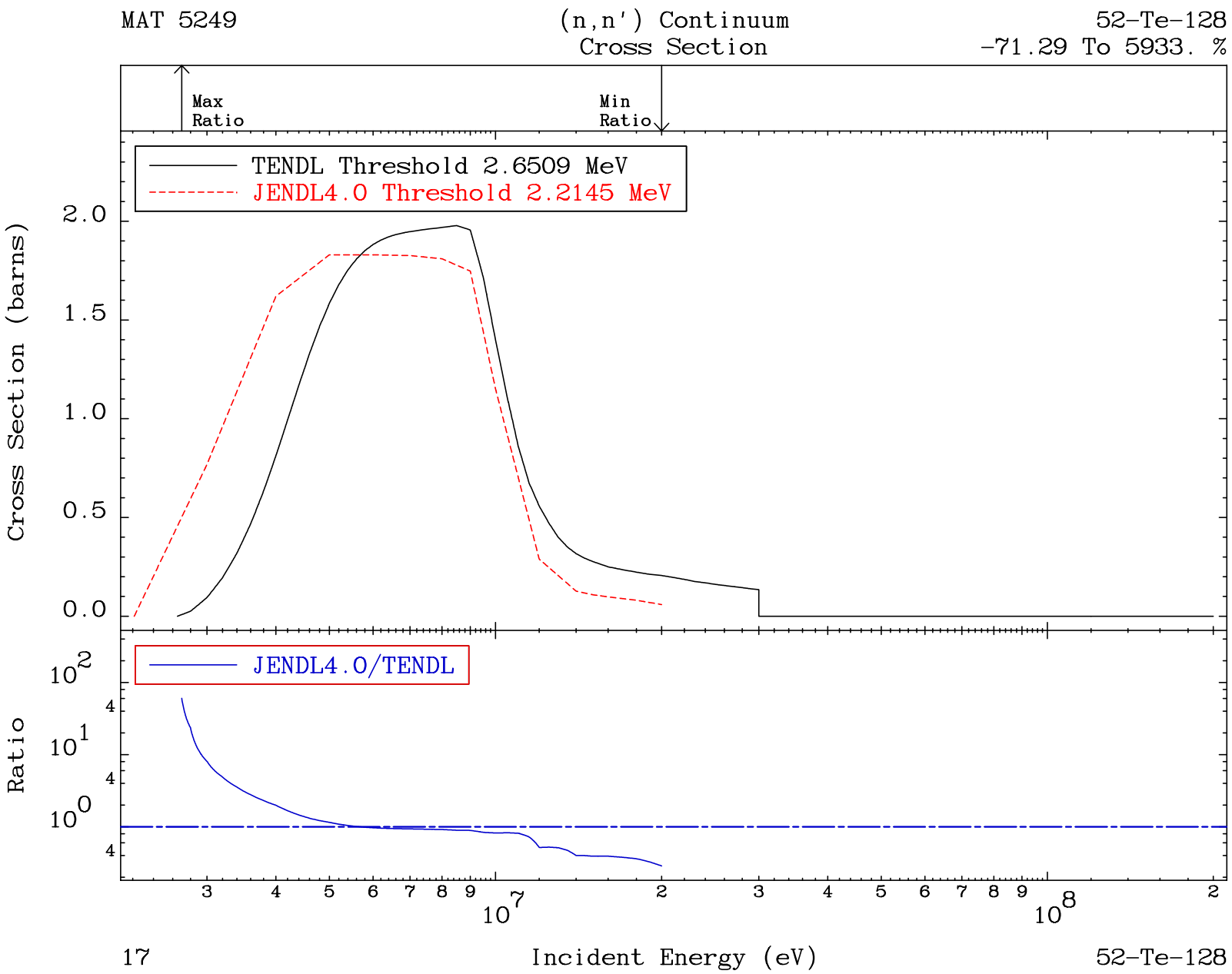

MAT 5249
MT= 55 (n,n') Level
Cross Section
52-Te-128
-99.79 To 67.14 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.9840 MeV
JENDL4.0 Threshold 1.9878 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-1
10^-2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
52-Te-128

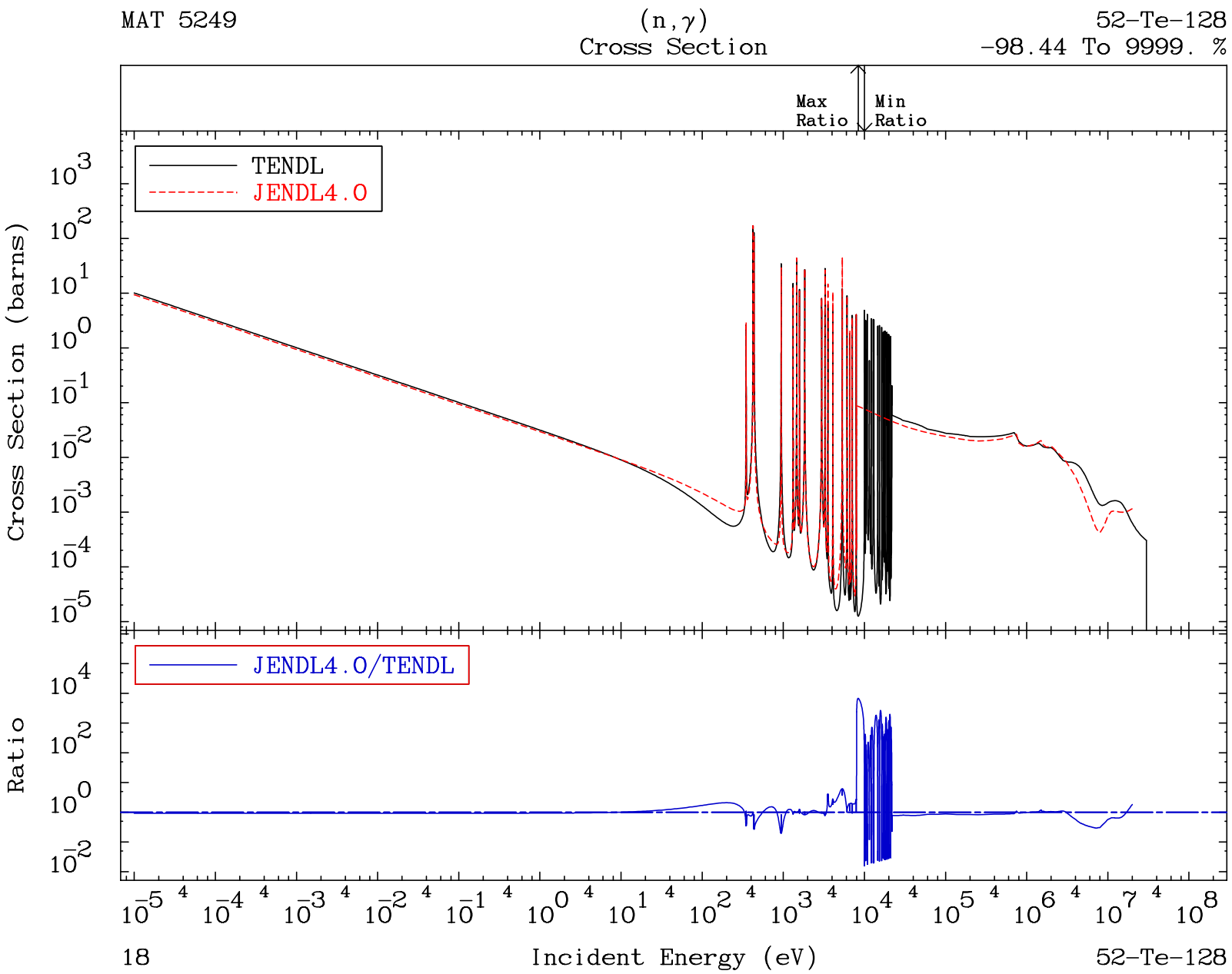

MAT 5249
MT= 56 (n,n') Level
Cross Section
52-Te-128
-99.97 To -50.83%
Max
Ratio
Min
Ratio
TENDL Threshold 1.9876 MeV
JENDL4.0 Threshold 1.9978 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-1
10^-2
10^-3
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
13
Incident Energy (eV)
52-Te-128

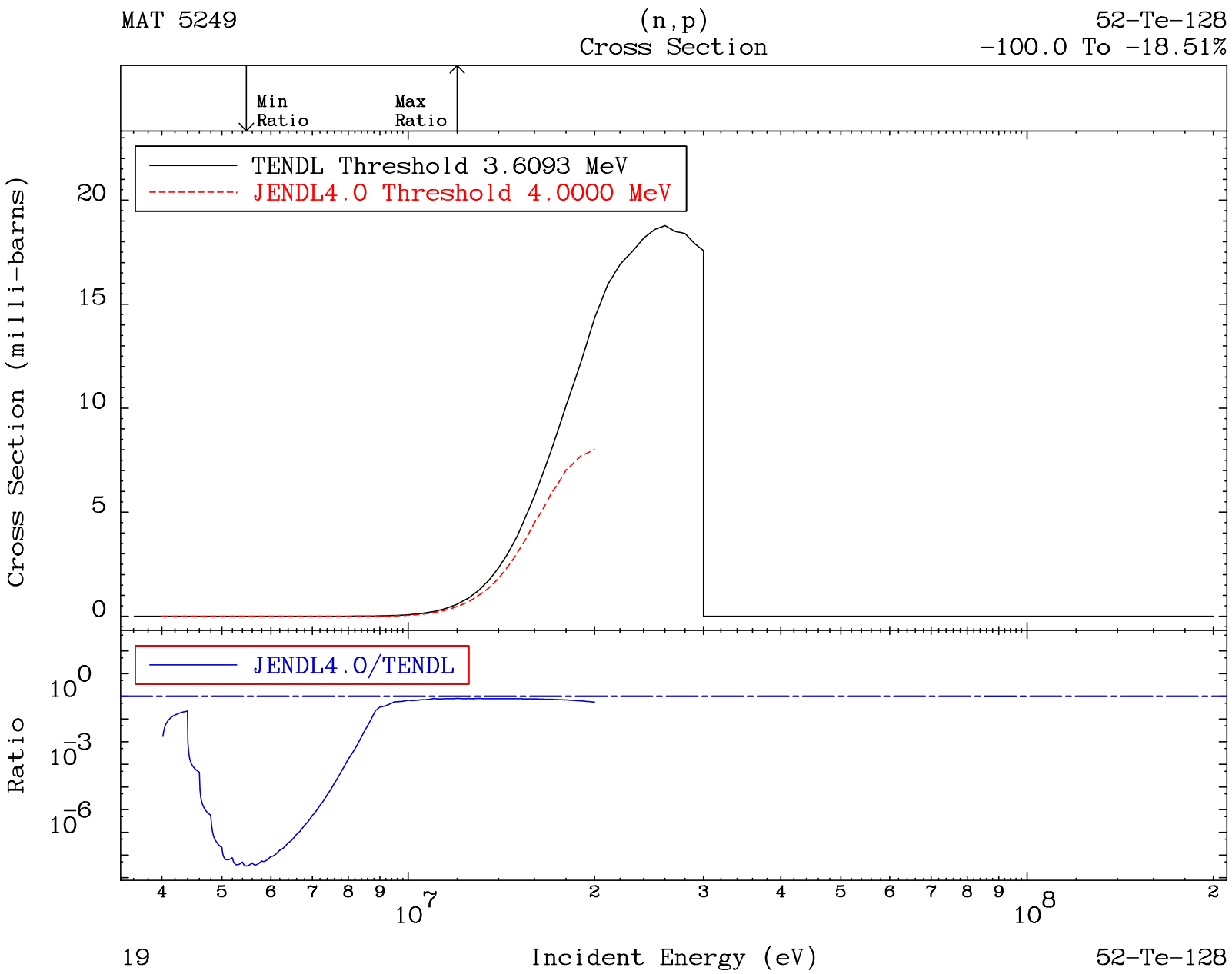

MAT 5249
MT= 57 (n,n') Level
Cross Section
52-Te-128
-99.18 To 145.1 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.9944 MeV
JENDL4.0 Threshold 2.0460 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-1
10^-2
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
14
Incident Energy (eV)
52-Te-128

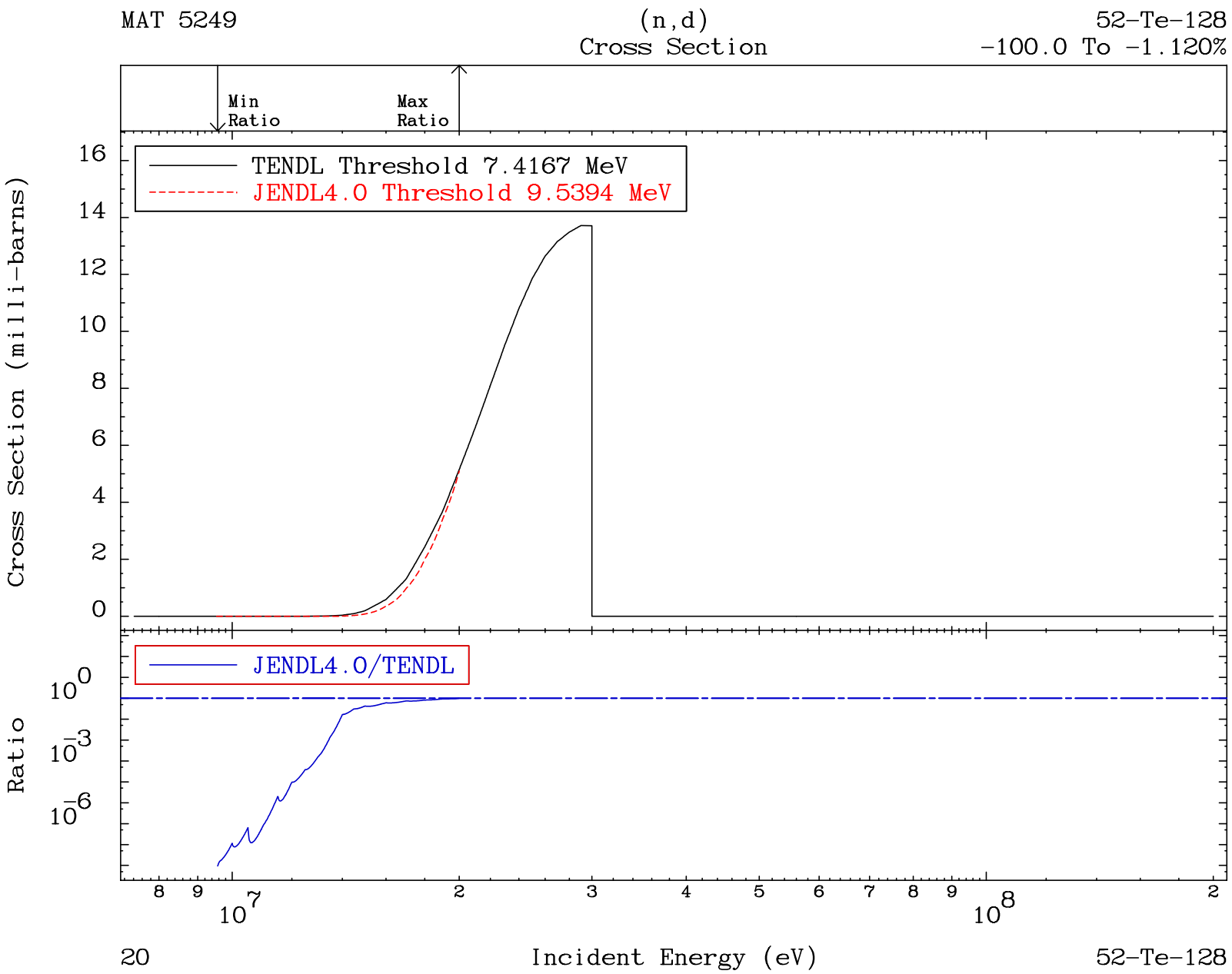

MAT 5249
MT= 58 (n,n') Level
Cross Section
52-Te-128
-100.0 To 68.75 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.0438 MeV
JENDL4.0 Threshold 2.1488 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
15
Incident Energy (eV)
52-Te-128

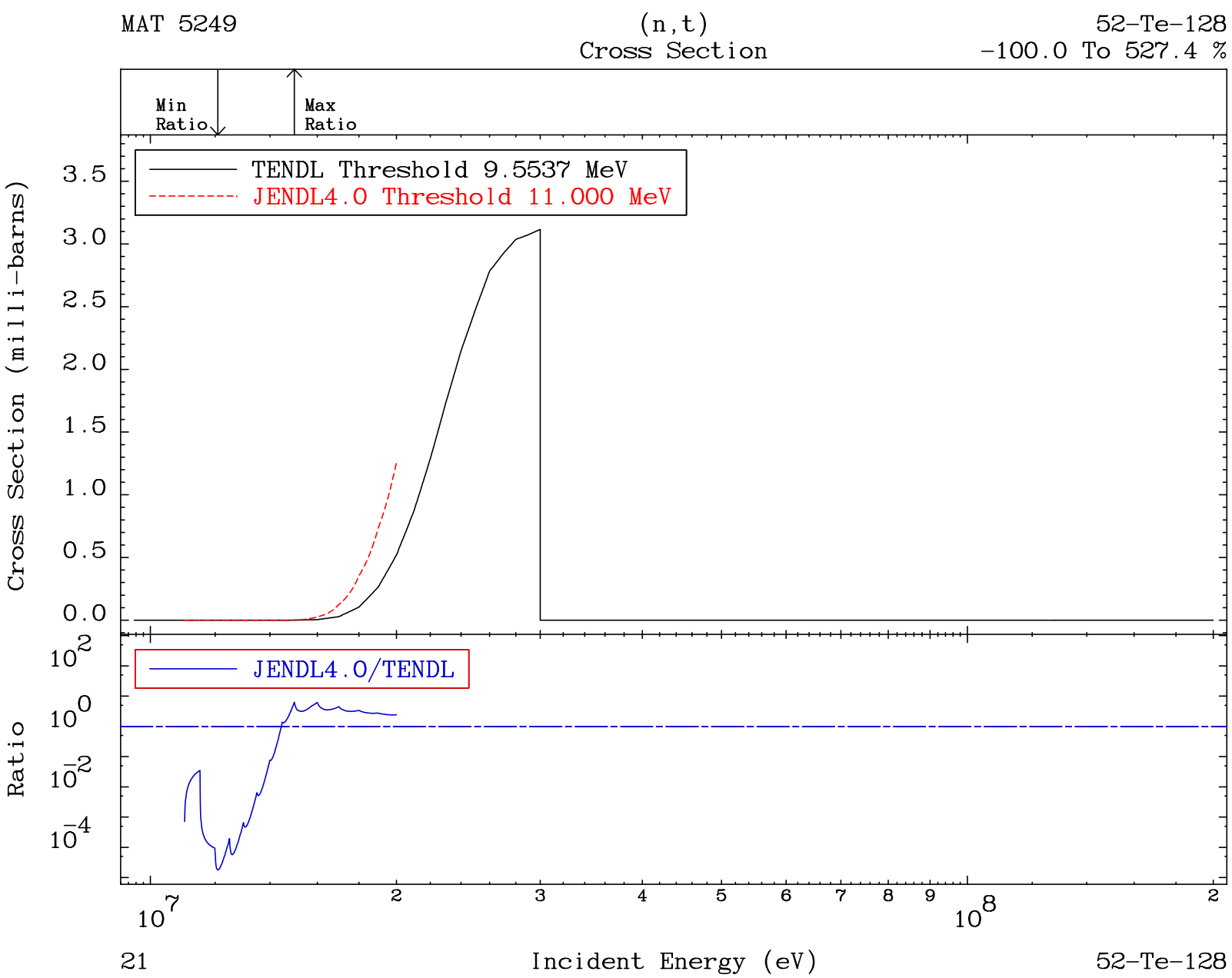

MAT 5249
MT= 59 (n,n') Level
Cross Section
52-Te-128
-100.0 To 55.86 %
Max
Ratio
Min
Ratio
TENDL Threshold 2.1501 MeV
JENDL4.0 Threshold 2.1501 MeV
Cross Section (milli-barns)
40
30
20
10
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
16
Incident Energy (eV)
52-Te-128

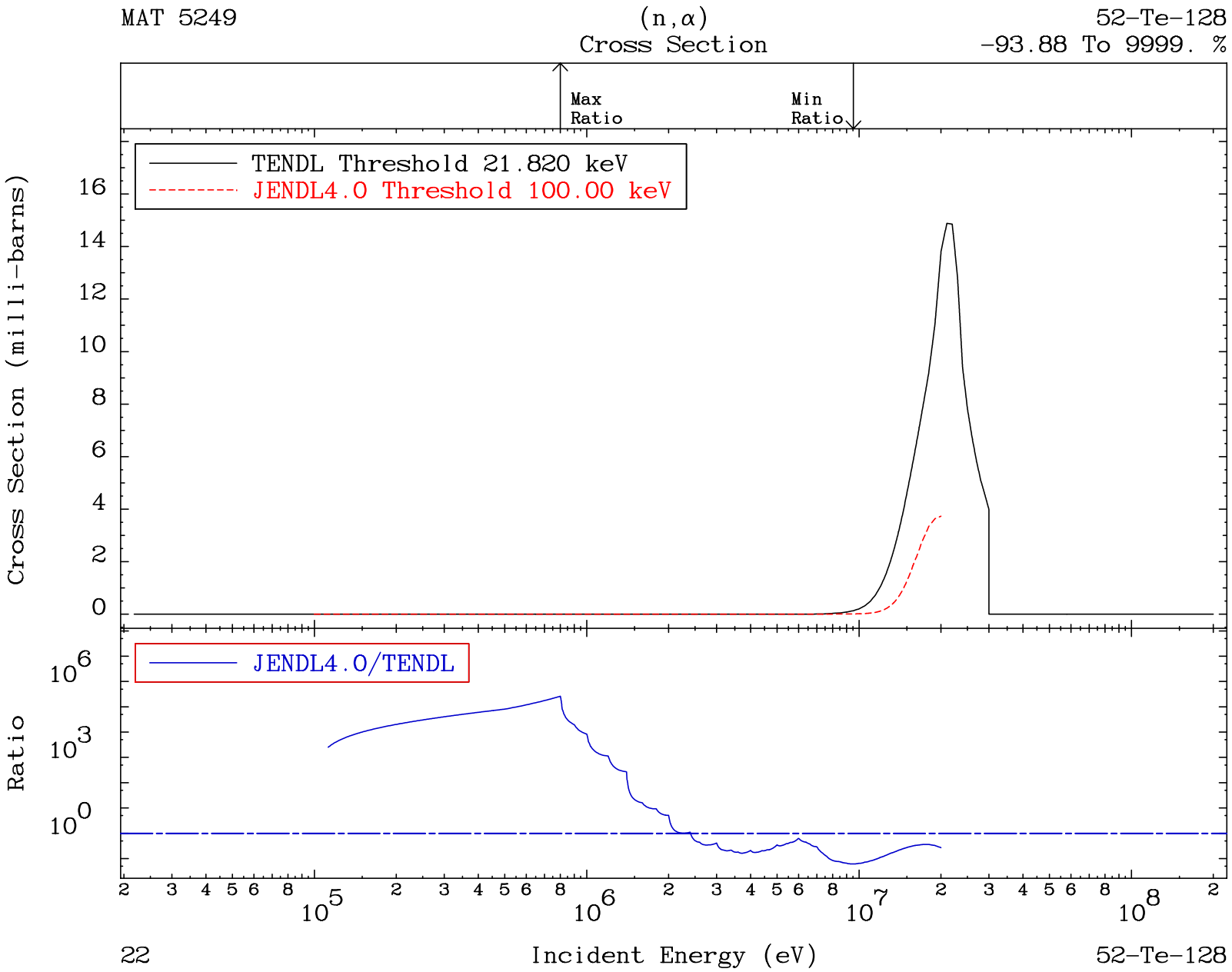

MAT 5249
(n,n') Continuum
Cross Section
52-Te-128
-71.29 To 5933. %
Max
Ratio
Min
Ratio
TENDL Threshold 2.6509 MeV
JENDL4.0 Threshold 2.2145 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^2
10^1
10^0
4
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
17
Incident Energy (eV)
52-Te-128

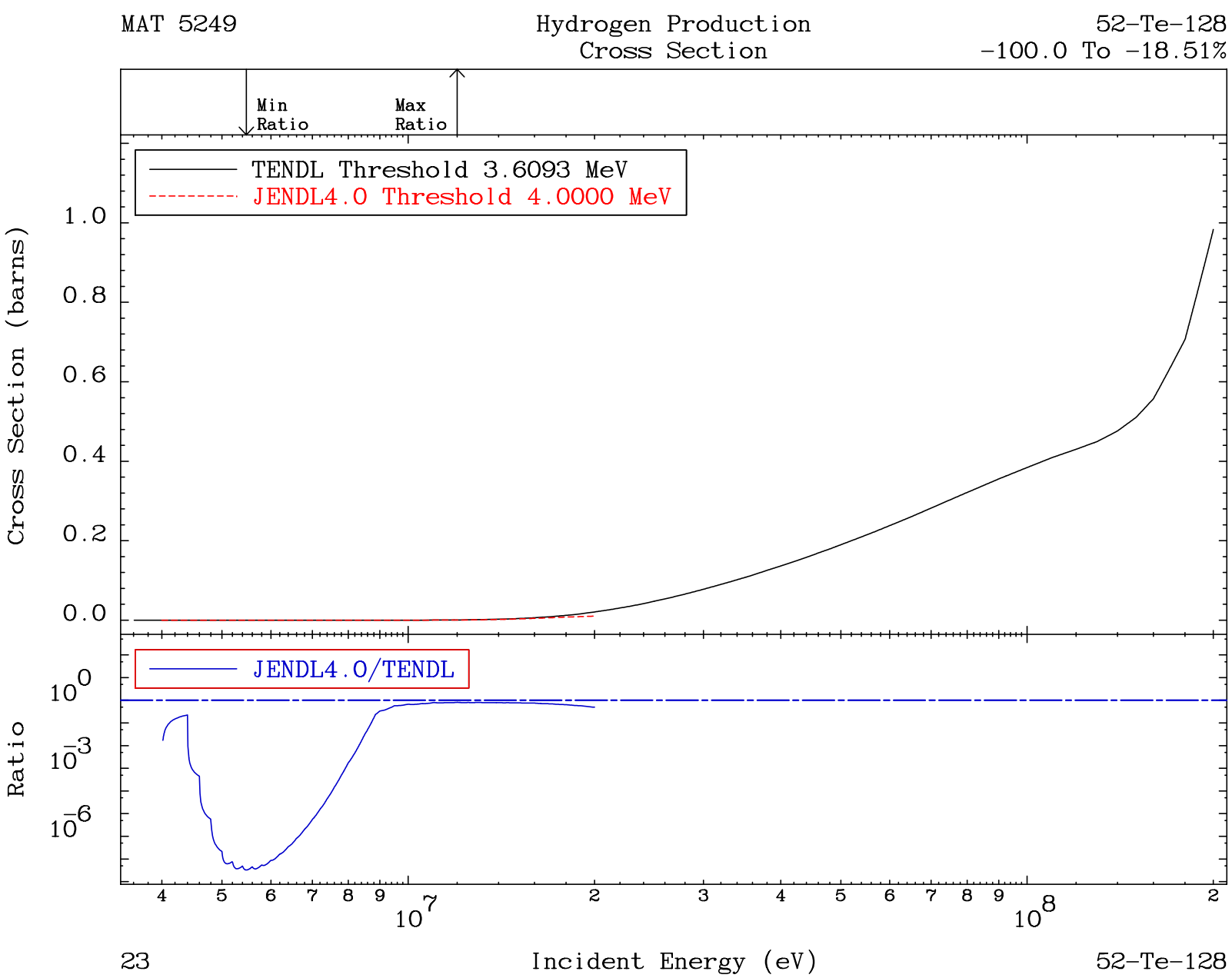

MAT 5249
(n,γ)
Cross Section
52-Te-128
-98.44 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
18
52-Te-128

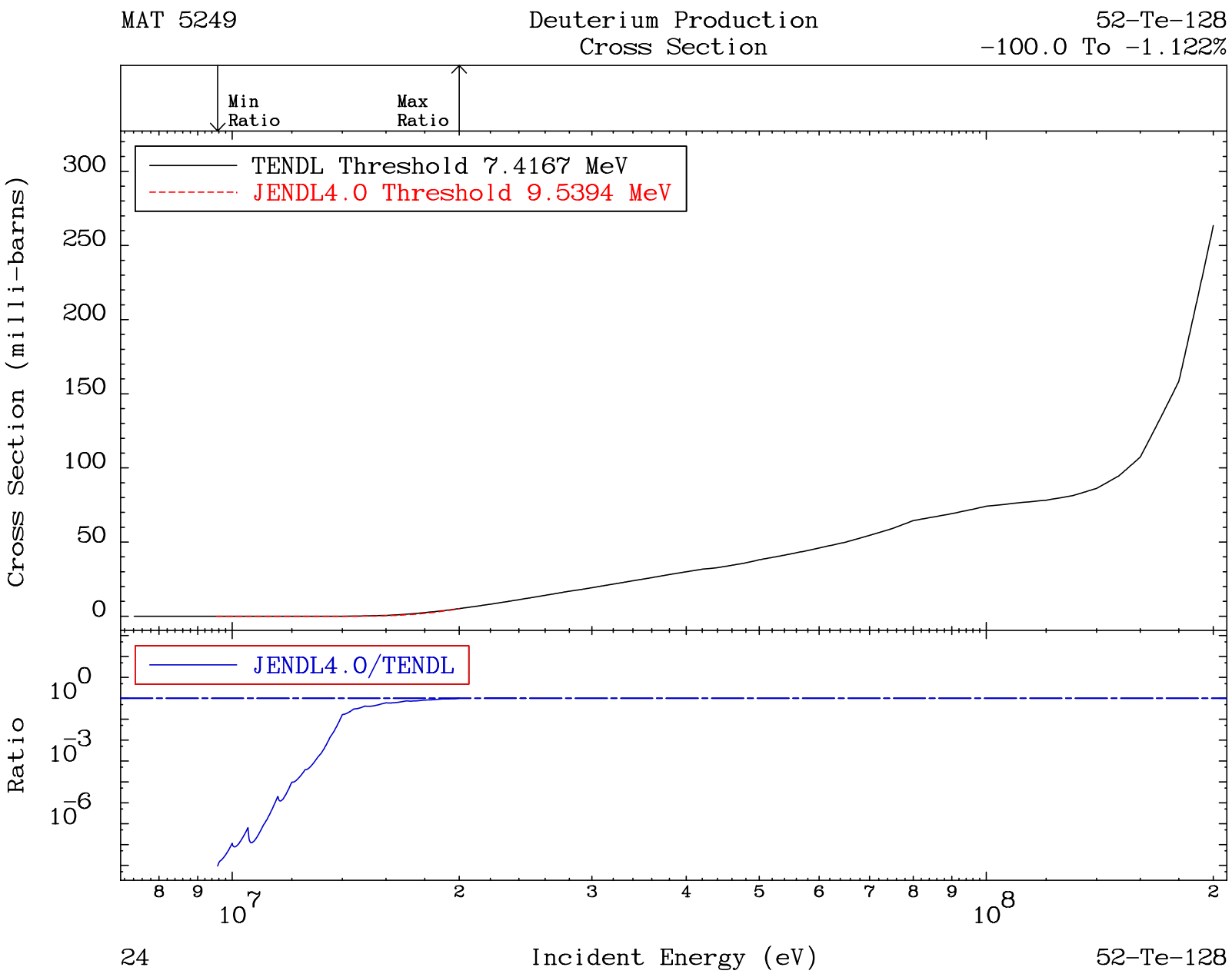

MAT 5249
(n,p)
Cross Section
52-Te-128
-100.0 To -18.51%
Min Ratio
Max Ratio
TENDL Threshold 3.6093 MeV
JENDL4.0 Threshold 4.0000 MeV
Cross Section (milli-barns)
20
15
10
5
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
52-Te-128

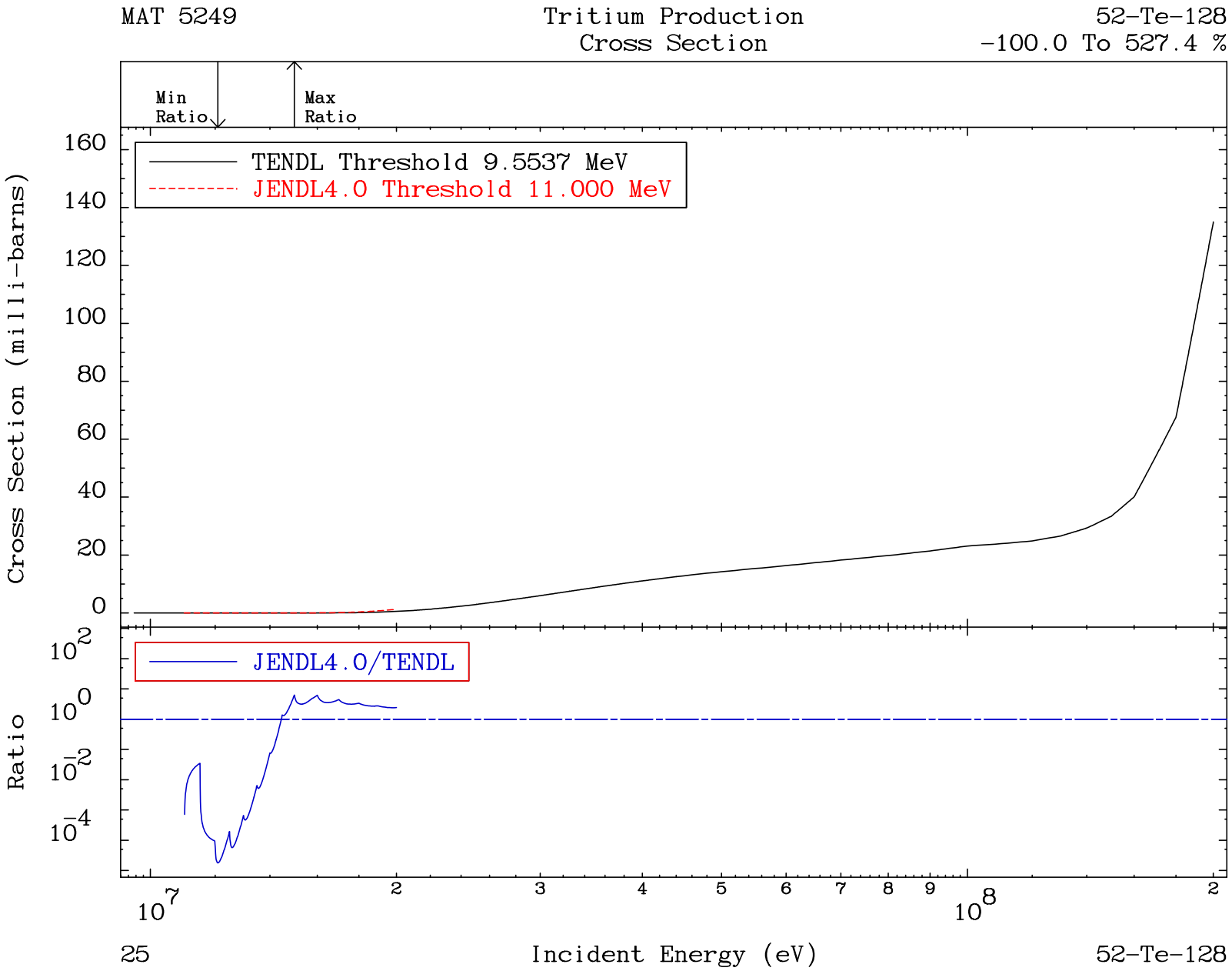

MAT 5249
(n,d)
Cross Section
52-Te-128
-100.0 To -1.120%
Min Ratio
Max Ratio
TENDL Threshold 7.4167 MeV
JENDL4.0 Threshold 9.5394 MeV
Cross Section (milli-barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
20
52-Te-128

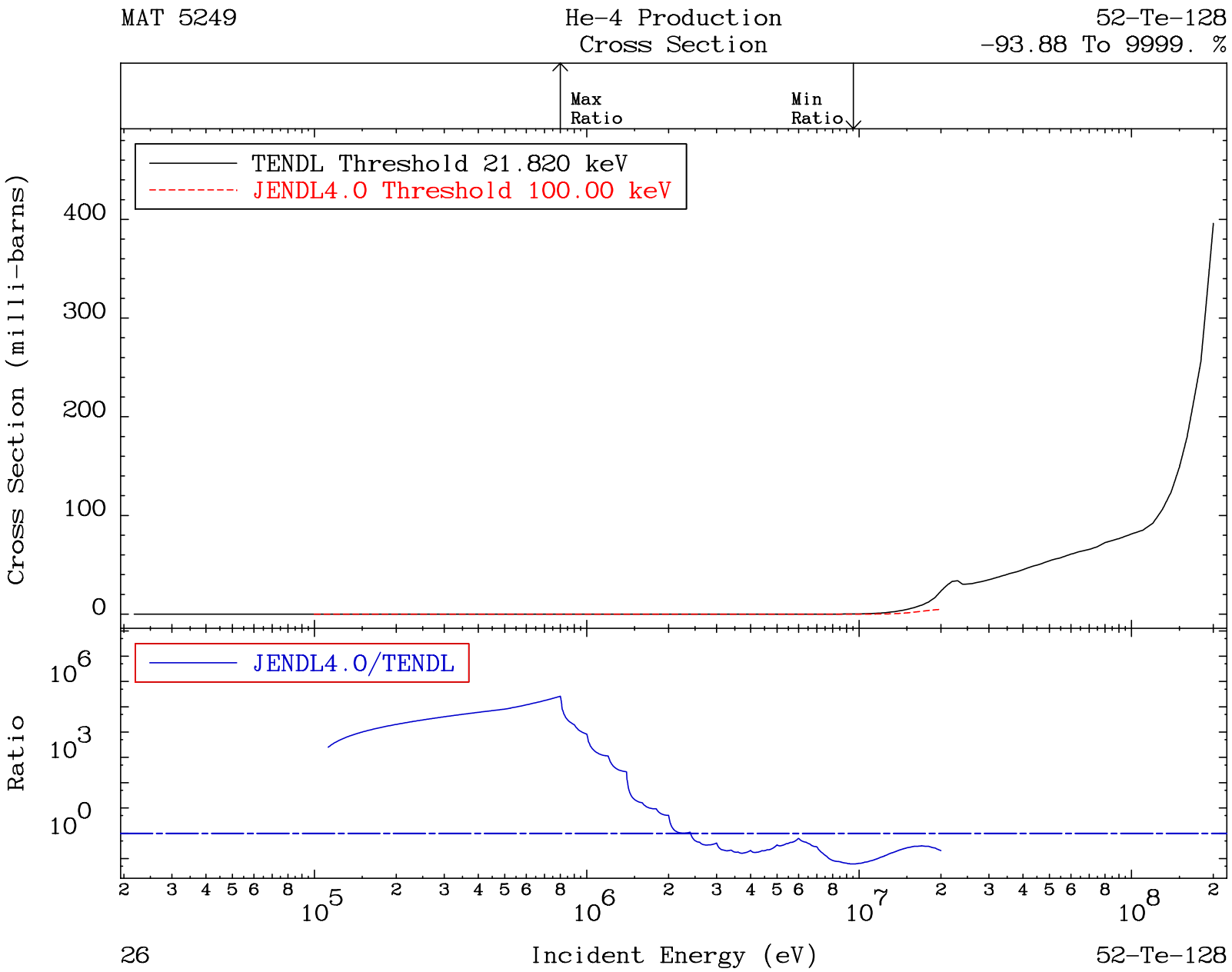

MAT 5249
(n,t)
Cross Section
52-Te-128
-100.0 To 527.4 %
Min Ratio
Max Ratio
TENDL Threshold 9.5537 MeV
JENDL4.0 Threshold 11.000 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JENDL4.0/TENDL
Ratio
10^2
10^0
10^-2
10^-4
10^7
2
3
4
5
6
7
8
9
10^8
2
21
Incident Energy (eV)
52-Te-128

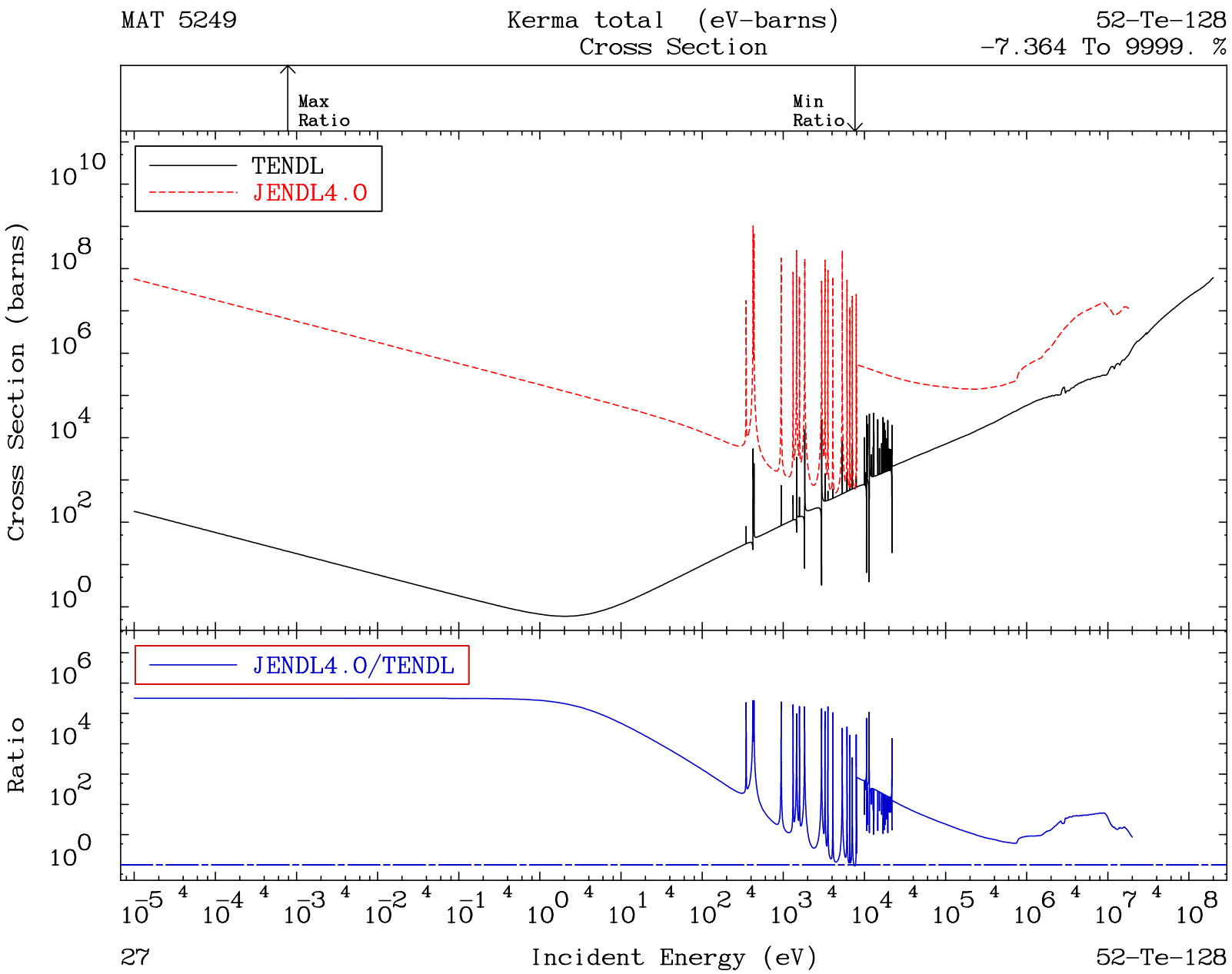

MAT 5249
(n,α)
Cross Section
52-Te-128
-93.88 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 21.820 keV
JENDL4.0 Threshold 100.00 keV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
16
JENDL4.0/TENDL
Ratio
10^6
10^3
10^0
2 3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
22
Incident Energy (eV)
52-Te-128

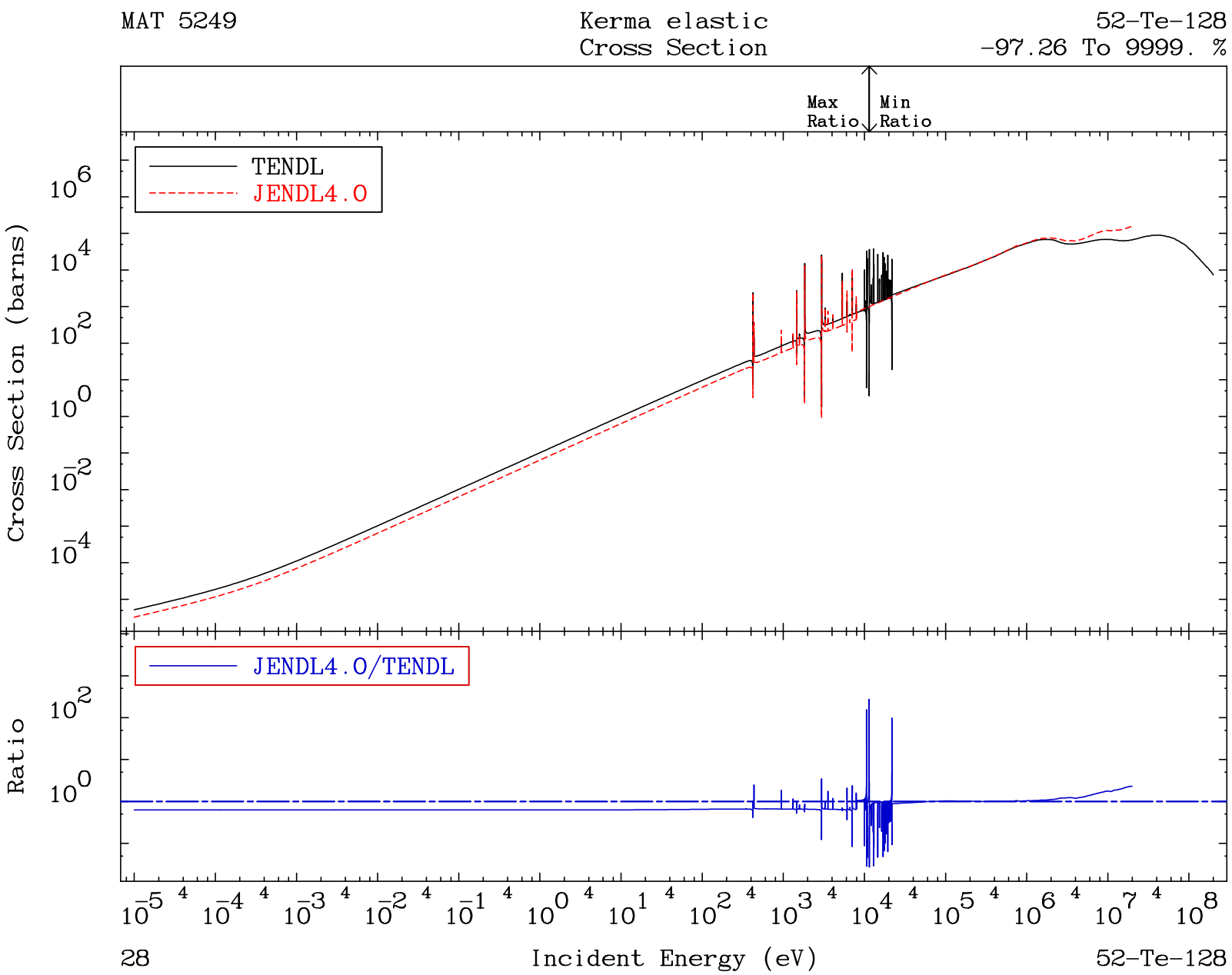

MAT 5249
Hydrogen Production
Cross Section
52-Te-128
-100.0 To -18.51%
Min Ratio
Max Ratio
TENDL Threshold 3.6093 MeV
JENDL4.0 Threshold 4.0000 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
52-Te-128

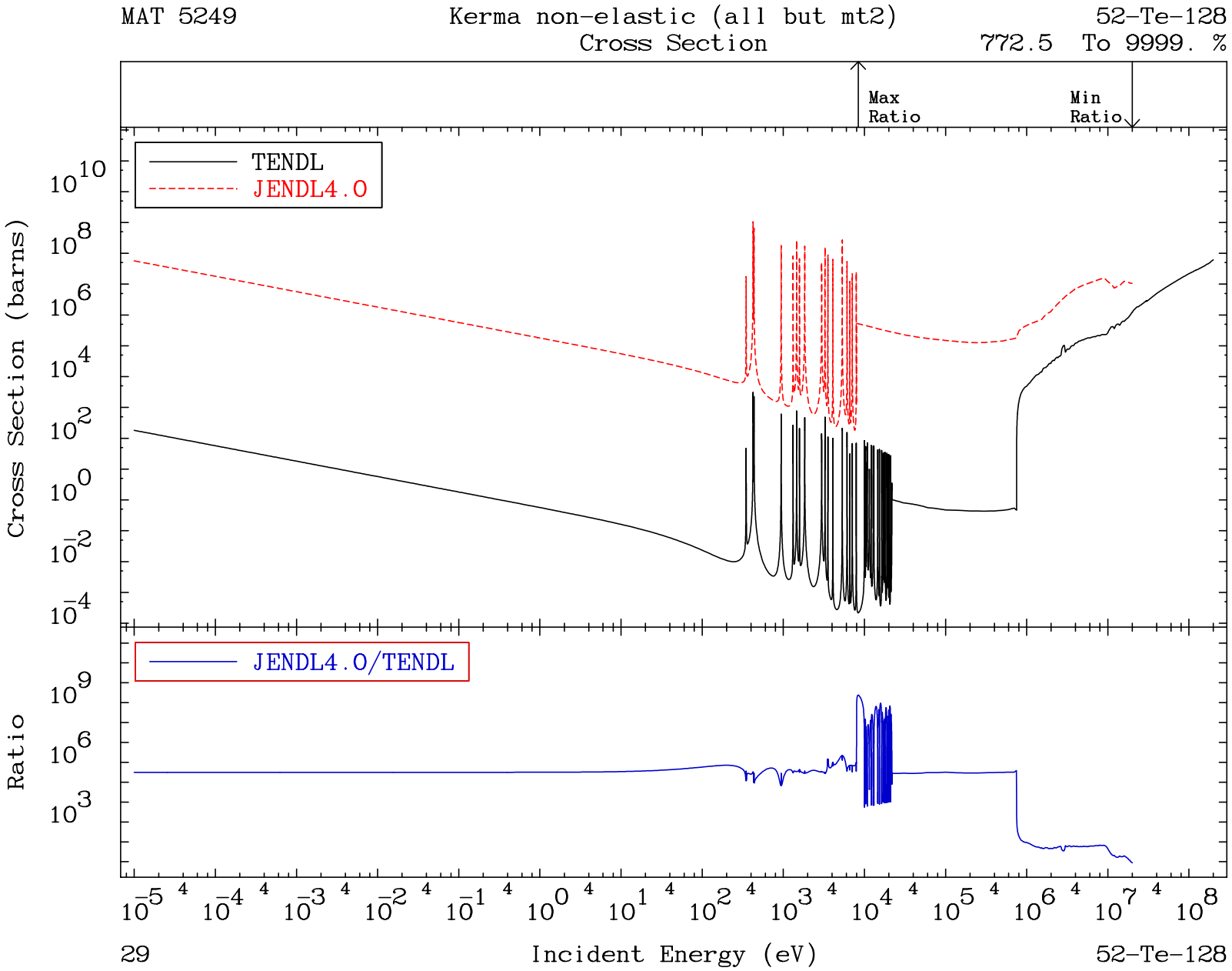

MAT 5249
Deuterium Production
Cross Section
52-Te-128
-100.0 To -1.122%
Min Ratio
Max Ratio
TENDL Threshold 7.4167 MeV
JENDL4.0 Threshold 9.5394 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JENDL4.0/TENDL
Ratio
10^0
10^-3
10^-6
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
52-Te-128

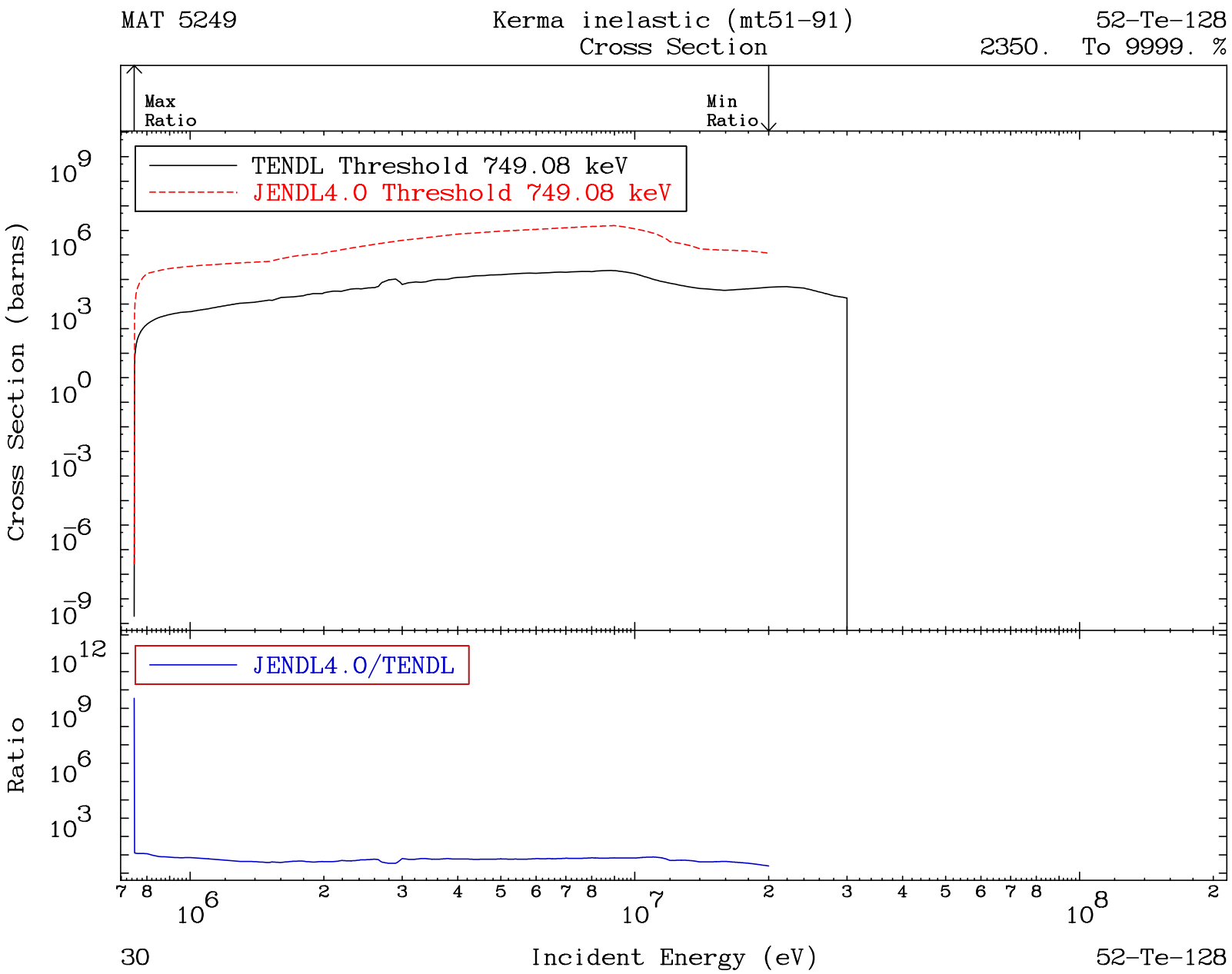

MAT 5249
Tritium Production
Cross Section
52-Te-128
-100.0 To 527.4 %
Min Ratio
Max Ratio
TENDL Threshold 9.5537 MeV
JENDL4.0 Threshold 11.000 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JENDL4.0/TENDL
Ratio
10^2
10^0
10^-2
10^-4
10^7
2
3
4
5
6
7
8
9
10^8
2
25
Incident Energy (eV)
52-Te-128

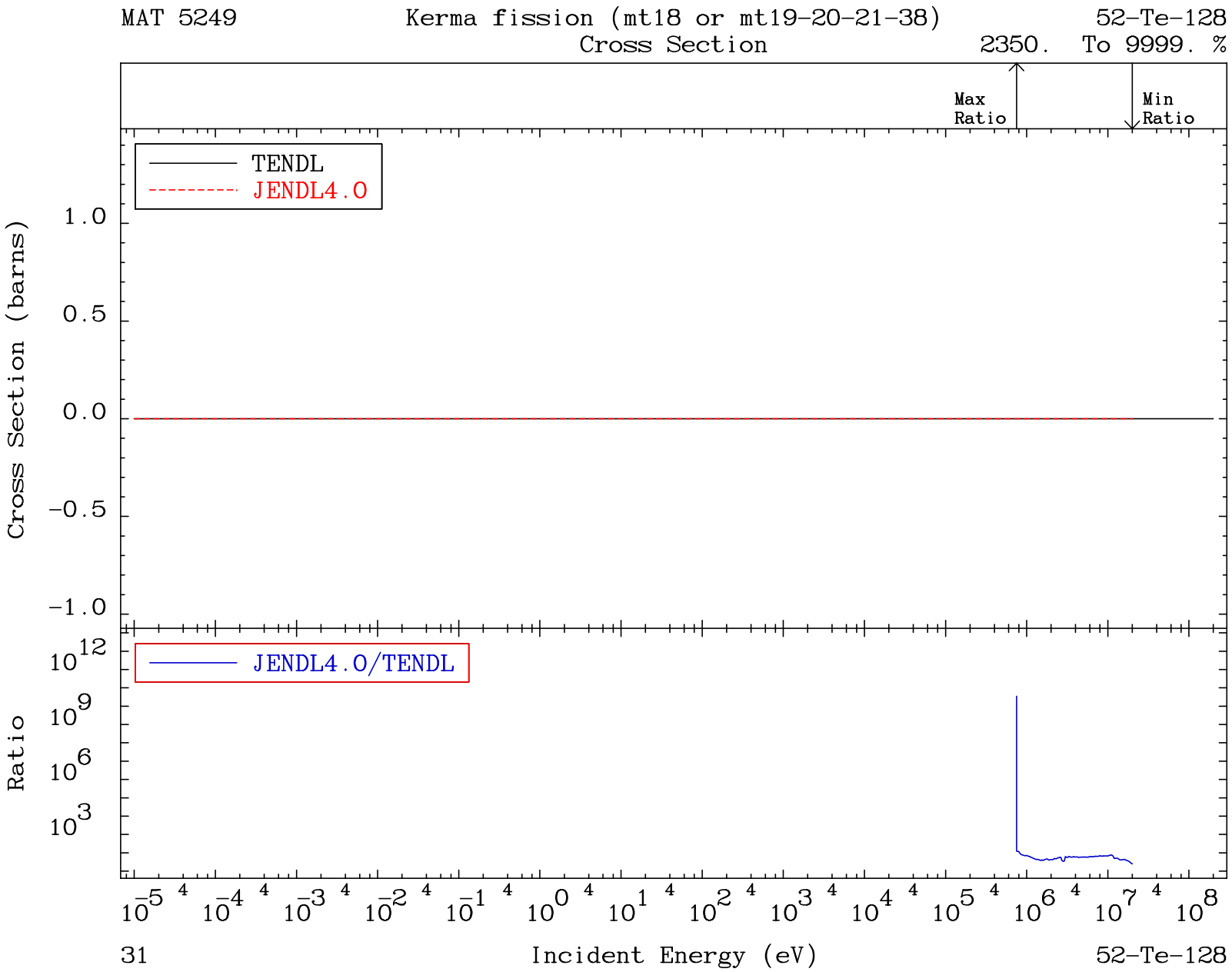

MAT 5249
He-4 Production
Cross Section
52-Te-128
-93.88 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 21.820 keV
JENDL4.0 Threshold 100.00 keV
Cross Section (milli-barns)
400
300
200
100
0
JENDL4.0/TENDL
Ratio
10^6
10^3
10^0
2 3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
26
Incident Energy (eV)
52-Te-128

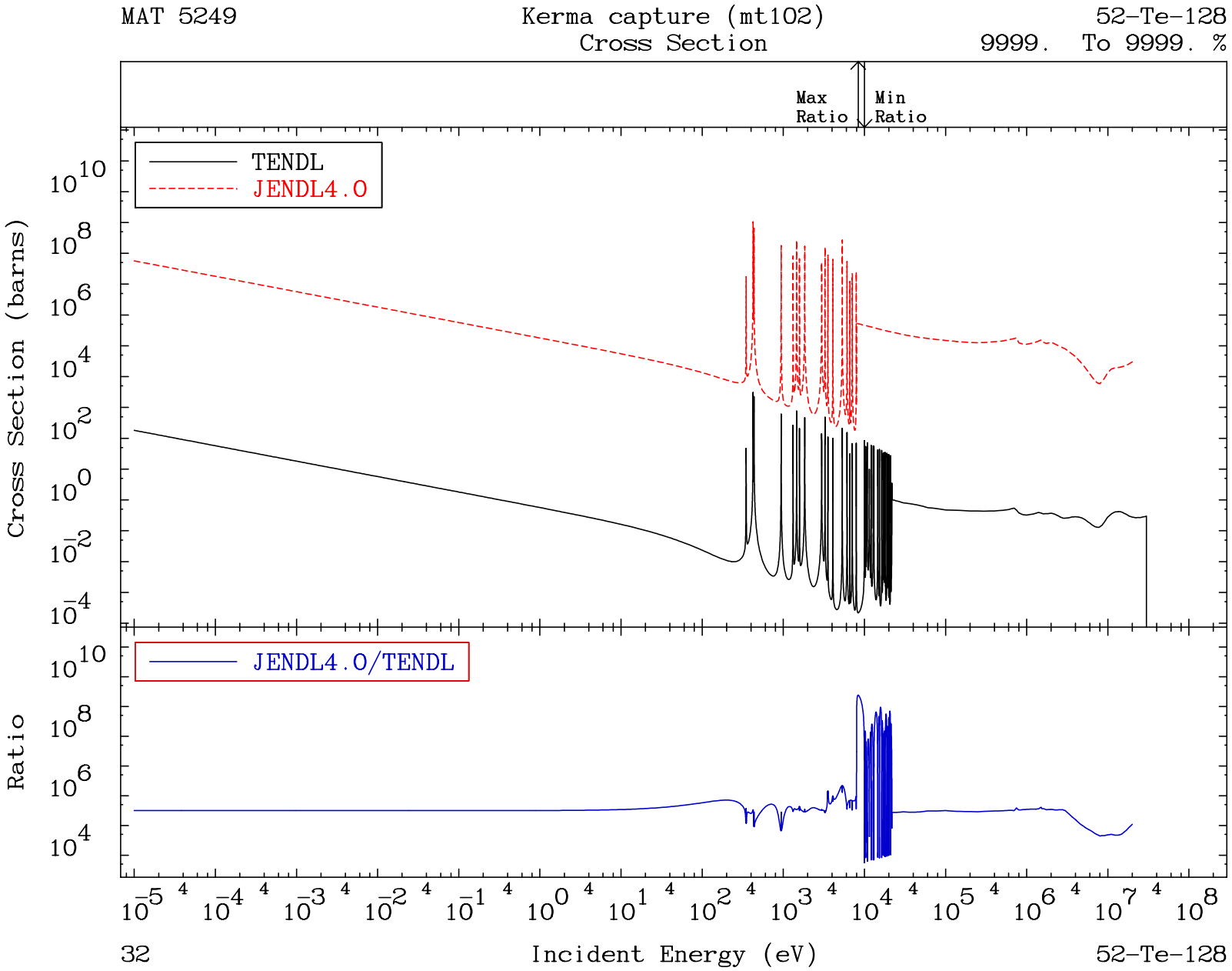

MAT 5249
Kerma total (eV-barns)
Cross Section
52-Te-128
-7.364 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
27
52-Te-128

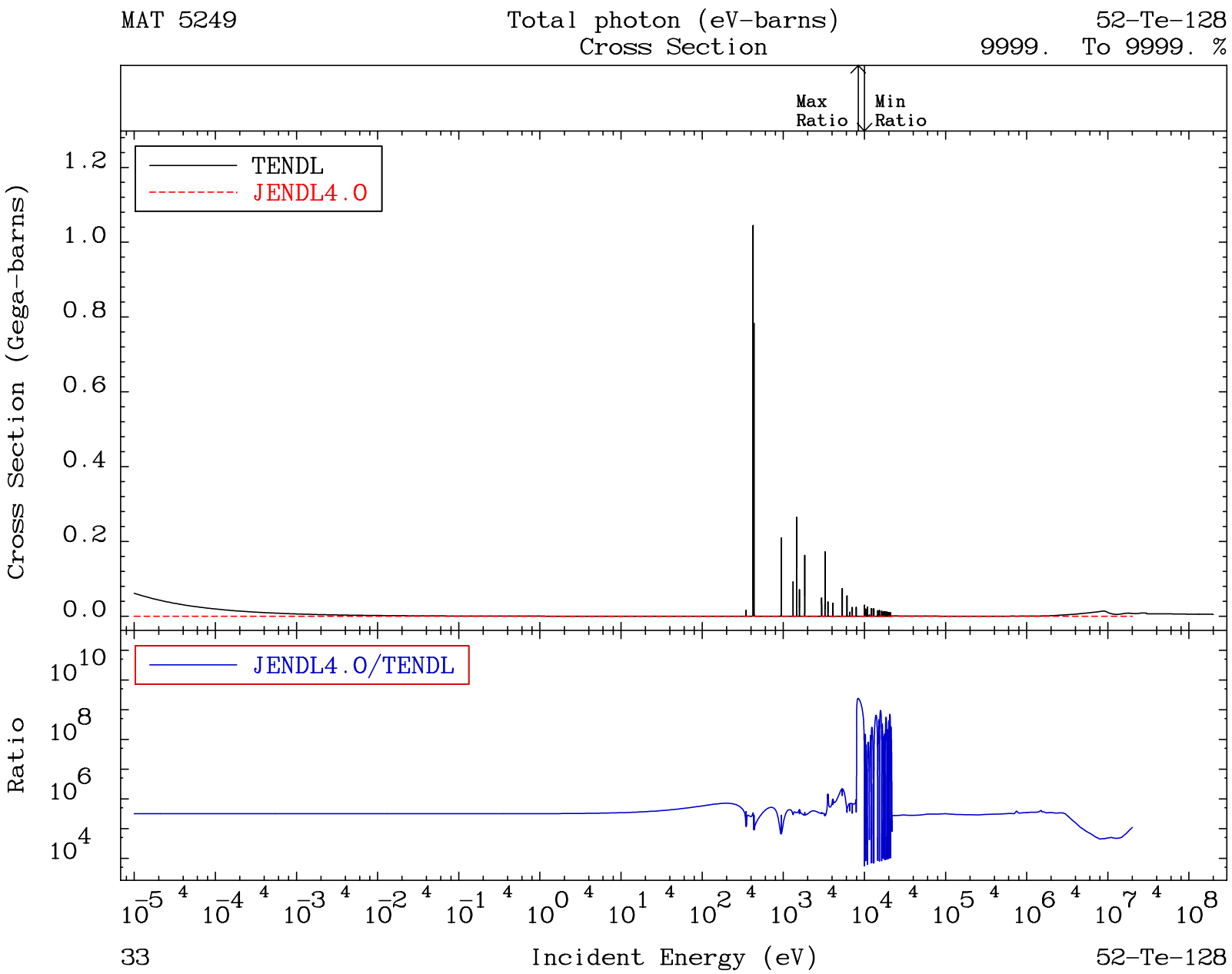

MAT 5249
Kerma elastic
Cross Section
52-Te-128
-97.26 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
28
52-Te-128

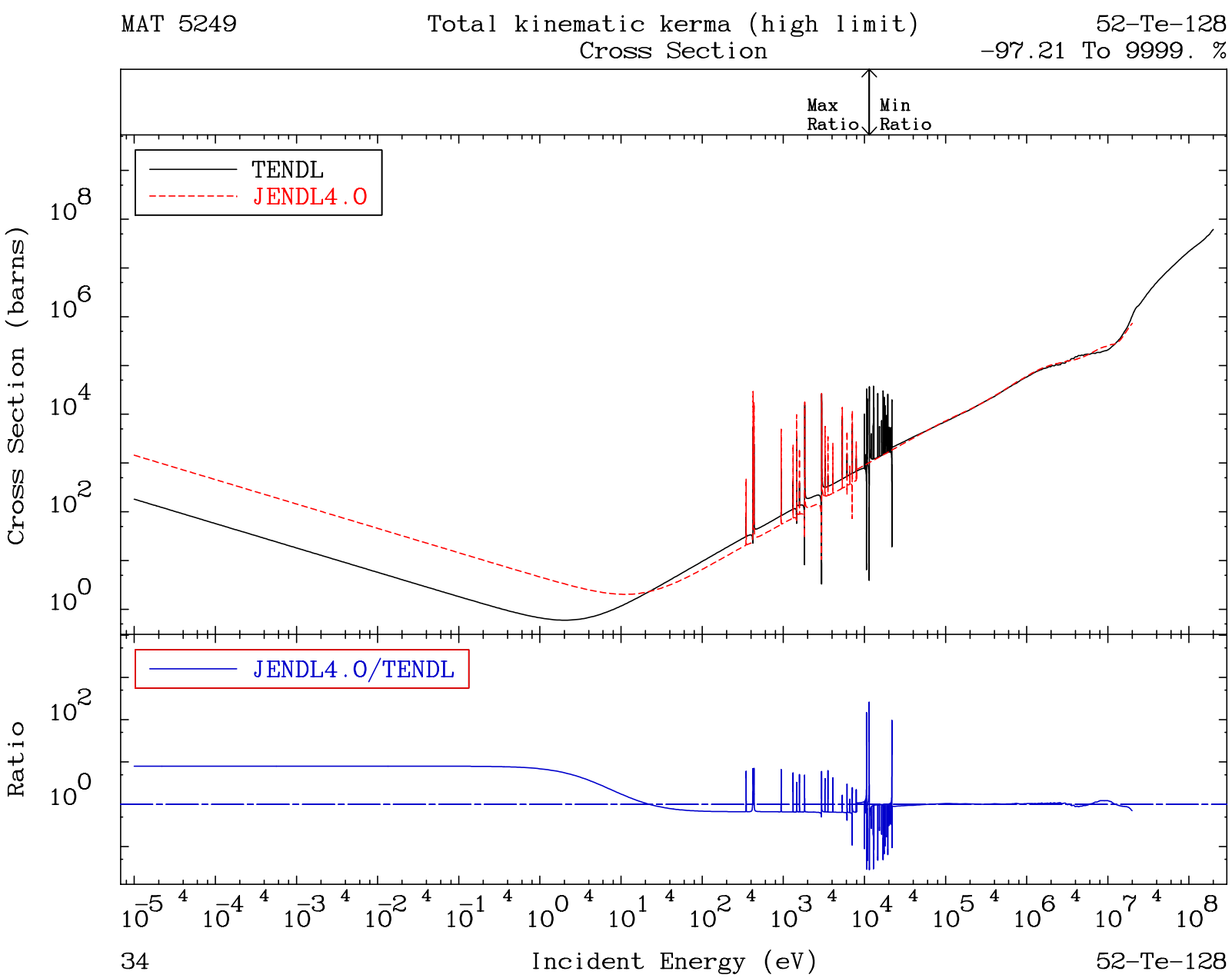

MAT 5249
Kerma non-elastic (all but mt2)
Cross Section
52-Te-128
772.5 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
29
52-Te-128

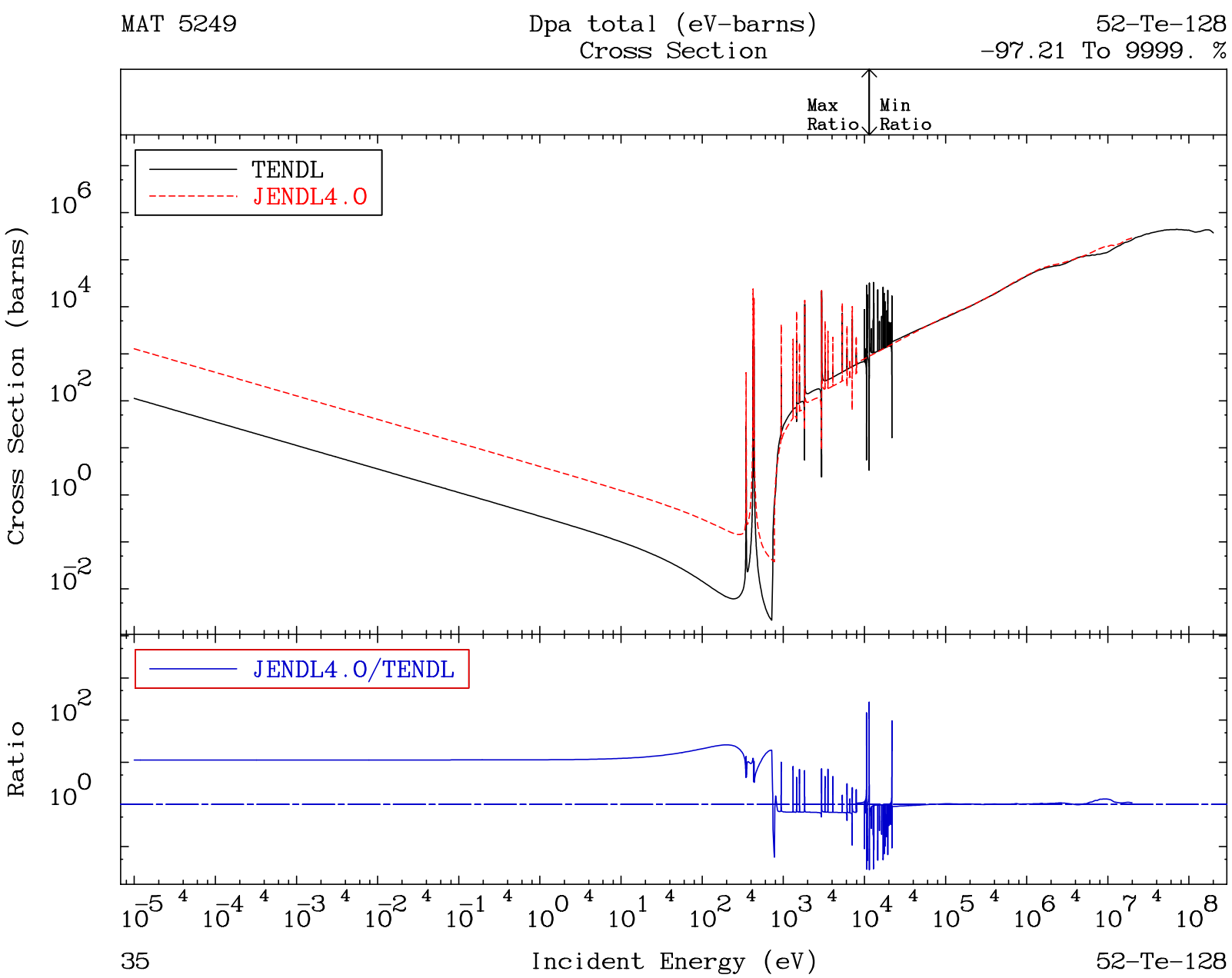

MAT 5249
Kerma inelastic (mt51-91)
Cross Section
52-Te-128
2350. To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 749.08 keV
JENDL4.0 Threshold 749.08 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
30
52-Te-128

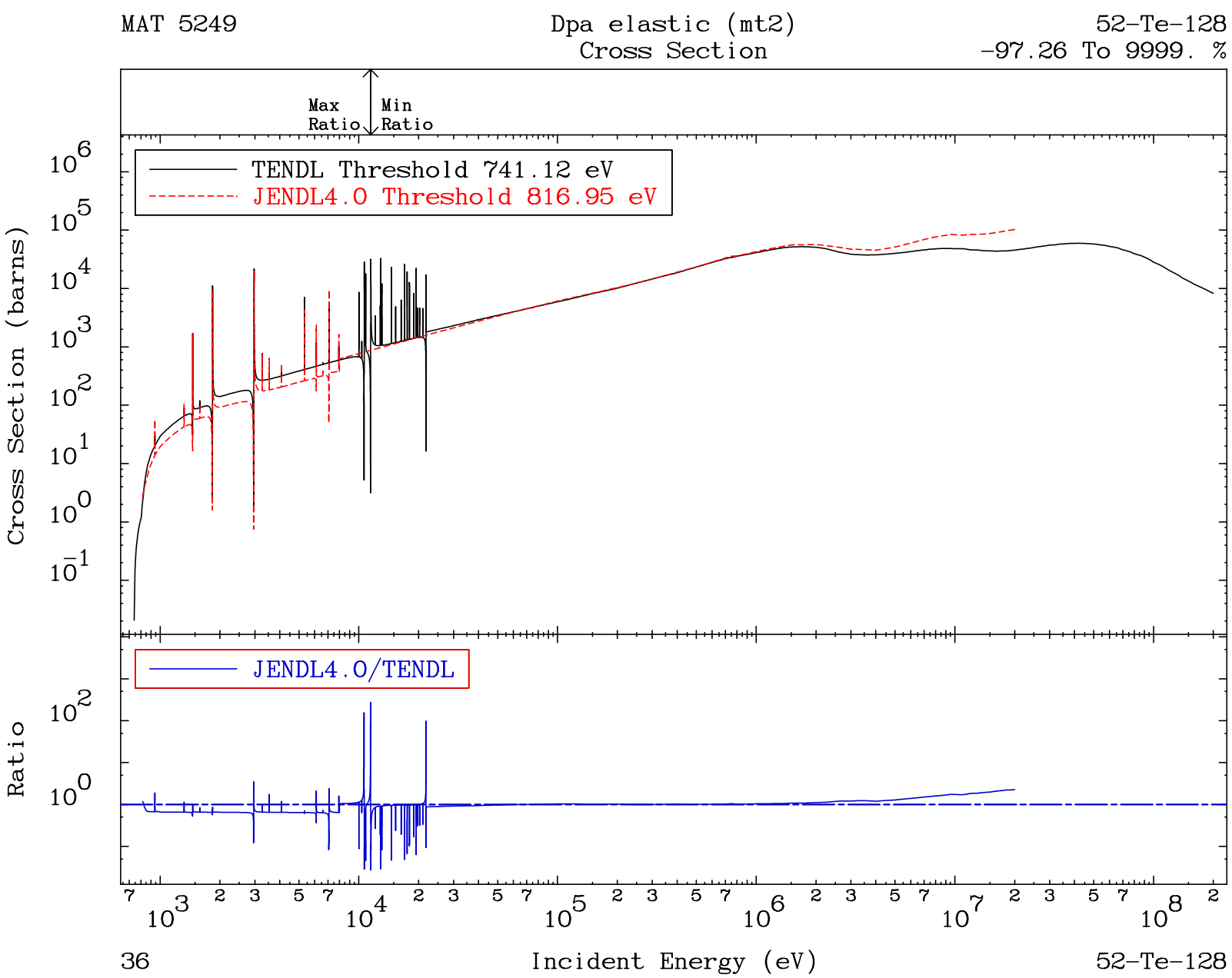

MAT 5249
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
52-Te-128
2350. To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JENDL4.0/TENDL
Ratio
10^12
10^9
10^6
10^3
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
31
Incident Energy (eV)
52-Te-128

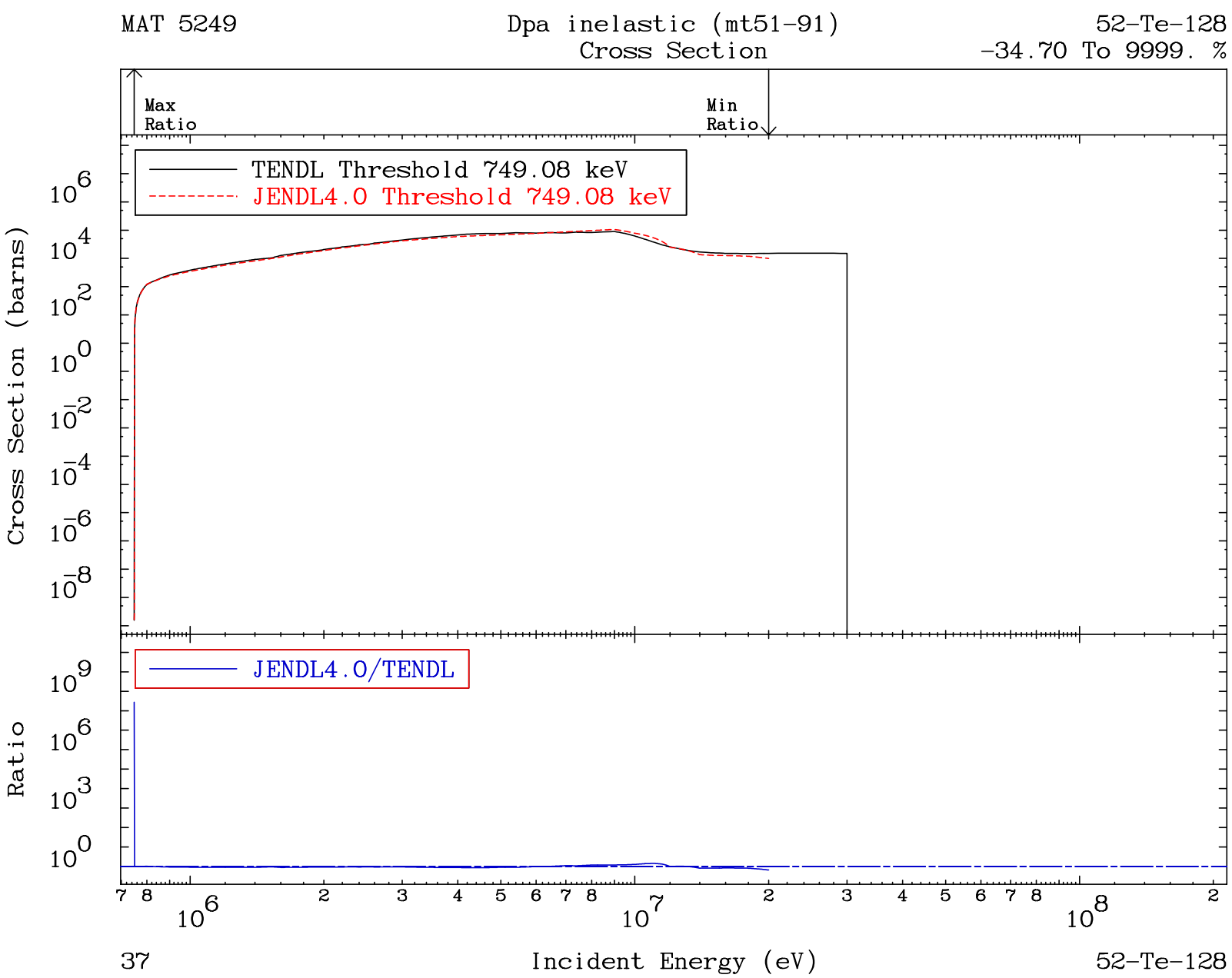

MAT 5249
Kerma capture (mt102)
Cross Section
52-Te-128
9999. To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
32
52-Te-128

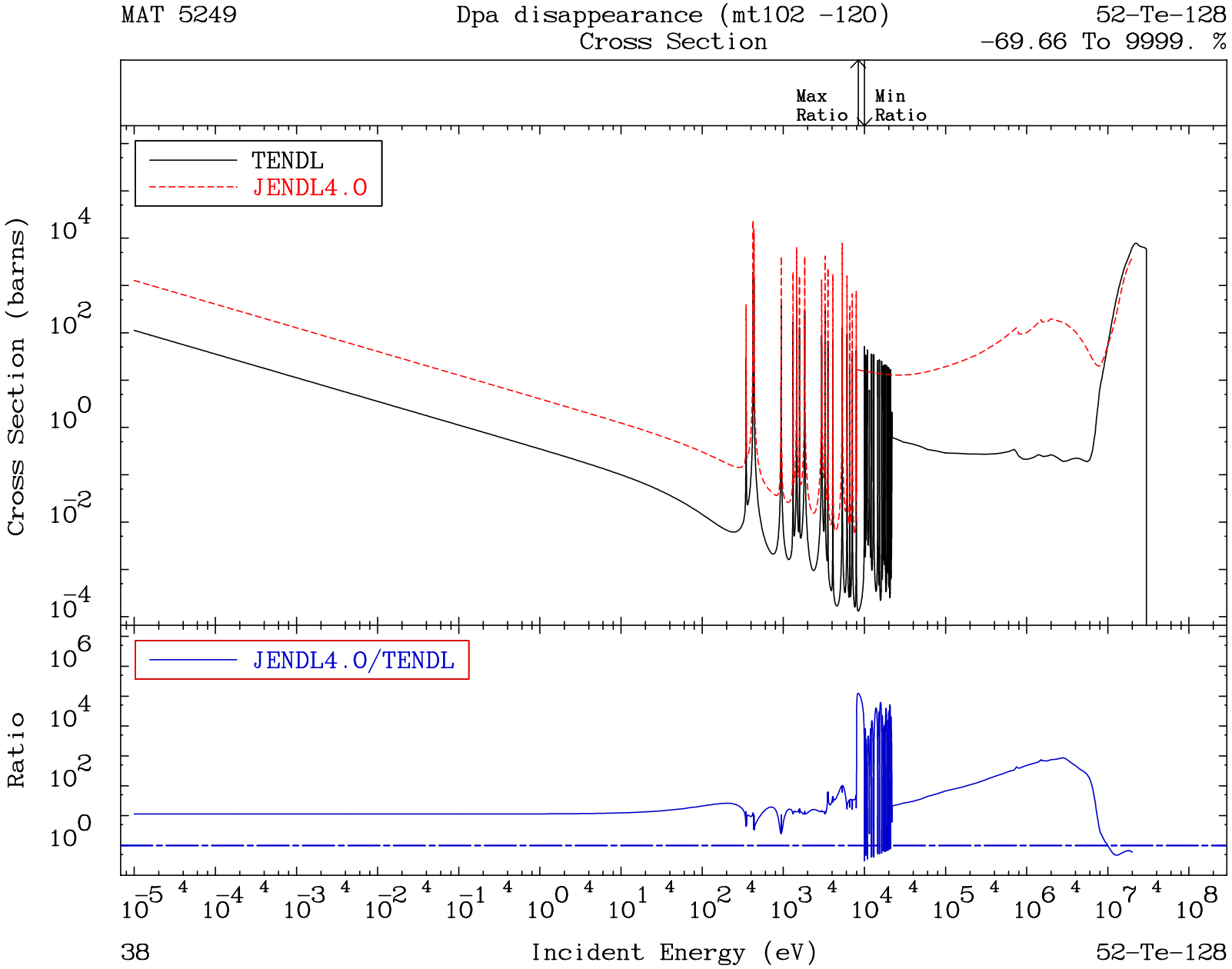

MAT 5249
Total photon (eV-barns)
Cross Section
52-Te-128
9999. To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (Giga-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL4.0/TENDL
Ratio
10^{10}
10^{8}
10^{6}
10^{4}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
33
Incident Energy (eV)
52-Te-128

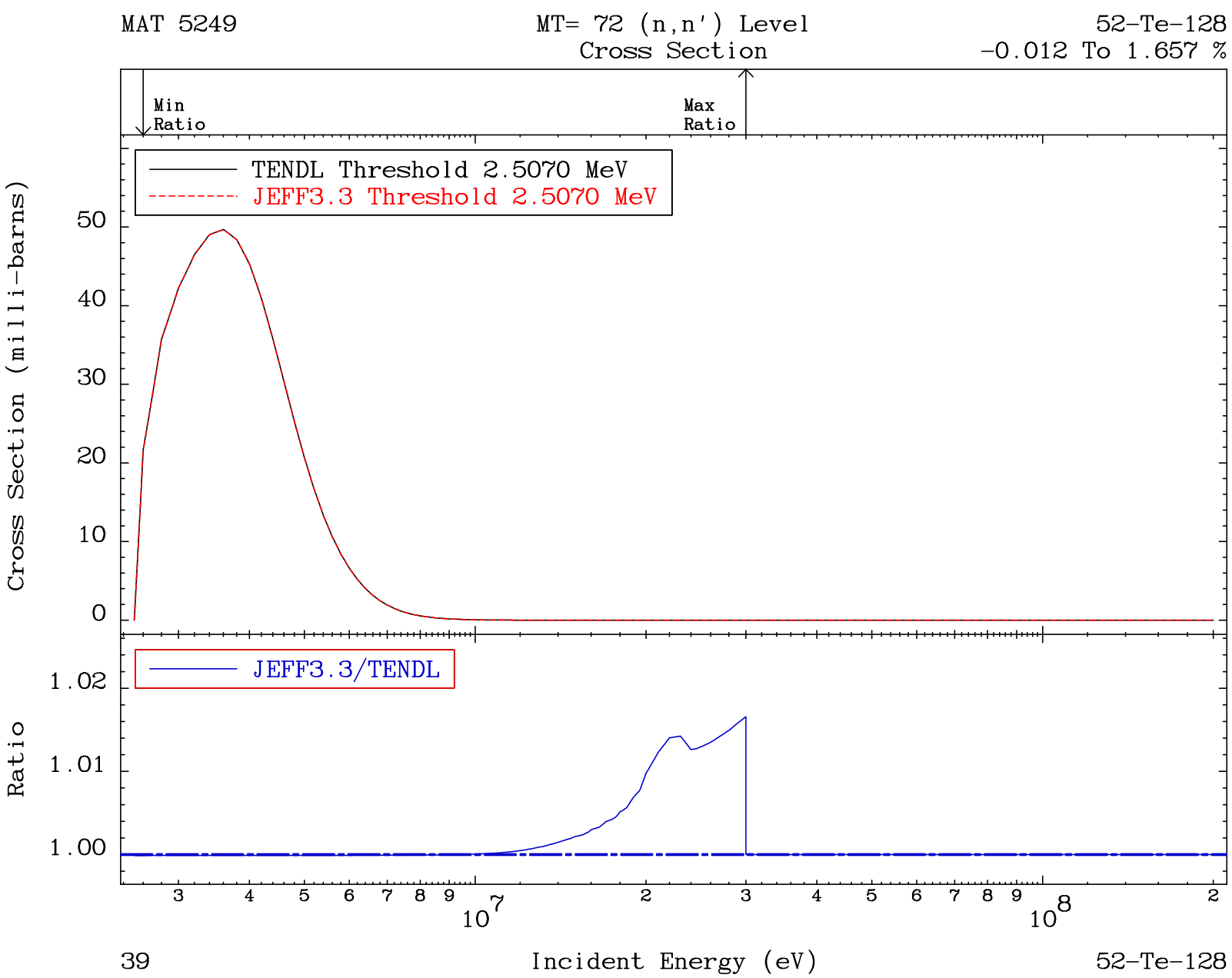

MAT 5249
Total kinematic kerma (high limit)
Cross Section
52-Te-128
-97.21 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
34
52-Te-128

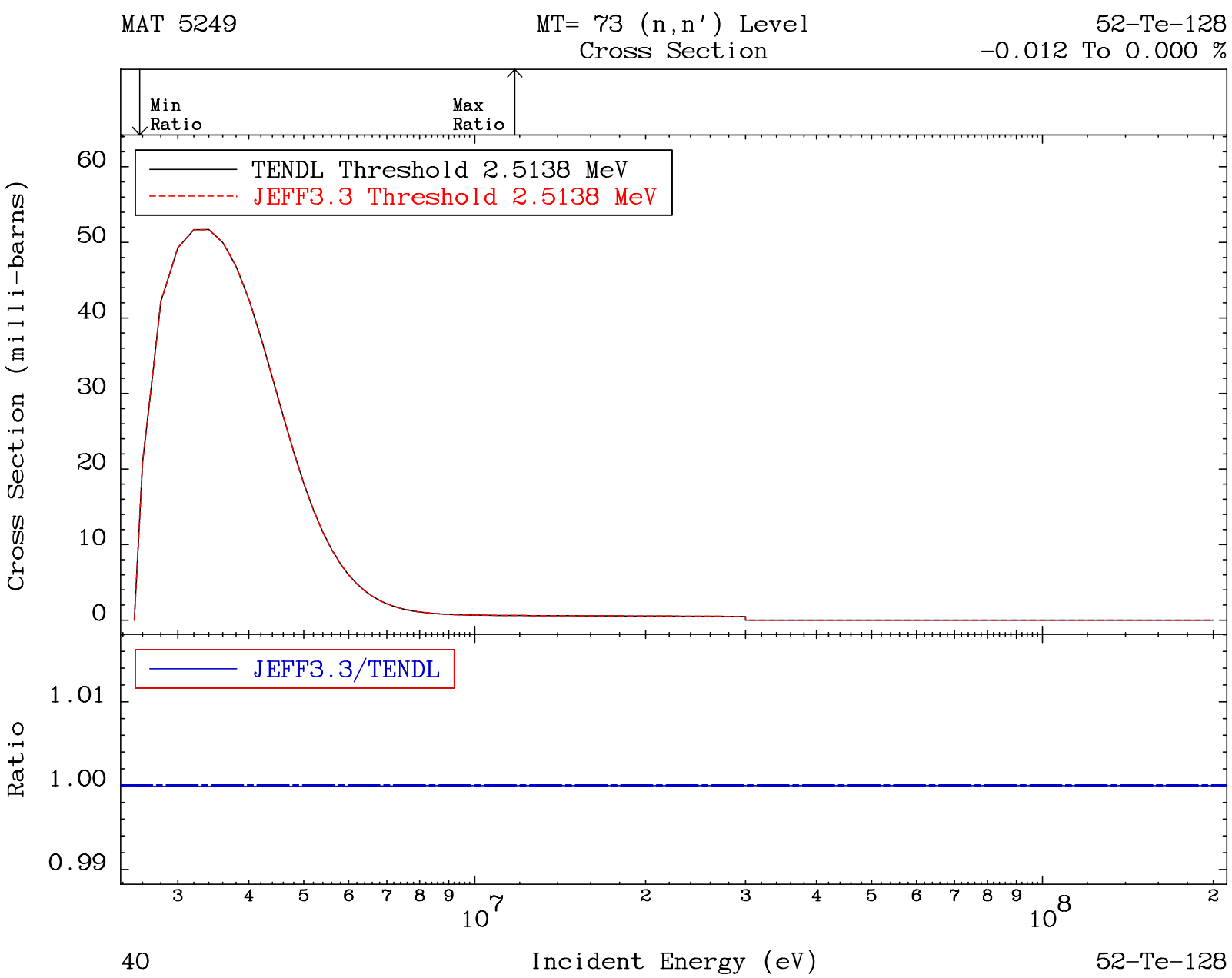

MAT 5249
Dpa total (eV-barns)
Cross Section
52-Te-128
-97.21 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
35
52-Te-128

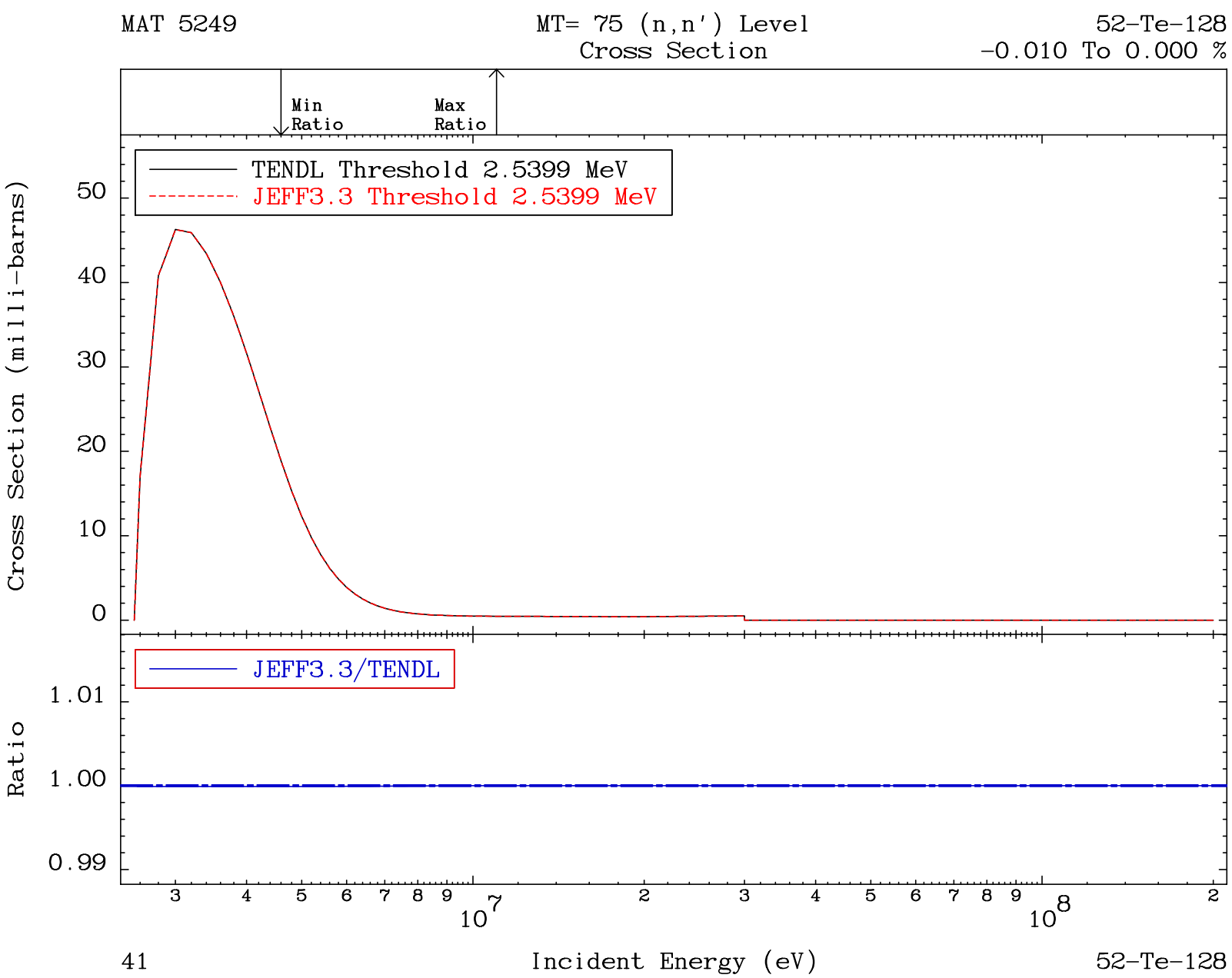

MAT 5249
Dpa elastic (mt2)
Cross Section
52-Te-128
-97.26 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 741.12 eV
JENDL4.0 Threshold 816.95 eV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
36
52-Te-128

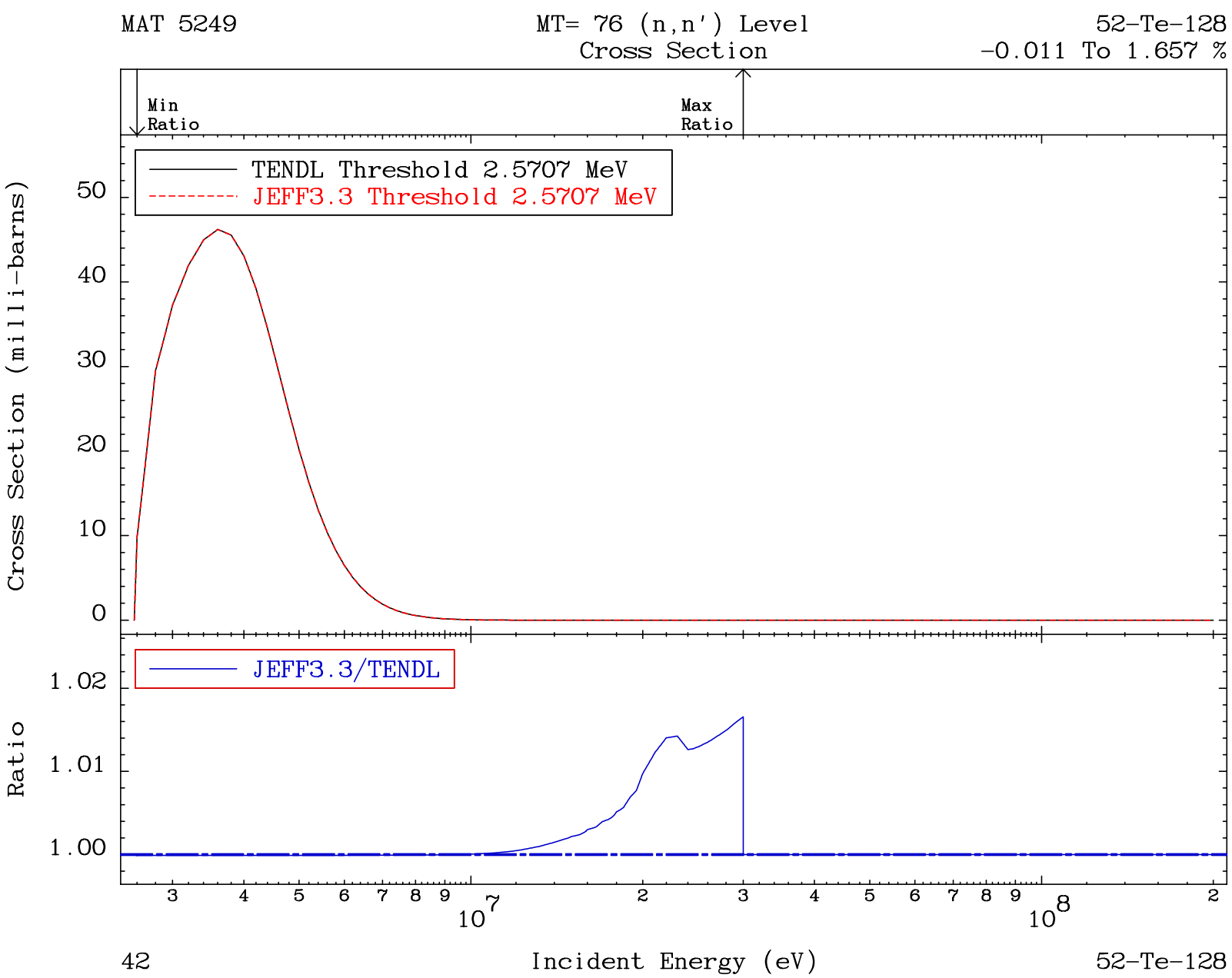

MAT 5249
Dpa inelastic (mt51-91)
Cross Section
52-Te-128
-34.70 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 749.08 keV
JENDL4.0 Threshold 749.08 keV
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
37
52-Te-128

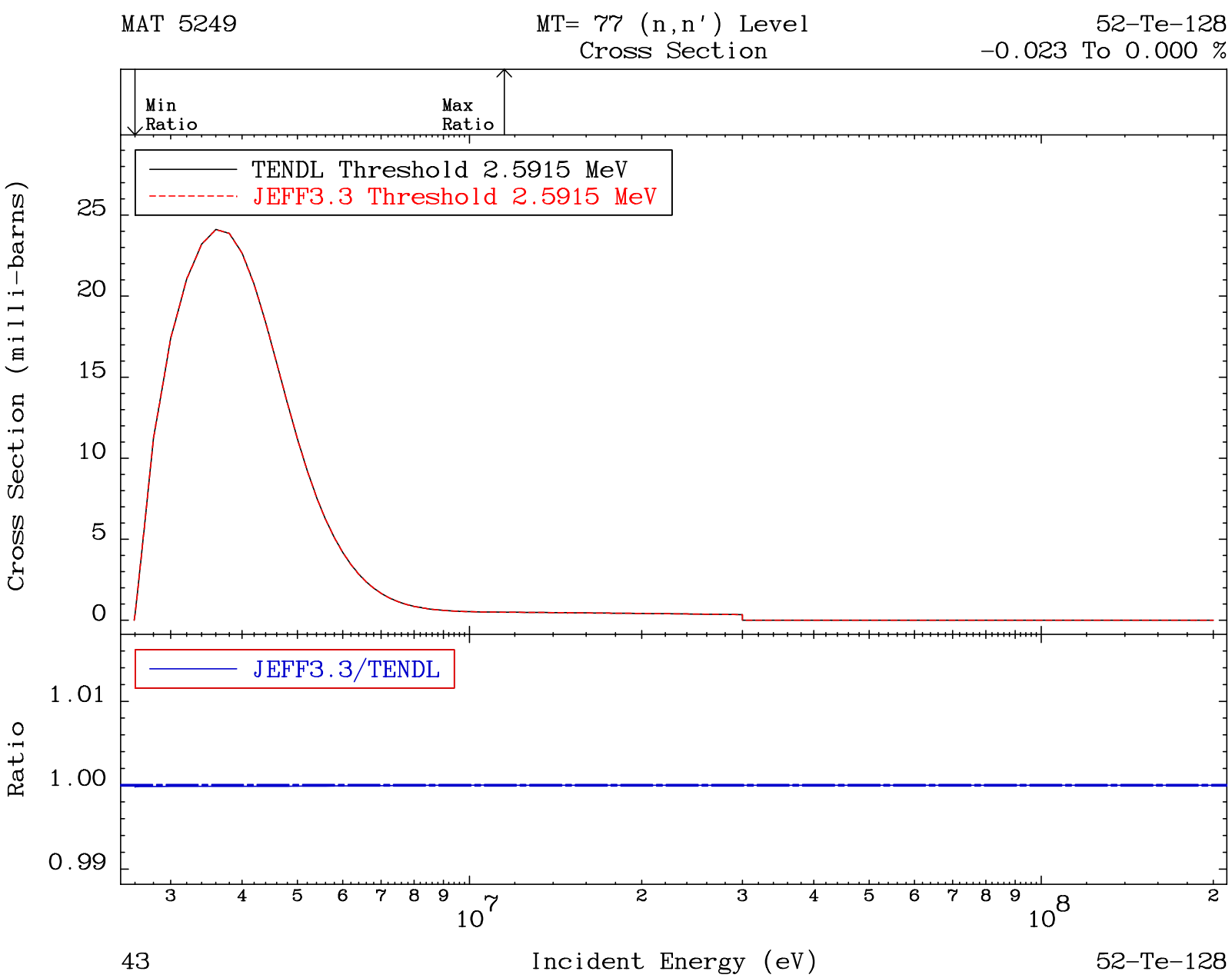

MAT 5249
Dpa disappearance (mt102 -120)
Cross Section
52-Te-128
-69.66 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL4.0
Cross Section (barns)
JENDL4.0/TENDL
Ratio
Incident Energy (eV)
38
52-Te-128

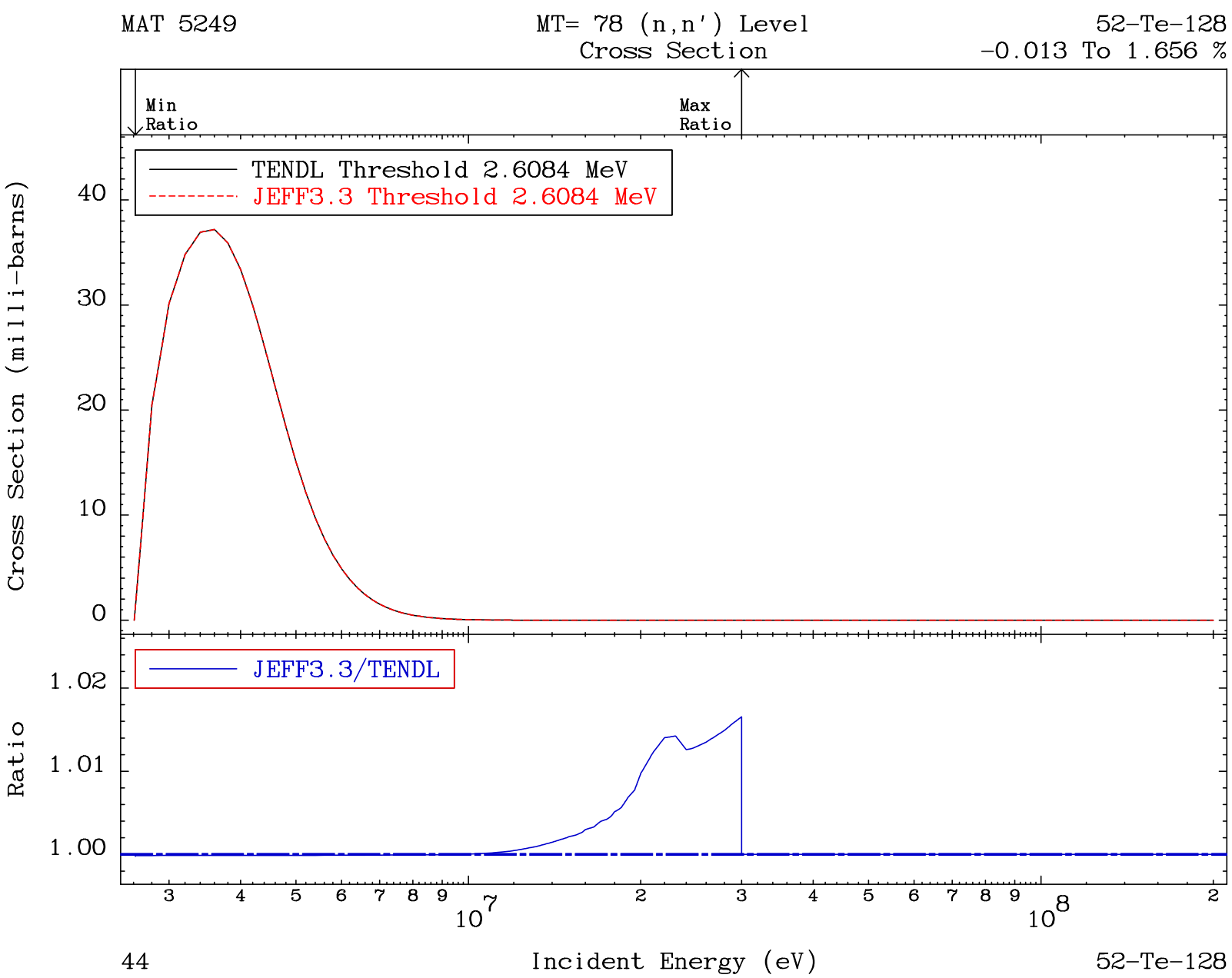

MAT 5249
MT= 72 (n,n') Level
Cross Section
52-Te-128
-0.012 To 1.657 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.5070 MeV
JEFF3.3 Threshold 2.5070 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
39
Incident Energy (eV)
52-Te-128

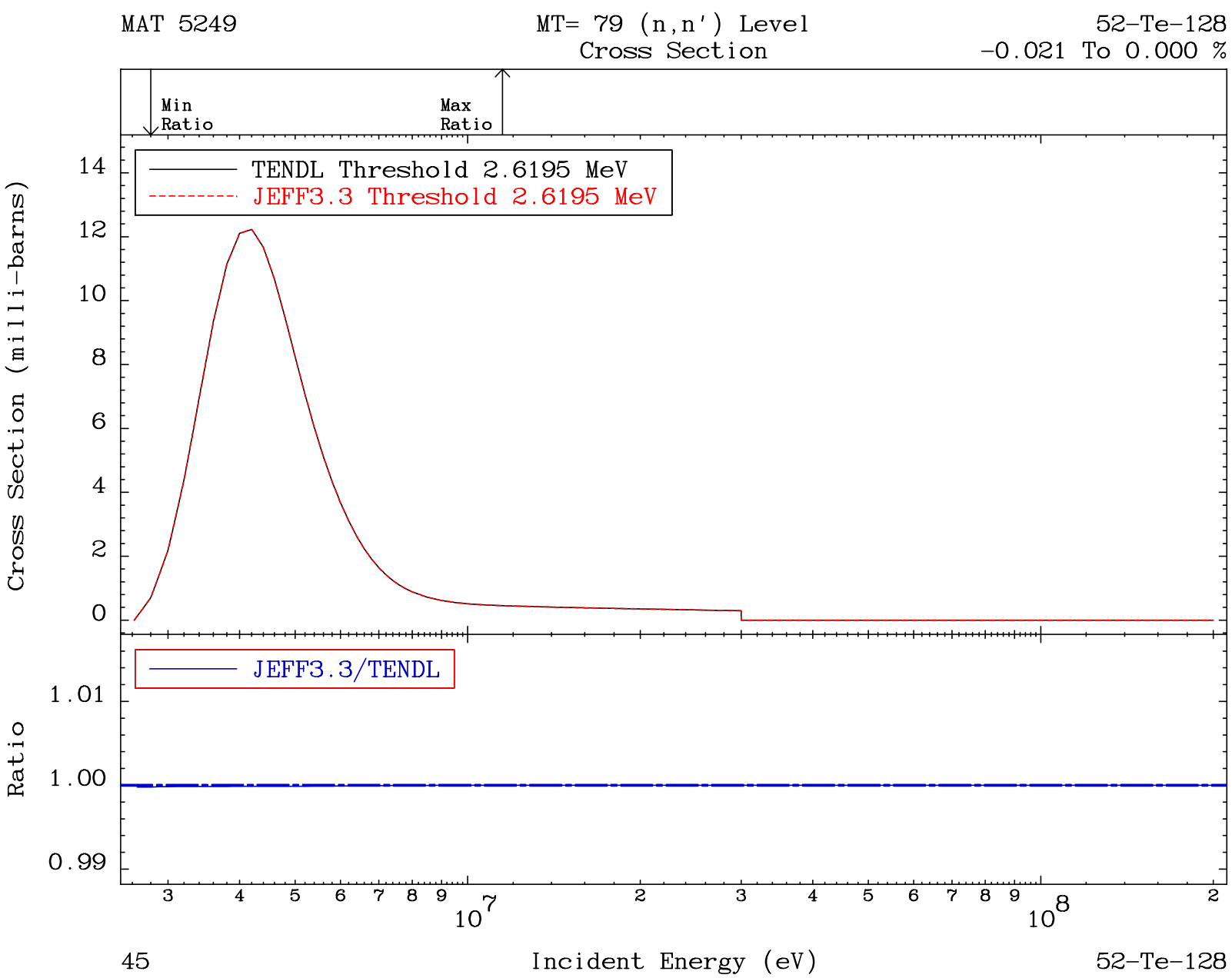

MAT 5249
MT= 73 (n,n') Level
Cross Section
52-Te-128
-0.012 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.5138 MeV
JEFF3.3 Threshold 2.5138 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
40
Incident Energy (eV)
52-Te-128

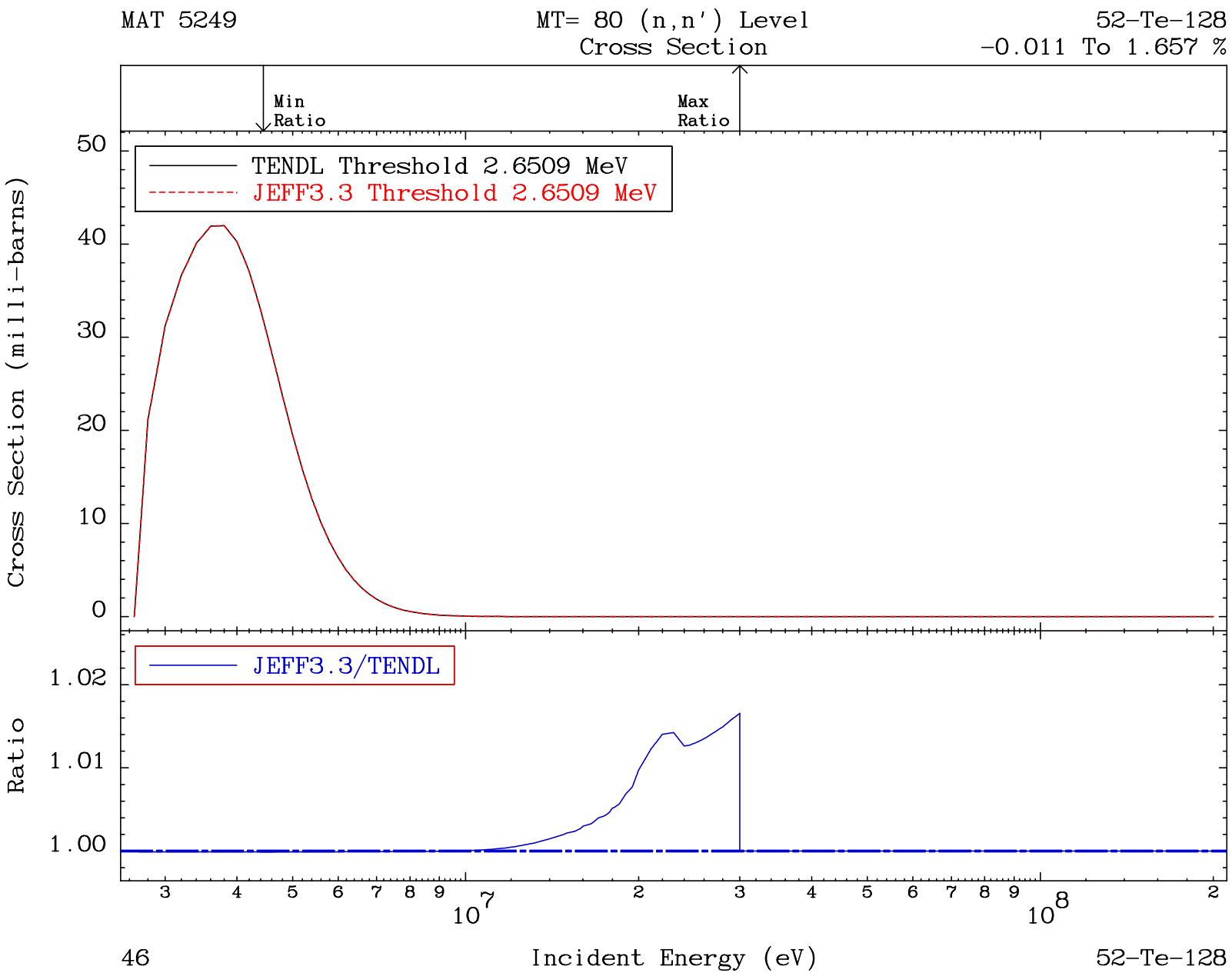

MAT 5249
MT= 75 (n,n') Level
Cross Section
52-Te-128
-0.010 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.5399 MeV
JEFF3.3 Threshold 2.5399 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
41
Incident Energy (eV)
52-Te-128

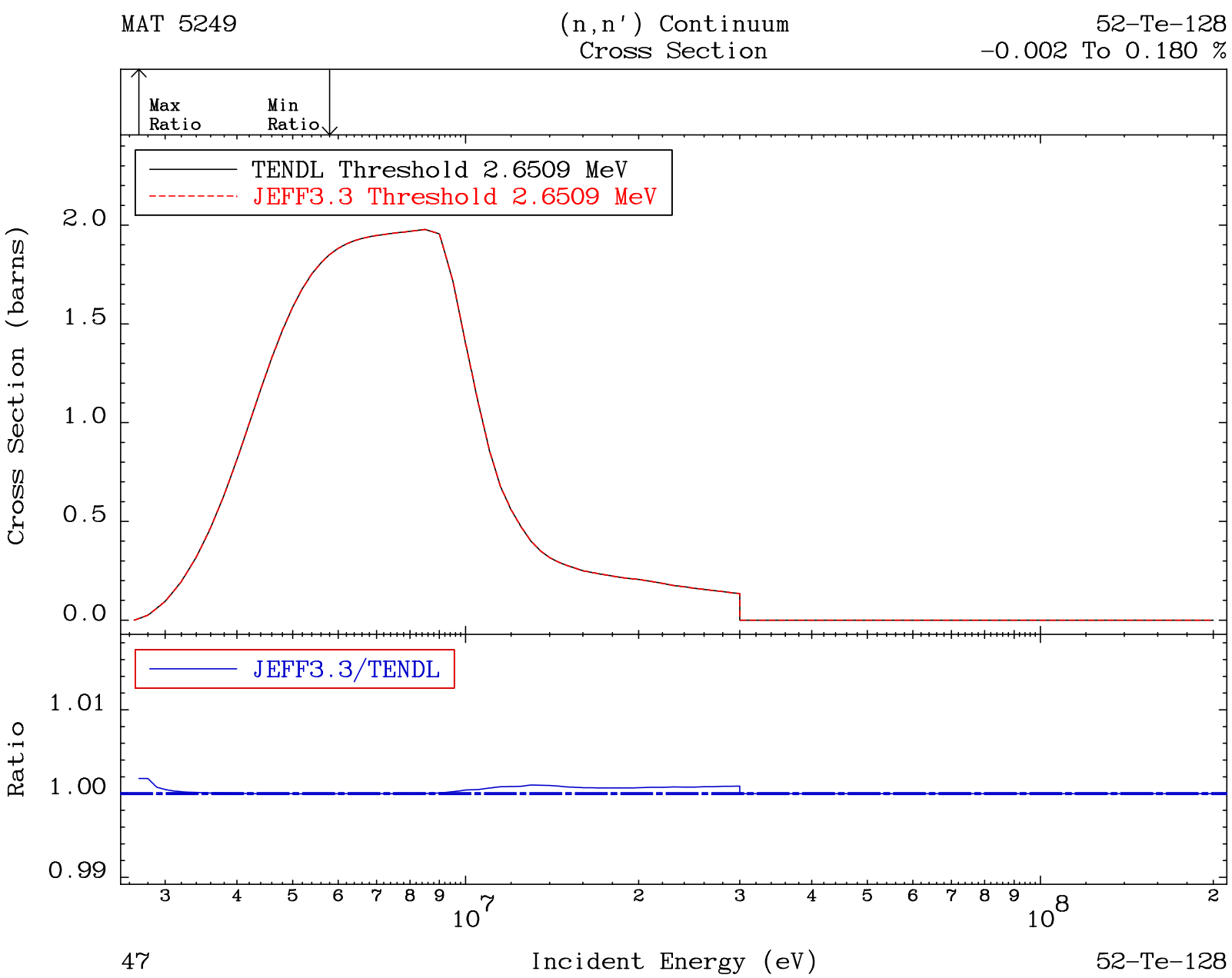

MAT 5249
MT= 76 (n,n') Level
Cross Section
52-Te-128
-0.011 To 1.657 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.5707 MeV
JEFF3.3 Threshold 2.5707 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
52-Te-128

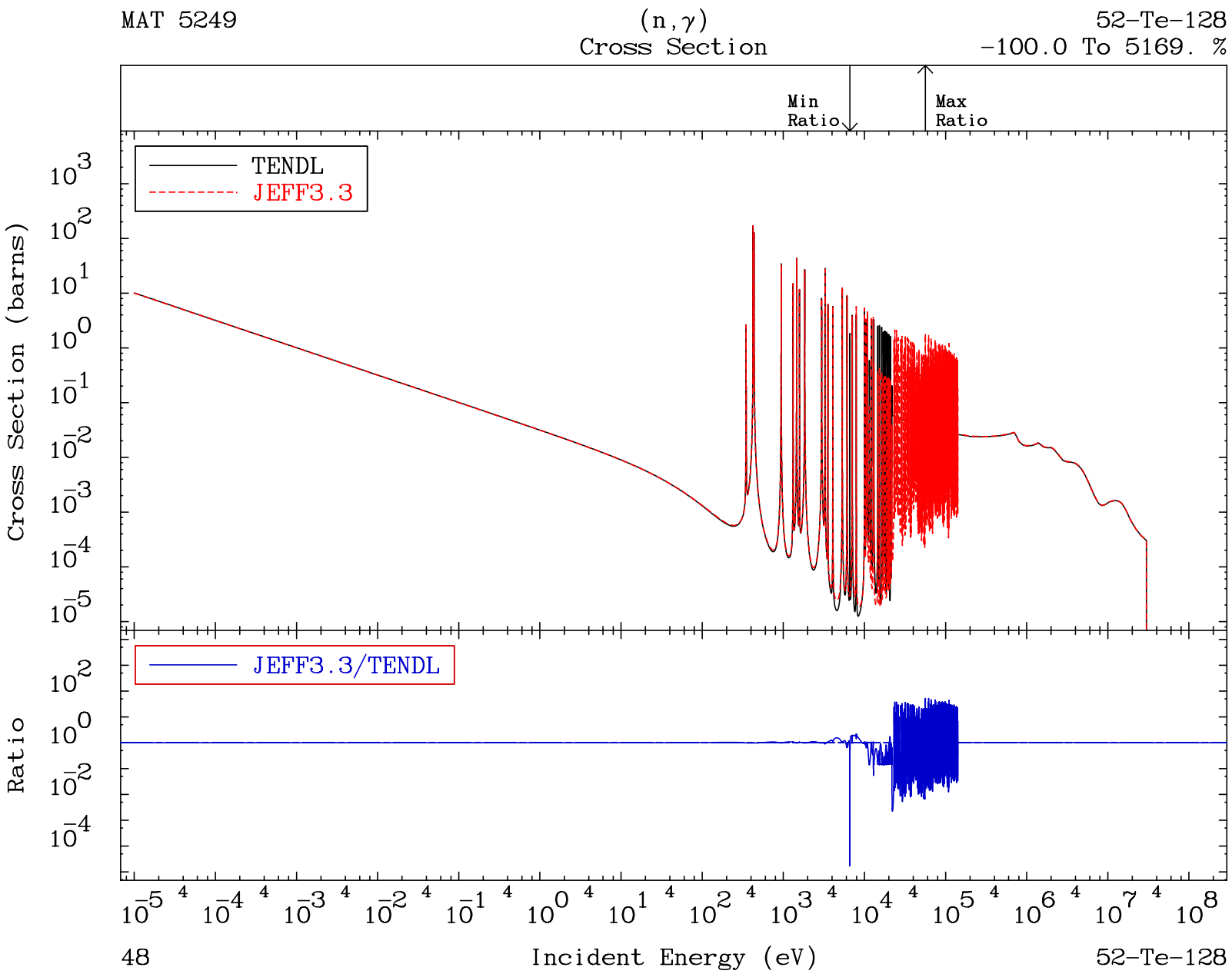

MAT 5249
MT= 77 (n,n') Level
Cross Section
52-Te-128
-0.023 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.5915 MeV
JEFF3.3 Threshold 2.5915 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
43
Incident Energy (eV)
52-Te-128

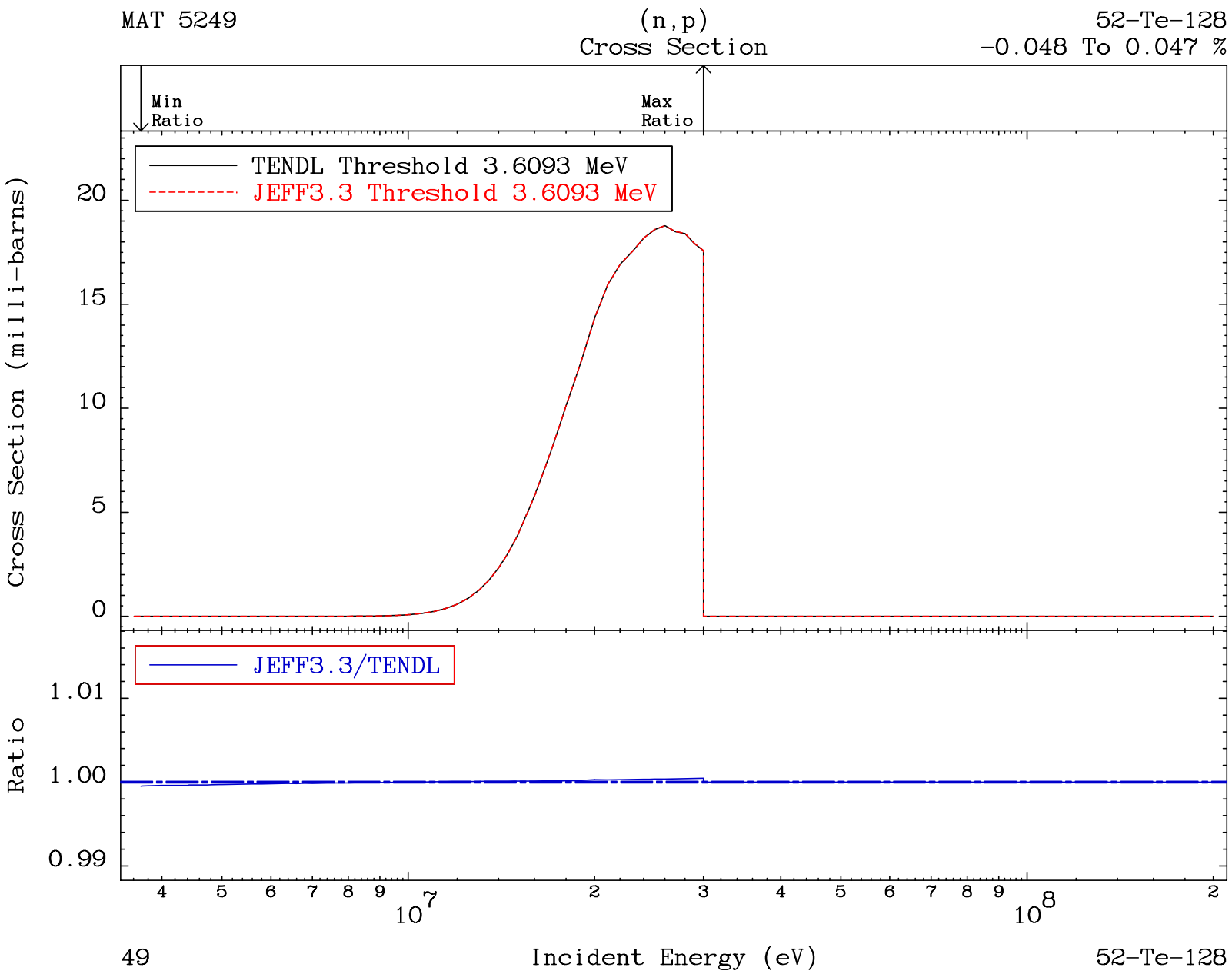

MAT 5249
MT= 78 (n,n') Level
Cross Section
52-Te-128
-0.013 To 1.656 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.6084 MeV
JEFF3.3 Threshold 2.6084 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
52-Te-128

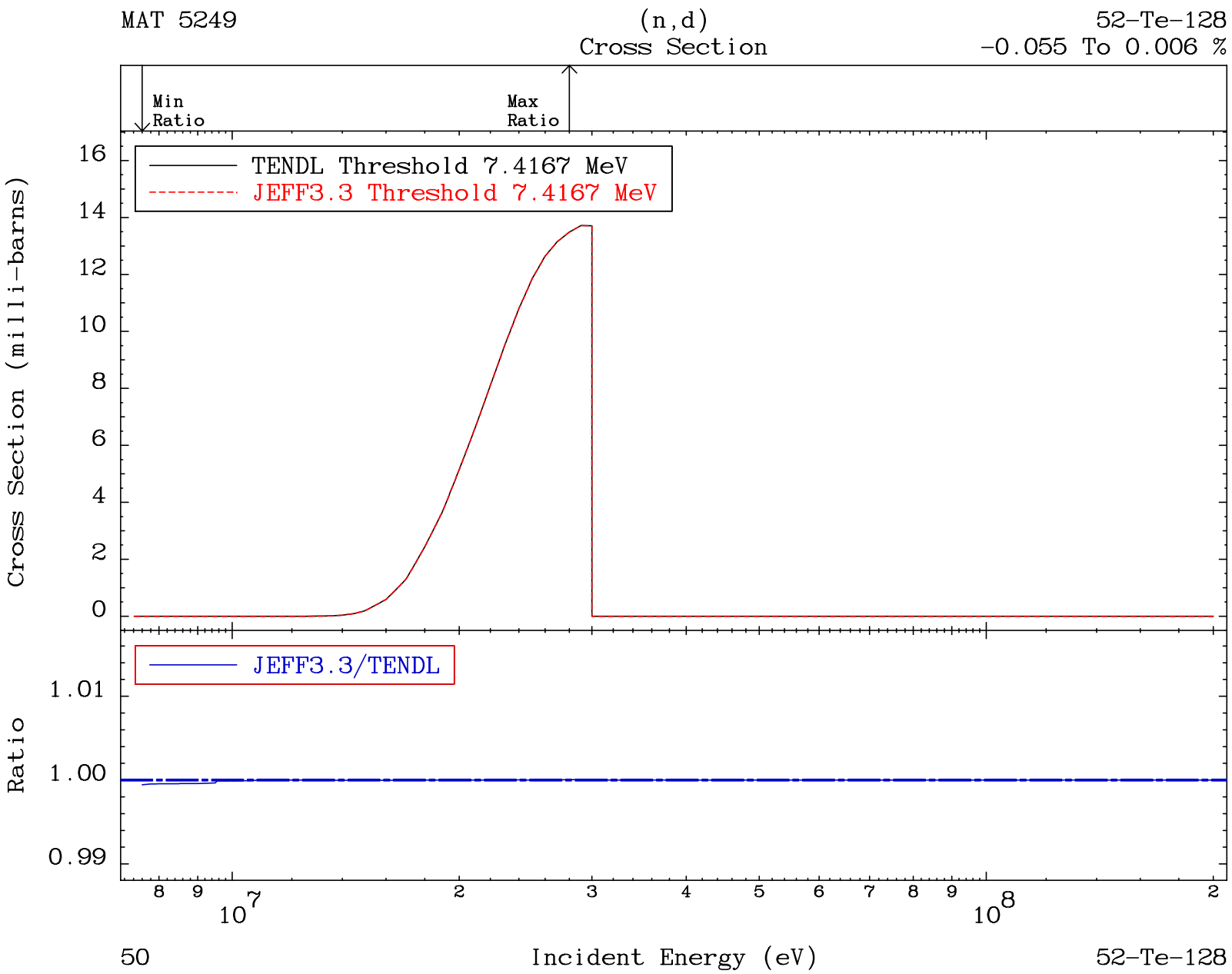

MAT 5249
MT= 79 (n,n') Level
Cross Section
52-Te-128
-0.021 To 0.000 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.6195 MeV
JEFF3.3 Threshold 2.6195 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
45
Incident Energy (eV)
52-Te-128

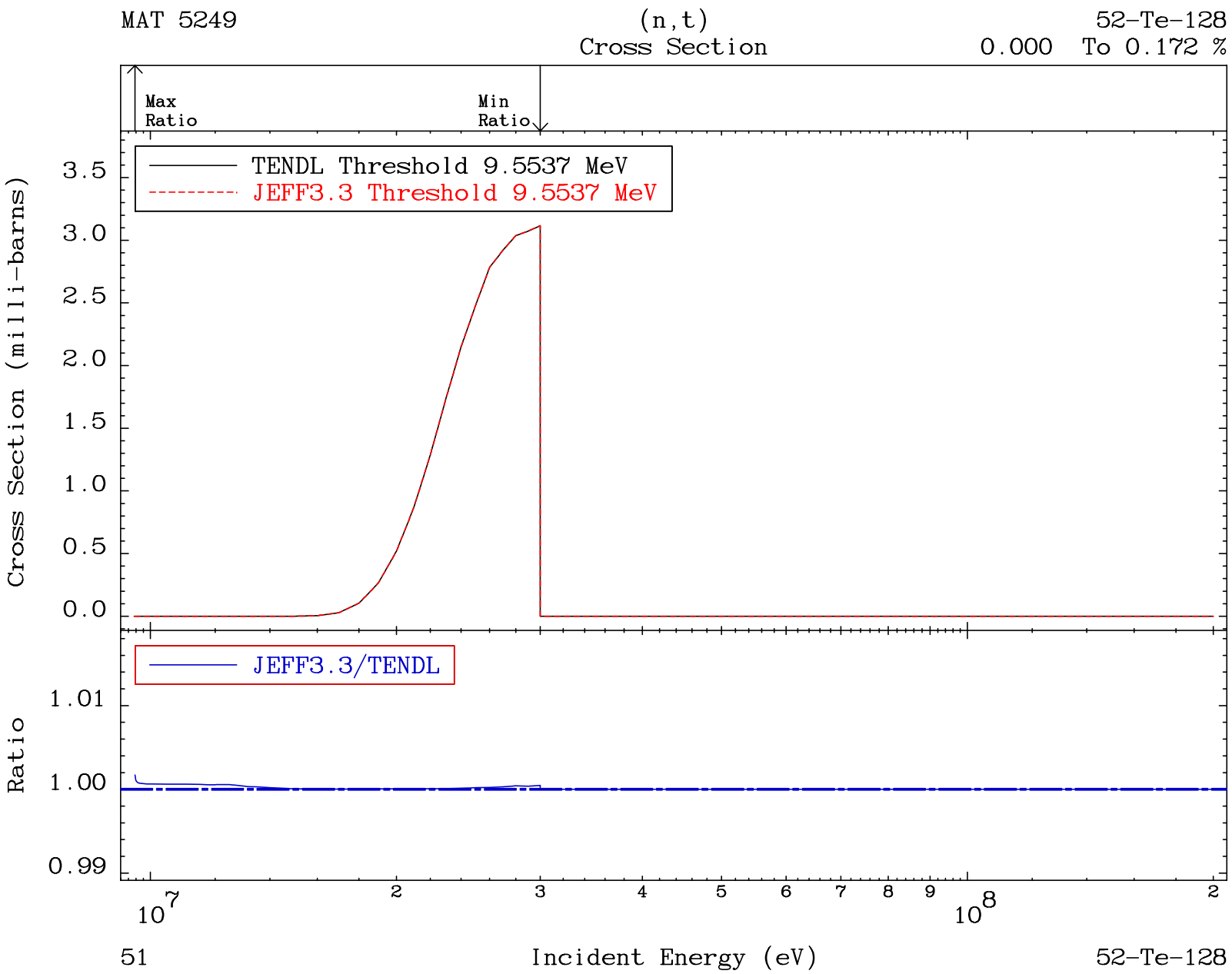

MAT 5249
MT= 80 (n,n') Level
Cross Section
52-Te-128
-0.011 To 1.657 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.6509 MeV
JEFF3.3 Threshold 2.6509 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
46
Incident Energy (eV)
52-Te-128

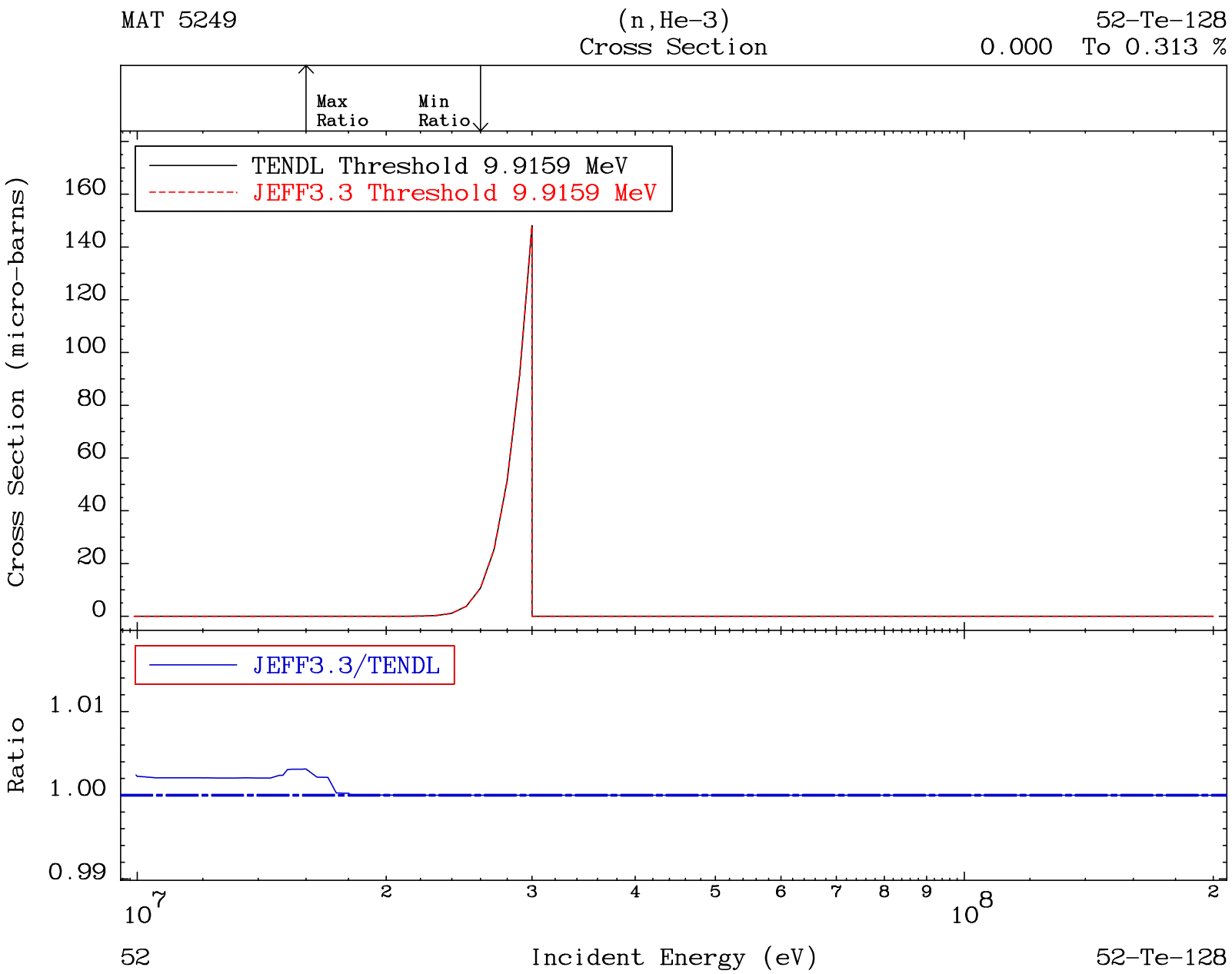

MAT 5249
(n,n') Continuum
Cross Section
52-Te-128
-0.002 To 0.180 %
Max Ratio
Min Ratio
TENDL Threshold 2.6509 MeV
JEFF3.3 Threshold 2.6509 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
47
Incident Energy (eV)
52-Te-128

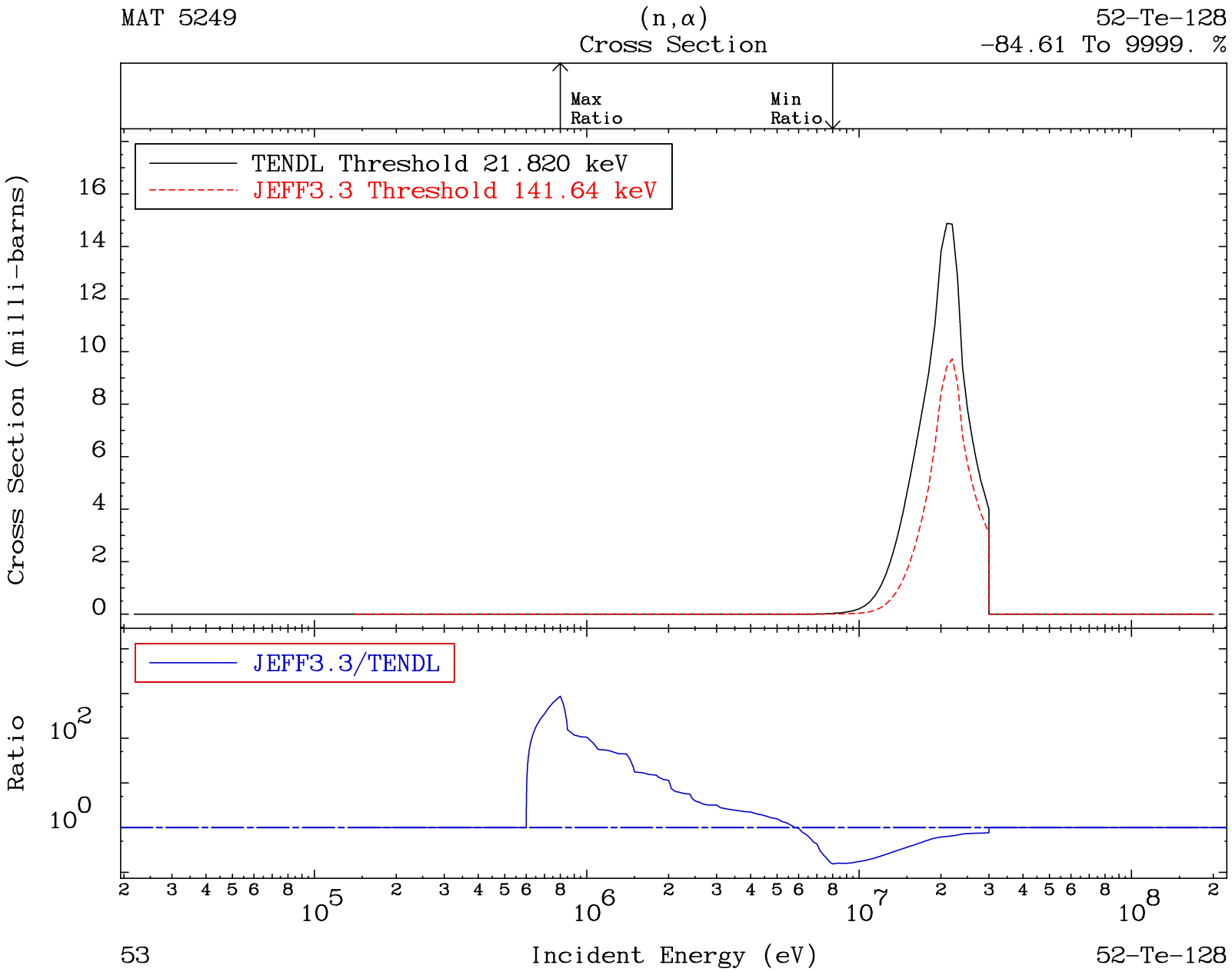

MAT 5249
(n,γ)
Cross Section
52-Te-128
-100.0 To 5169. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
48
52-Te-128

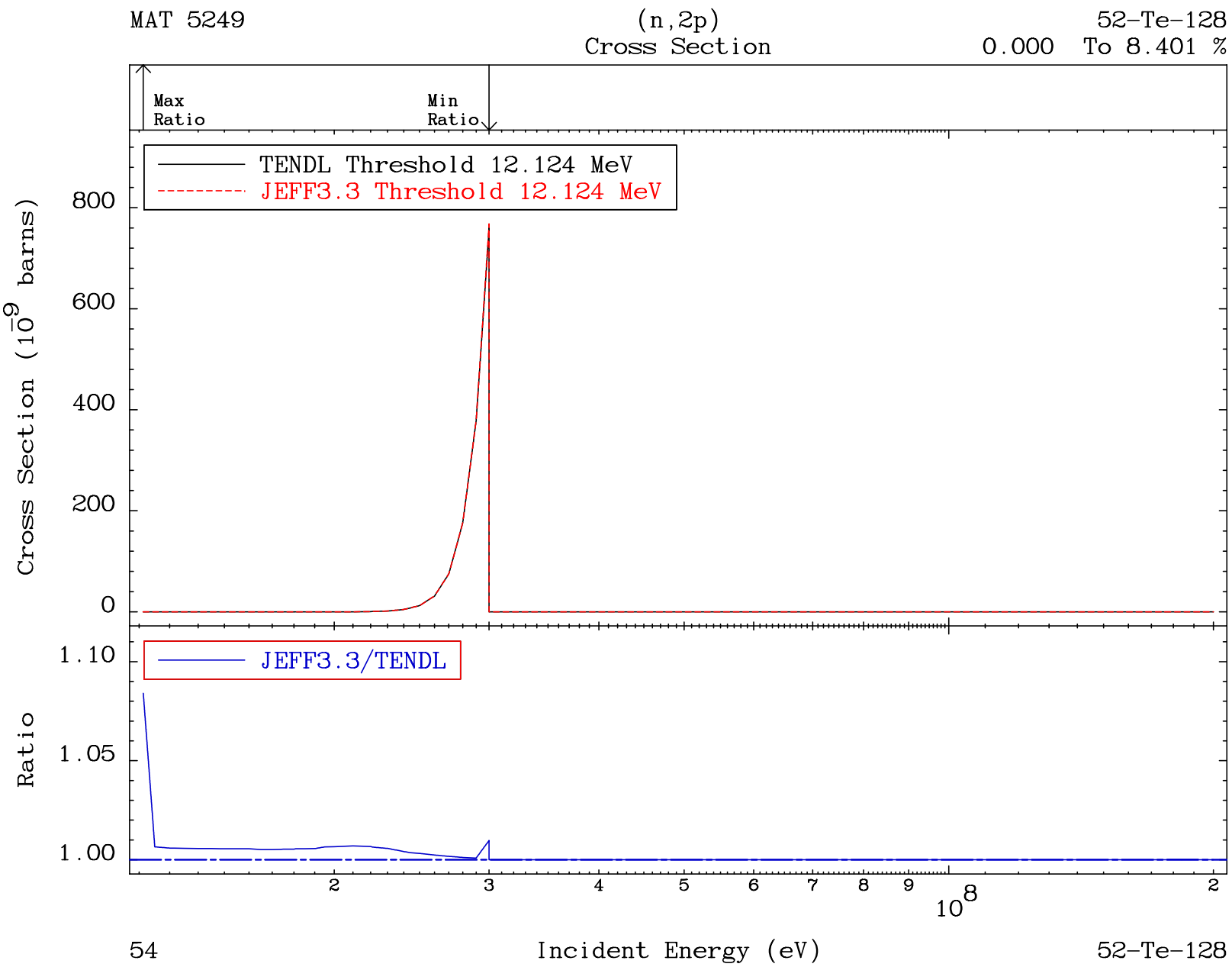

MAT 5249
(n,p)
Cross Section
52-Te-128
-0.048 To 0.047 %
Min Ratio
Max Ratio
TENDL Threshold 3.6093 MeV
JEFF3.3 Threshold 3.6093 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
52-Te-128

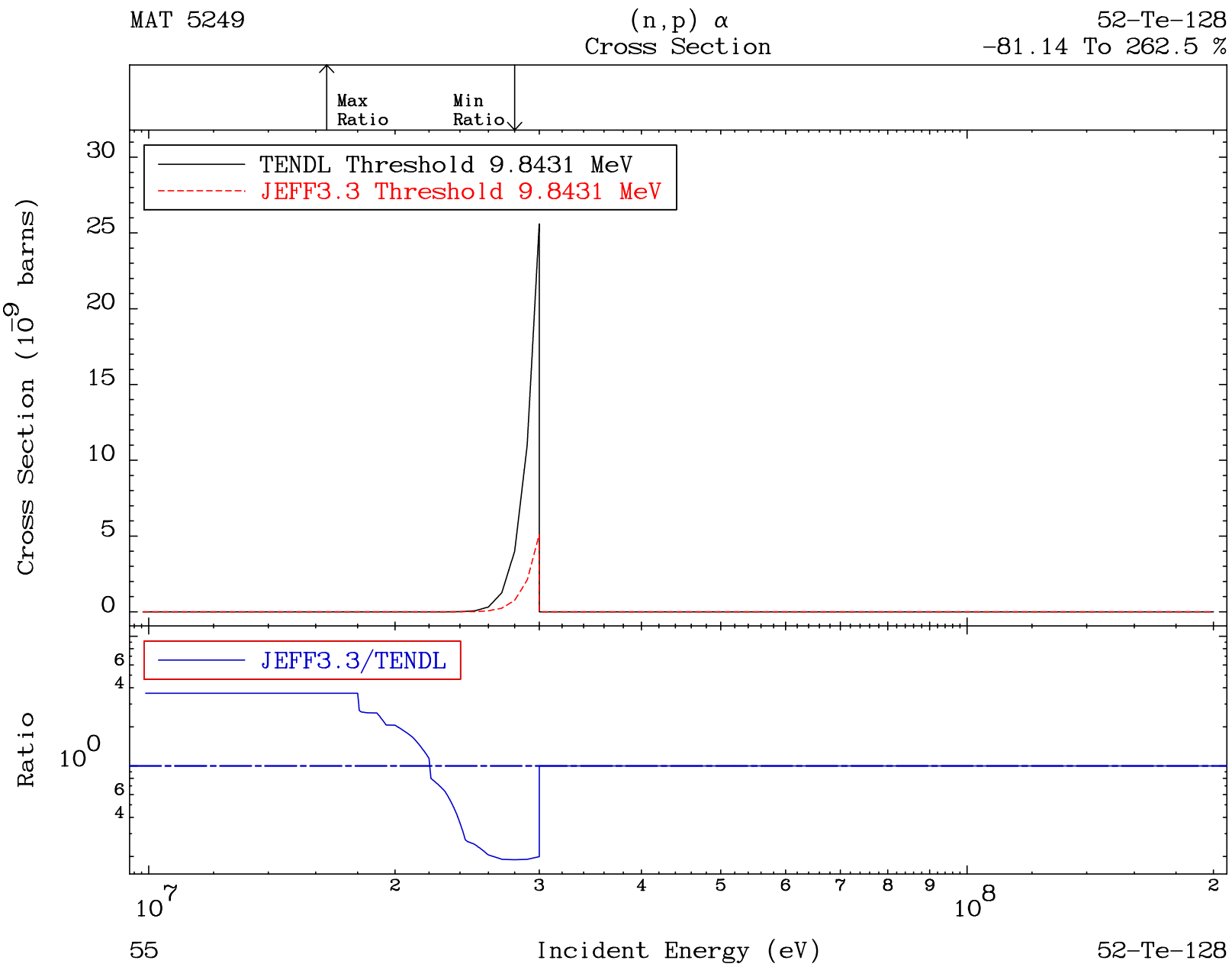

MAT 5249
(n,d)
Cross Section
52-Te-128
-0.055 To 0.006 %
Min Ratio
Max Ratio
TENDL Threshold 7.4167 MeV
JEFF3.3 Threshold 7.4167 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
50
Incident Energy (eV)
52-Te-128

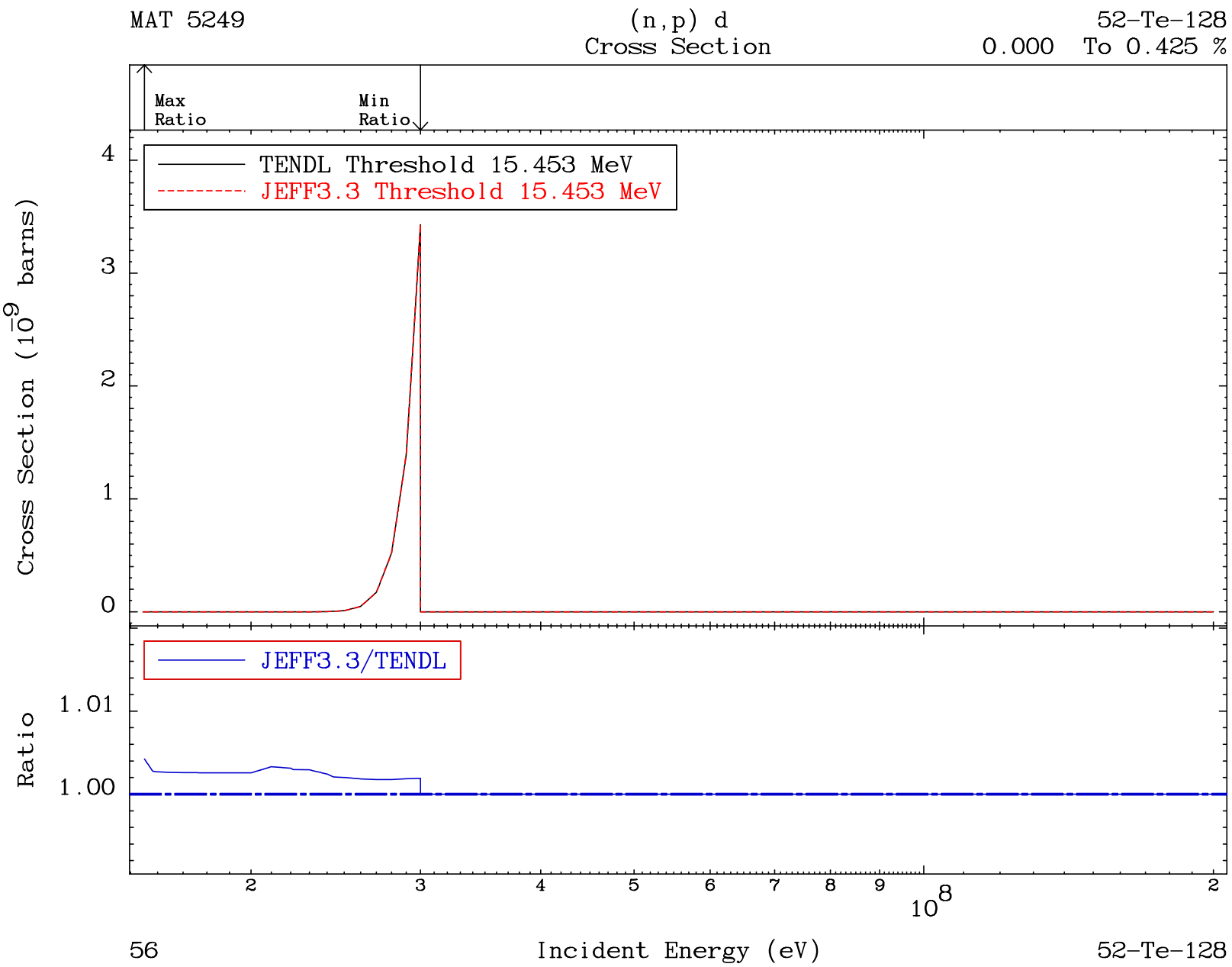

MAT 5249
(n,t)
Cross Section
52-Te-128
0.000 To 0.172 %
Max Ratio
Min Ratio
TENDL Threshold 9.5537 MeV
JEFF3.3 Threshold 9.5537 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^7
2
3
4
5
6
7
8
9
10^8
2
51
Incident Energy (eV)
52-Te-128

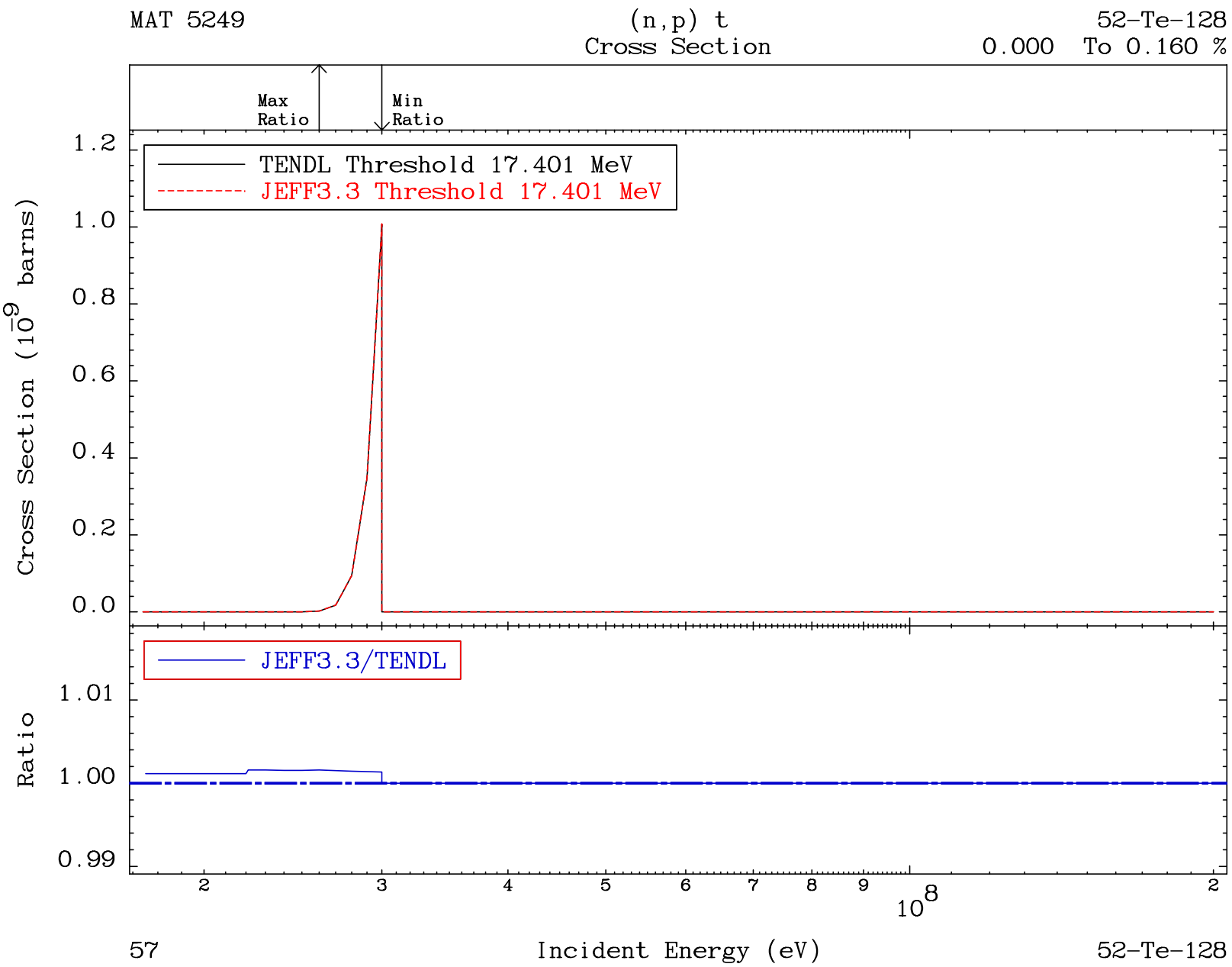

MAT 5249
(n,He-3)
Cross Section
52-Te-128
0.000 To 0.313 %
Max Ratio
Min Ratio
TENDL Threshold 9.9159 MeV
JEFF3.3 Threshold 9.9159 MeV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^7
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
52-Te-128

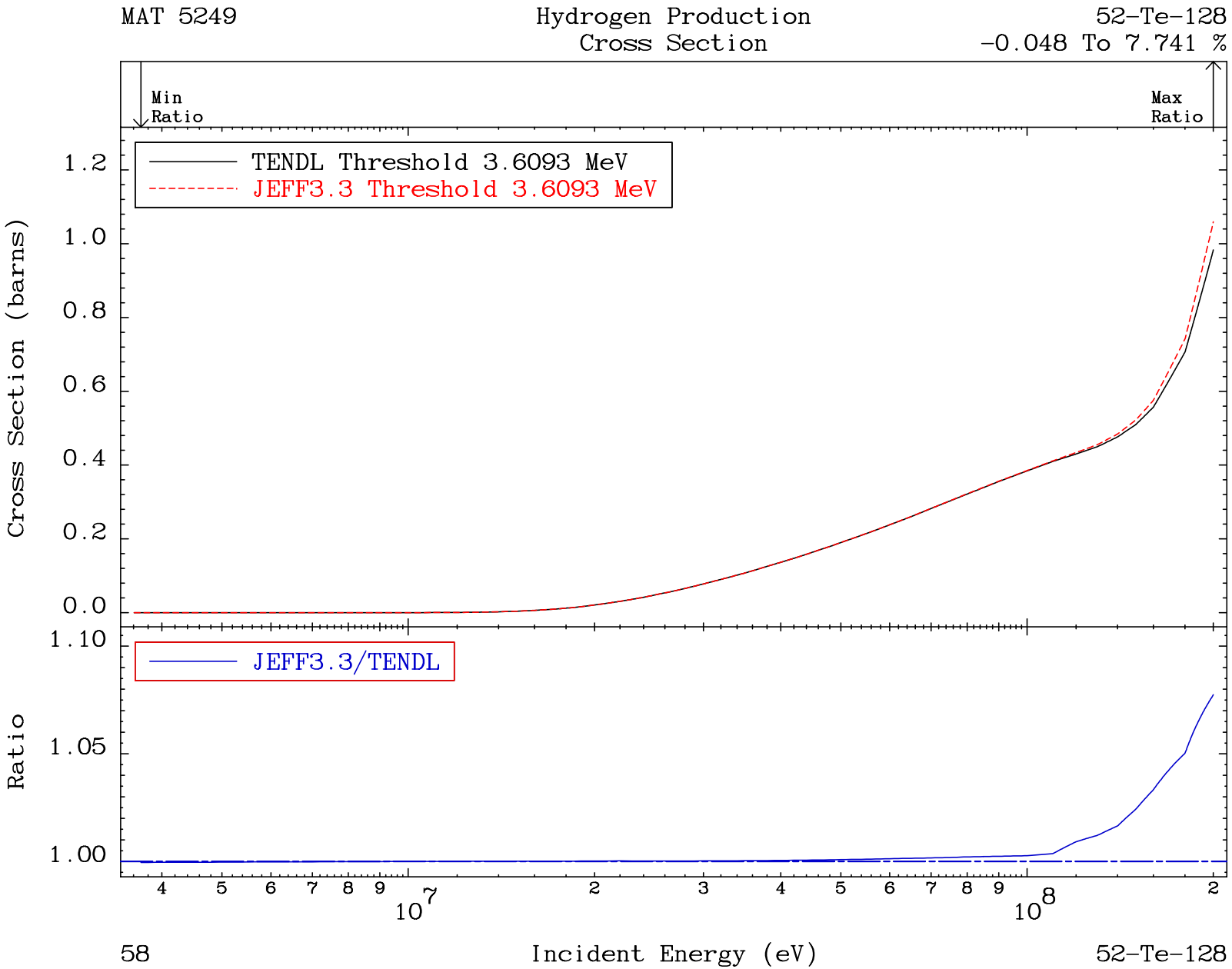

MAT 5249
(n,α)
Cross Section
52-Te-128
-84.61 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 21.820 keV
JEFF3.3 Threshold 141.64 keV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
16
JEFF3.3/TENDL
Ratio
10^0
10^2
2 3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
53
Incident Energy (eV)
52-Te-128

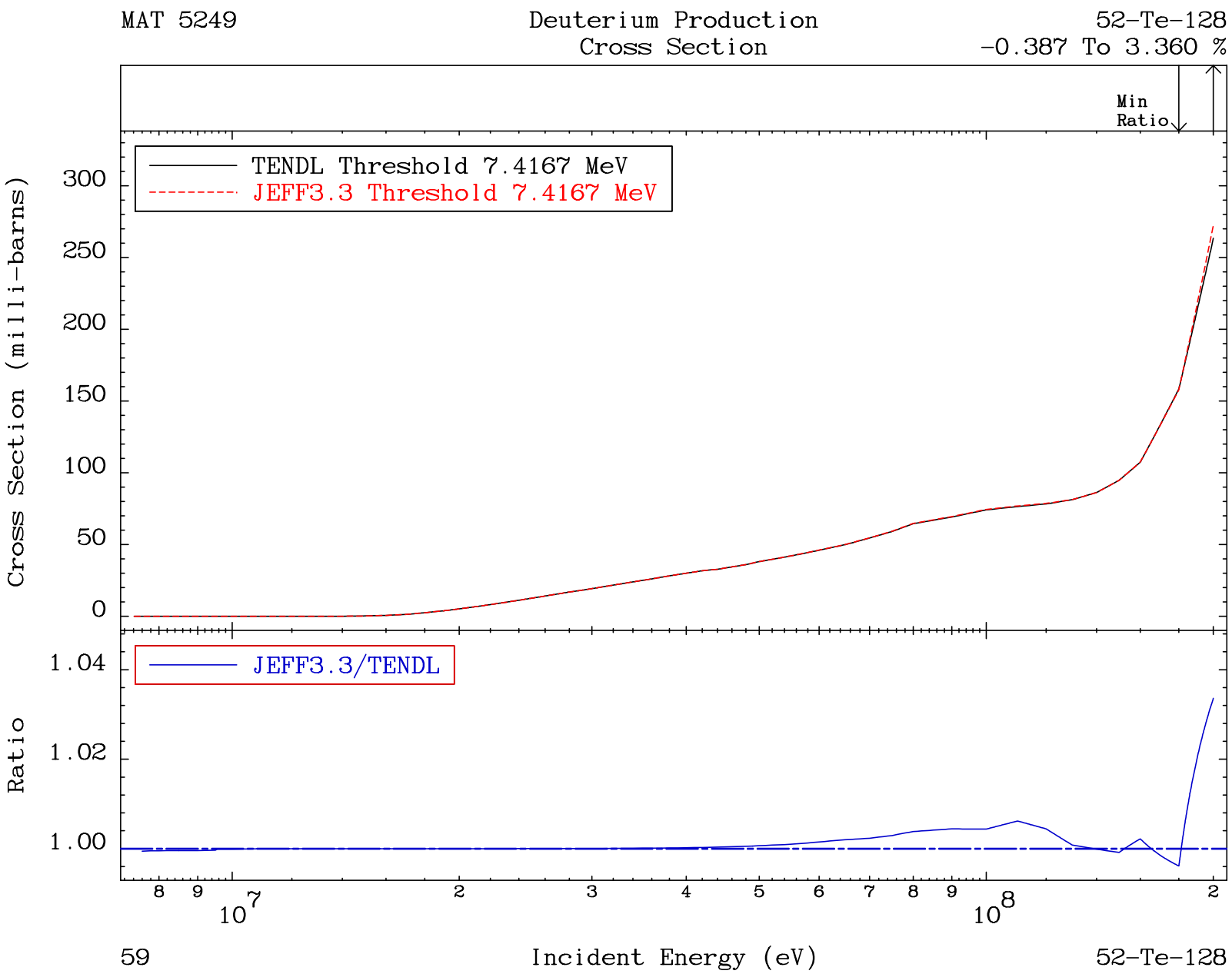

MAT 5249
(n,2p)
Cross Section
52-Te-128
0.000 To 8.401 %
Max Ratio
Min Ratio
TENDL Threshold 12.124 MeV
JEFF3.3 Threshold 12.124 MeV
Cross Section (10^{-9} barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
54
Incident Energy (eV)
52-Te-128

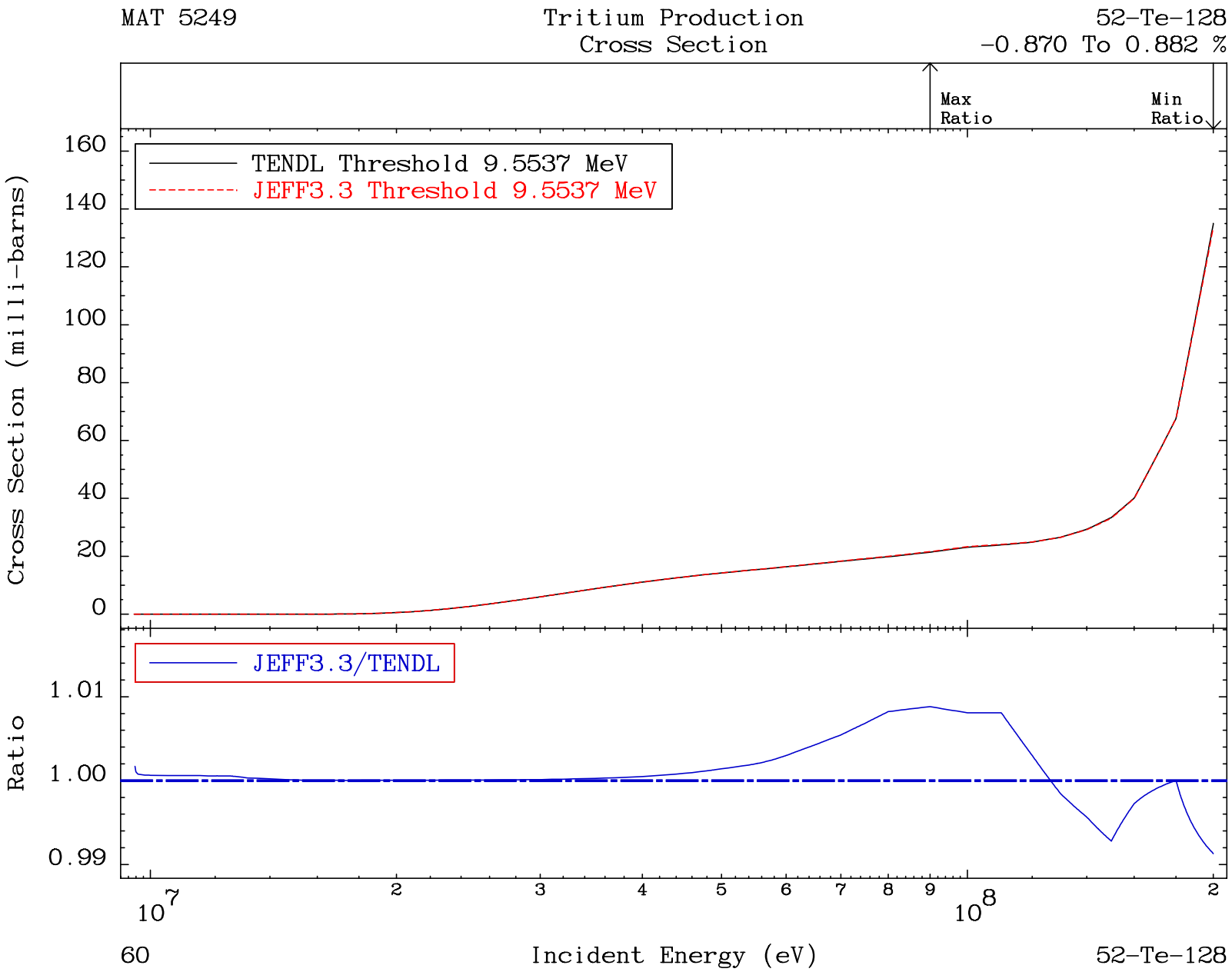

MAT 5249
(n,p) α
Cross Section
52-Te-128
-81.14 To 262.5 %
Max Ratio
Min Ratio
TENDL Threshold 9.8431 MeV
JEFF3.3 Threshold 9.8431 MeV
Cross Section (10^{-9} barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
10^{0}
6
4
6
4
10^{7}
2
3
4
5
6
7
8
9
10^{8}
2
55
Incident Energy (eV)
52-Te-128

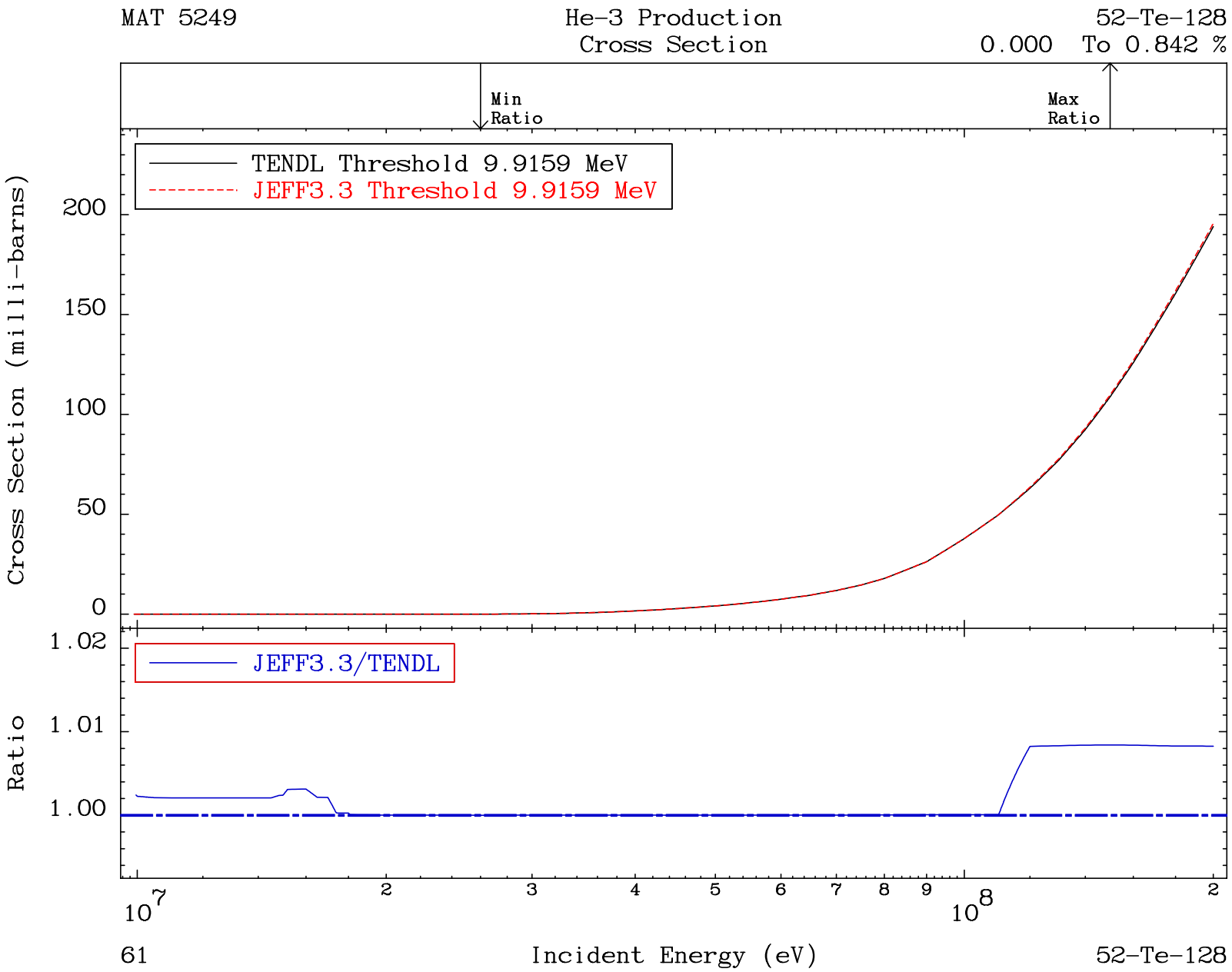

MAT 5249
(n,p) d
Cross Section
52-Te-128
0.000 To 0.425 %
Max Ratio
Min Ratio
TENDL Threshold 15.453 MeV
JEFF3.3 Threshold 15.453 MeV
Cross Section (10^{-9} barns)
4
3
2
1
0
JEFF3.3/TENDL
Ratio
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
56
Incident Energy (eV)
52-Te-128

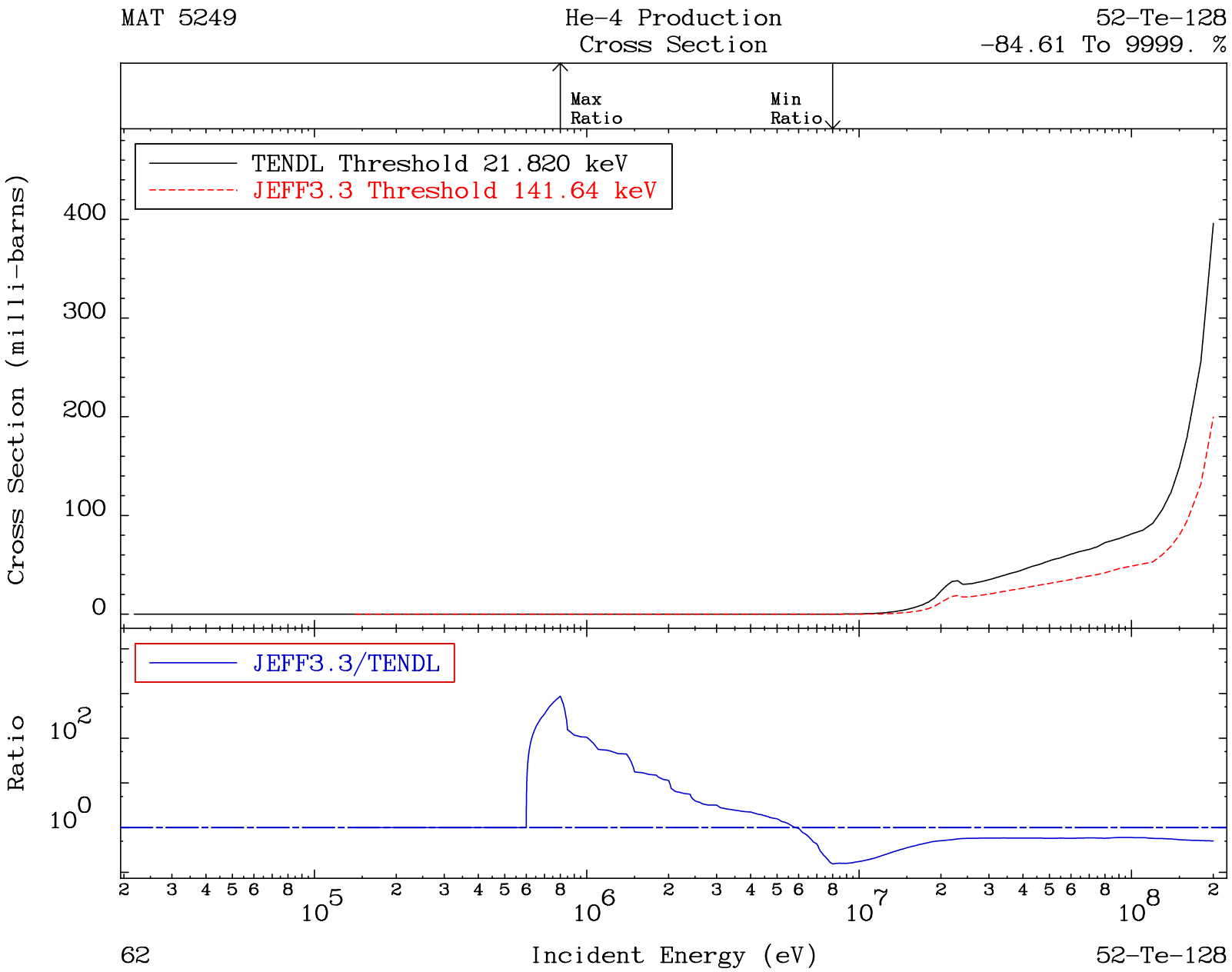

MAT 5249
(n,p) t
Cross Section
52-Te-128
0.000 To 0.160 %
Max Ratio
Min Ratio
TENDL Threshold 17.401 MeV
JEFF3.3 Threshold 17.401 MeV
Cross Section (10^{-9} barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
57
Incident Energy (eV)
52-Te-128

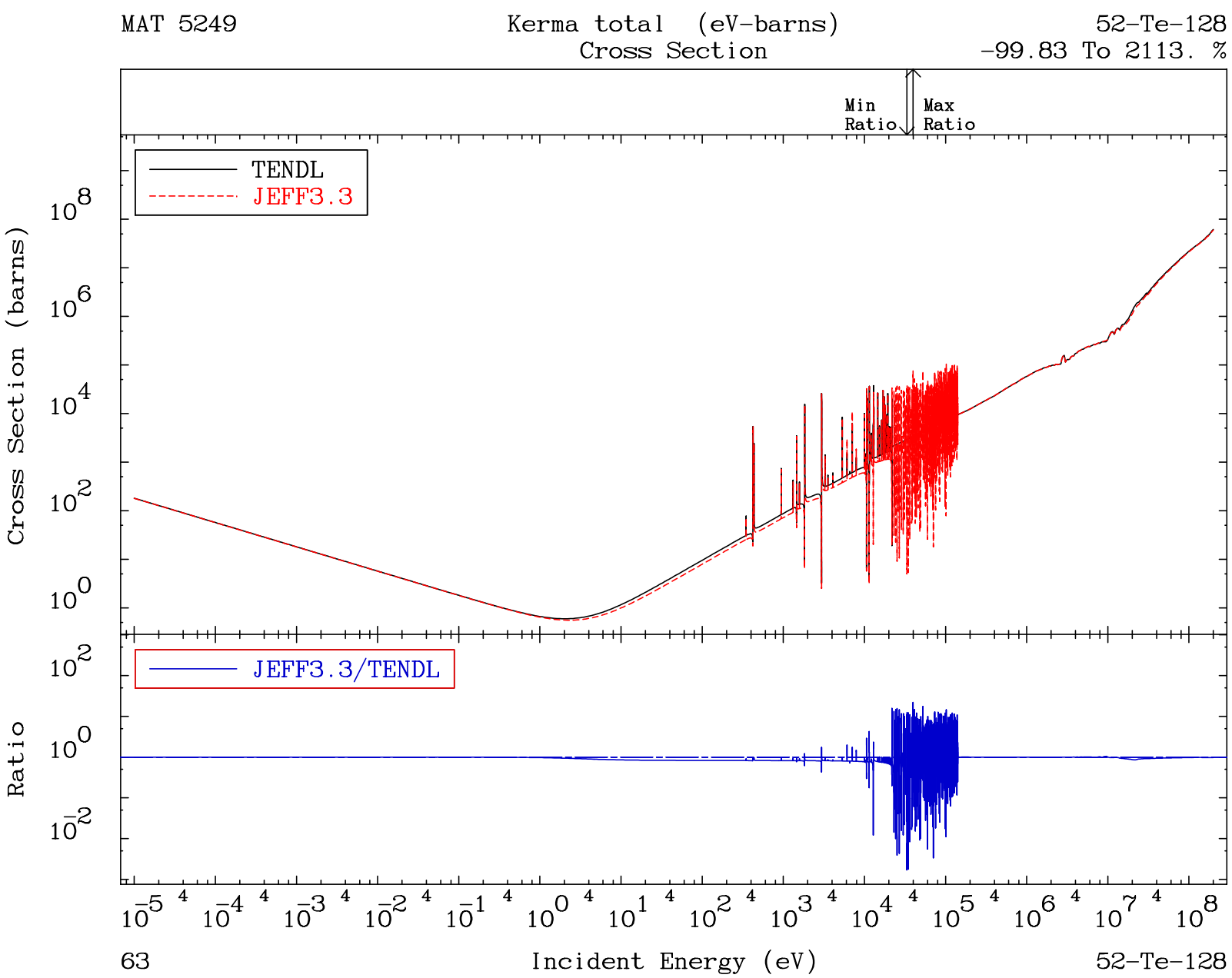

MAT 5249
Hydrogen Production
Cross Section
52-Te-128
-0.048 To 7.741 %
Min Ratio
Max Ratio
TENDL Threshold 3.6093 MeV
JEFF3.3 Threshold 3.6093 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
58
Incident Energy (eV)
52-Te-128

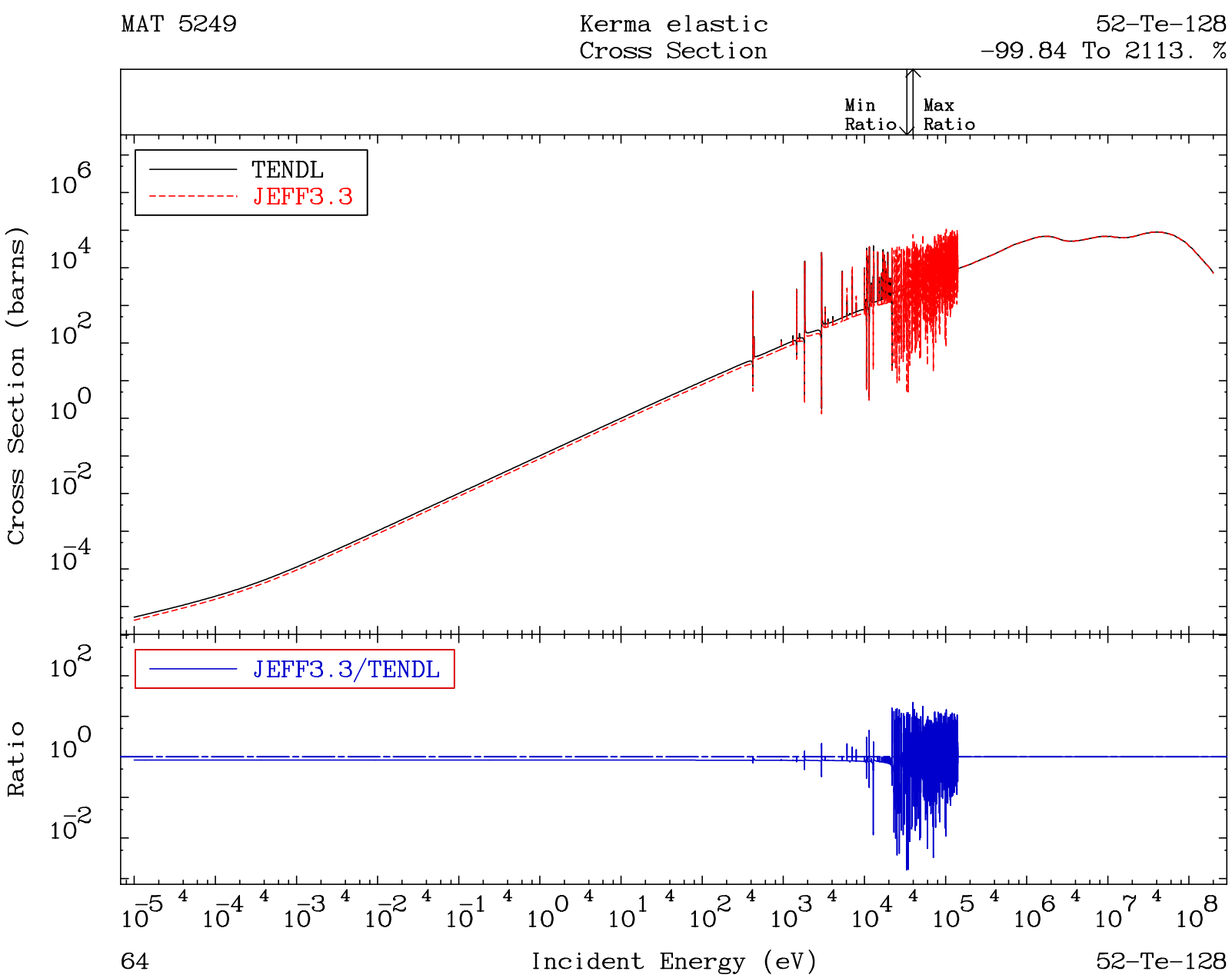

MAT 5249
Deuterium Production
Cross Section
52-Te-128
-0.387 To 3.360 %
Min
Ratio
TENDL Threshold 7.4167 MeV
JEFF3.3 Threshold 7.4167 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.04
1.02
1.00
8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
59
Incident Energy (eV)
52-Te-128

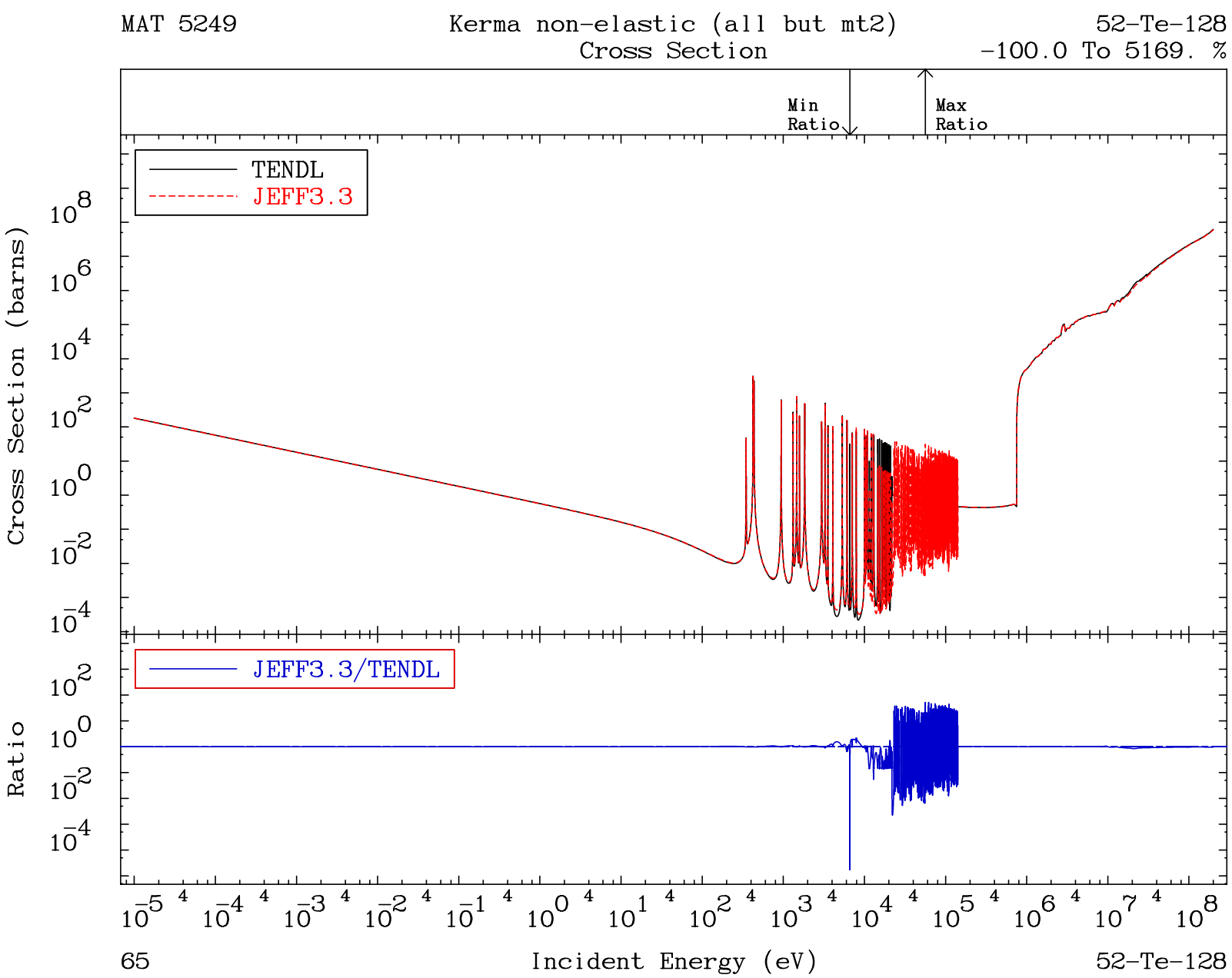

MAT 5249
Tritium Production
Cross Section
52-Te-128
-0.870 To 0.882 %
Max
Ratio
Min
Ratio
TENDL Threshold 9.5537 MeV
JEFF3.3 Threshold 9.5537 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^7
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
52-Te-128

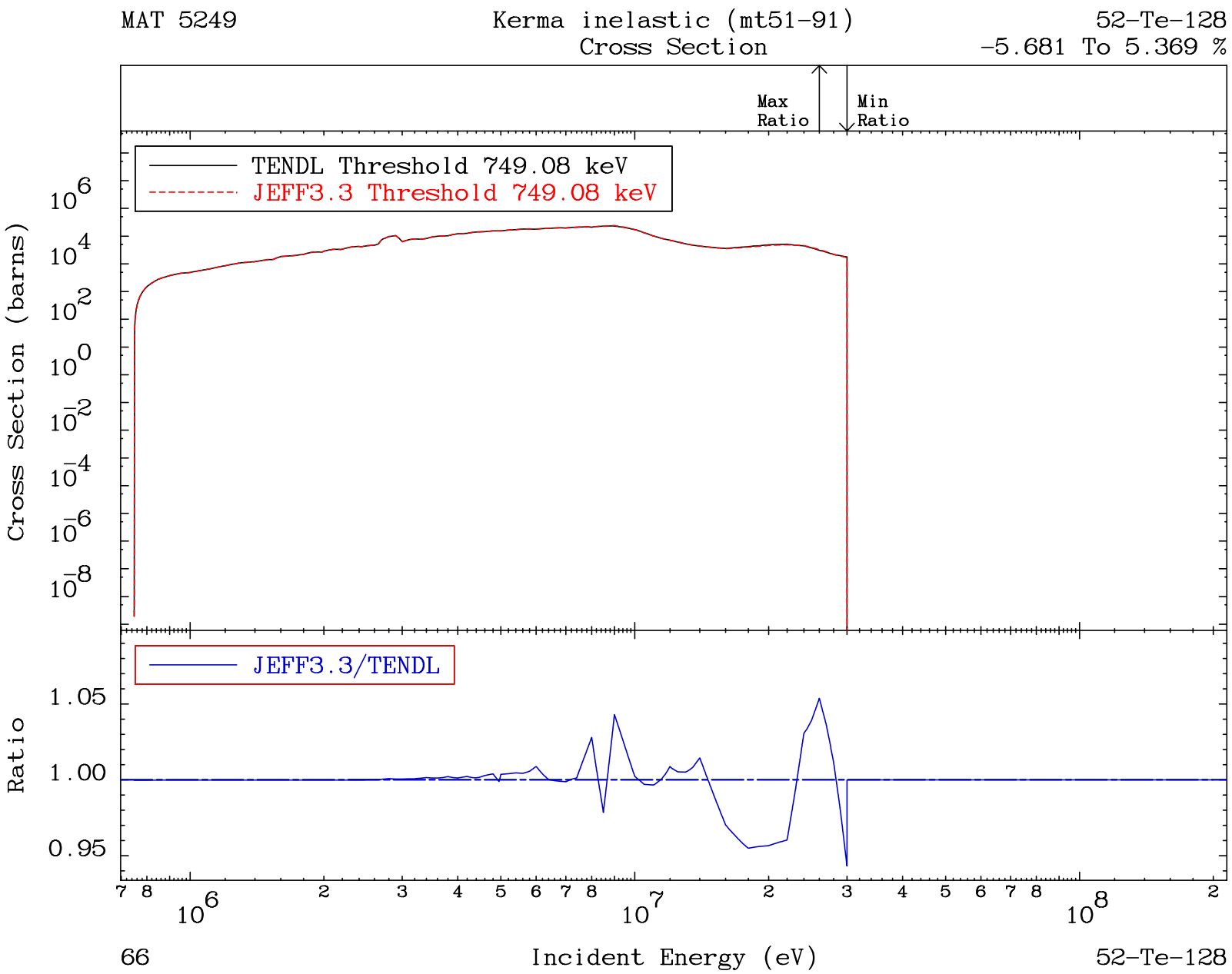

MAT 5249
He-3 Production
Cross Section
52-Te-128
0.000 To 0.842 %
Min Ratio
Max Ratio
TENDL Threshold 9.9159 MeV
JEFF3.3 Threshold 9.9159 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
10^7
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
52-Te-128

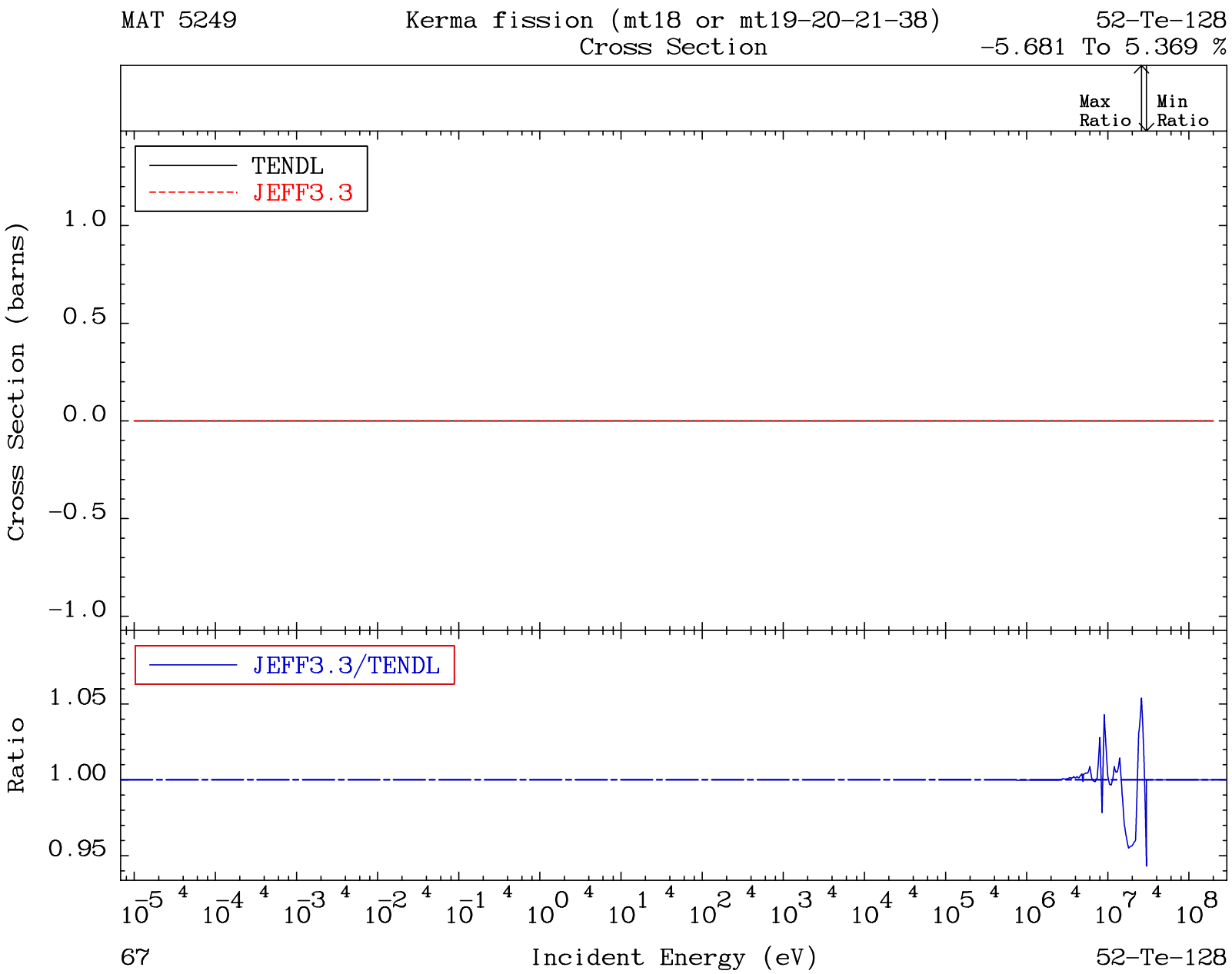

MAT 5249
He-4 Production
Cross Section
52-Te-128
-84.61 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 21.820 keV
JEFF3.3 Threshold 141.64 keV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
10^2
10^0
2 3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
62
Incident Energy (eV)
52-Te-128

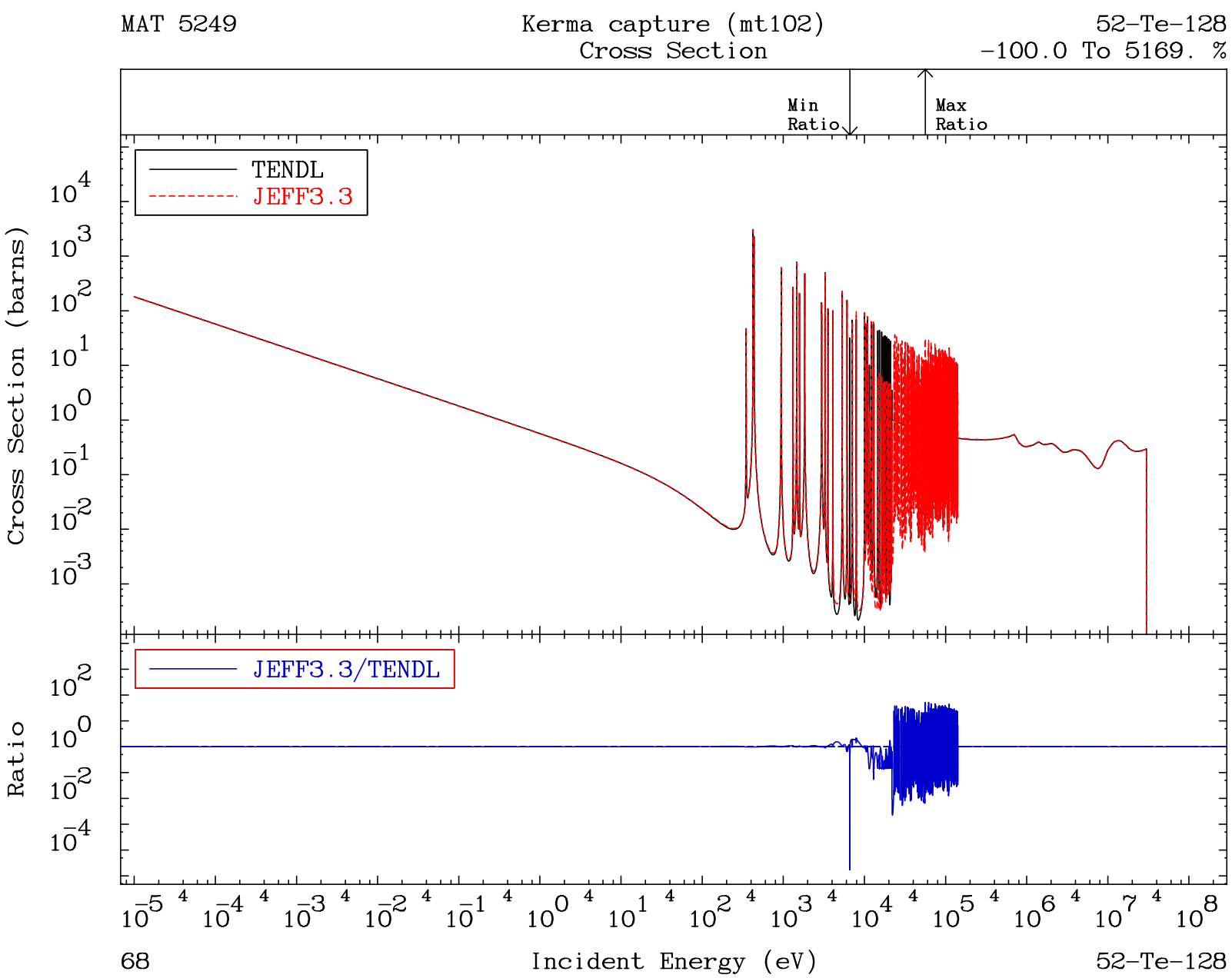

MAT 5249
Kerma total (eV-barns)
Cross Section
52-Te-128
-99.83 To 2113. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
63
52-Te-128

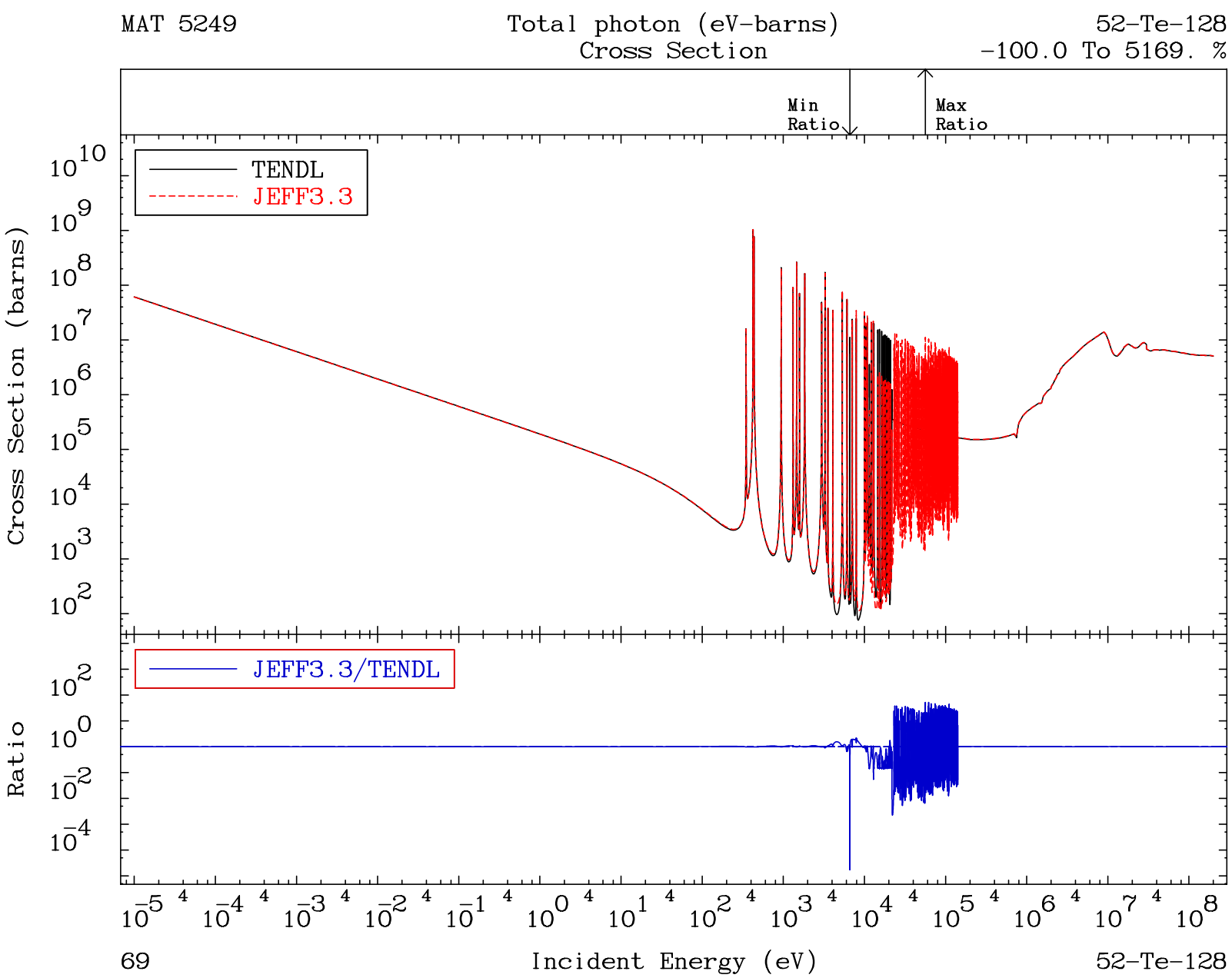

MAT 5249
Kerma elastic
Cross Section
52-Te-128
-99.84 To 2113. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
64
52-Te-128

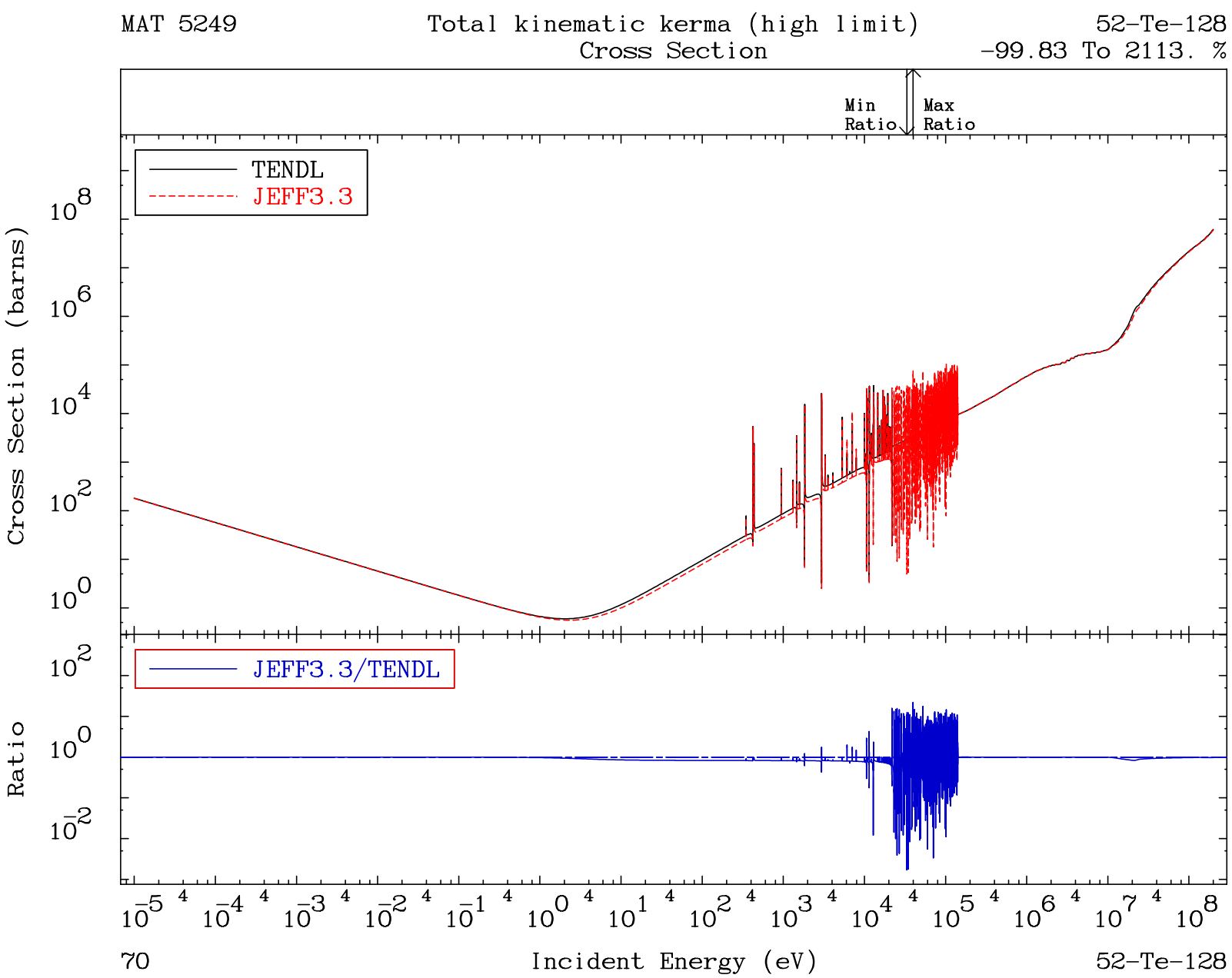

MAT 5249
Kerma non-elastic (all but mt2)
Cross Section
52-Te-128
-100.0 To 5169. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
65
52-Te-128

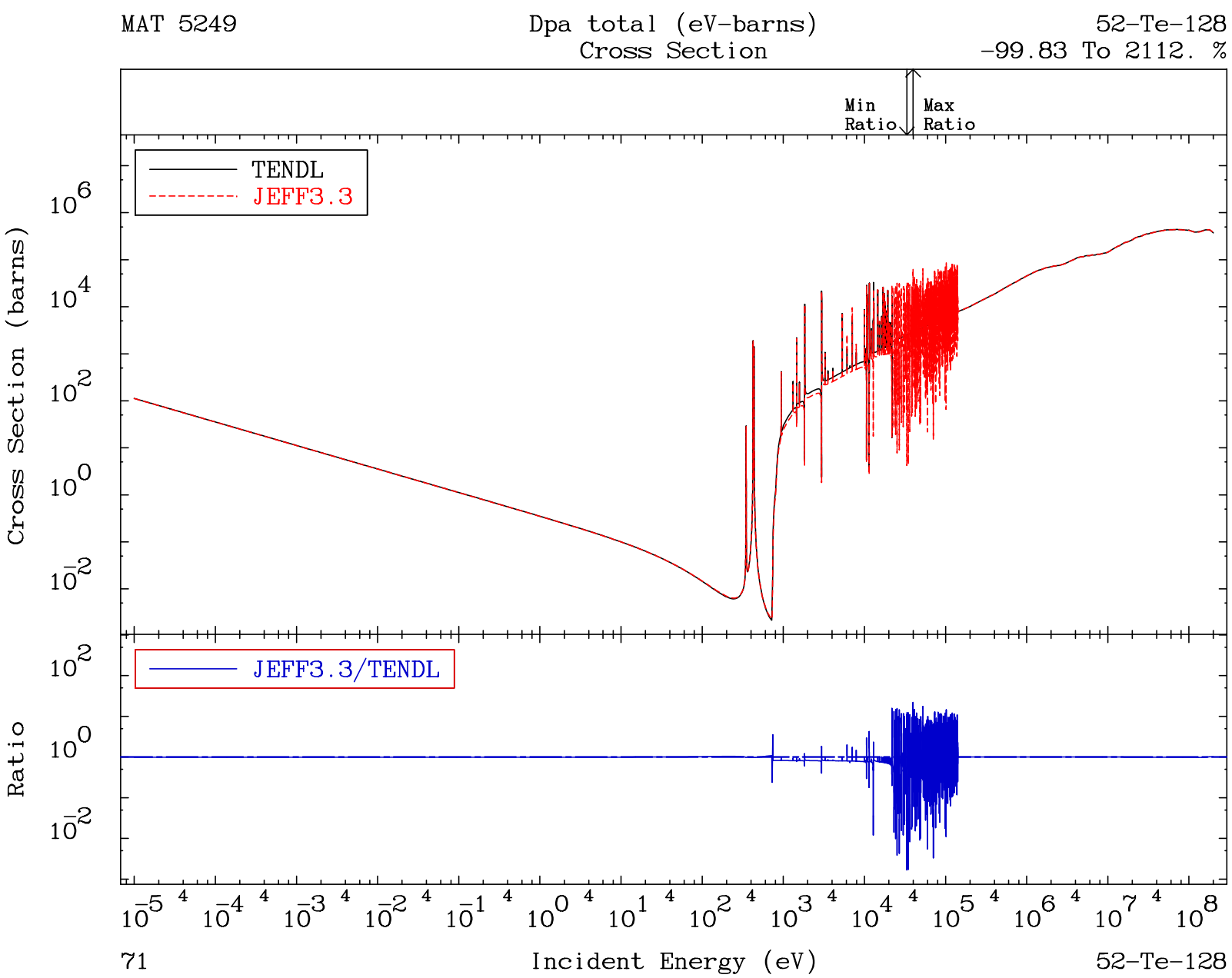

MAT 5249
Kerma inelastic (mt51-91)
Cross Section
52-Te-128
-5.681 To 5.369 %
Max Ratio
Min Ratio
TENDL Threshold 749.08 keV
JEFF3.3 Threshold 749.08 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
66
52-Te-128

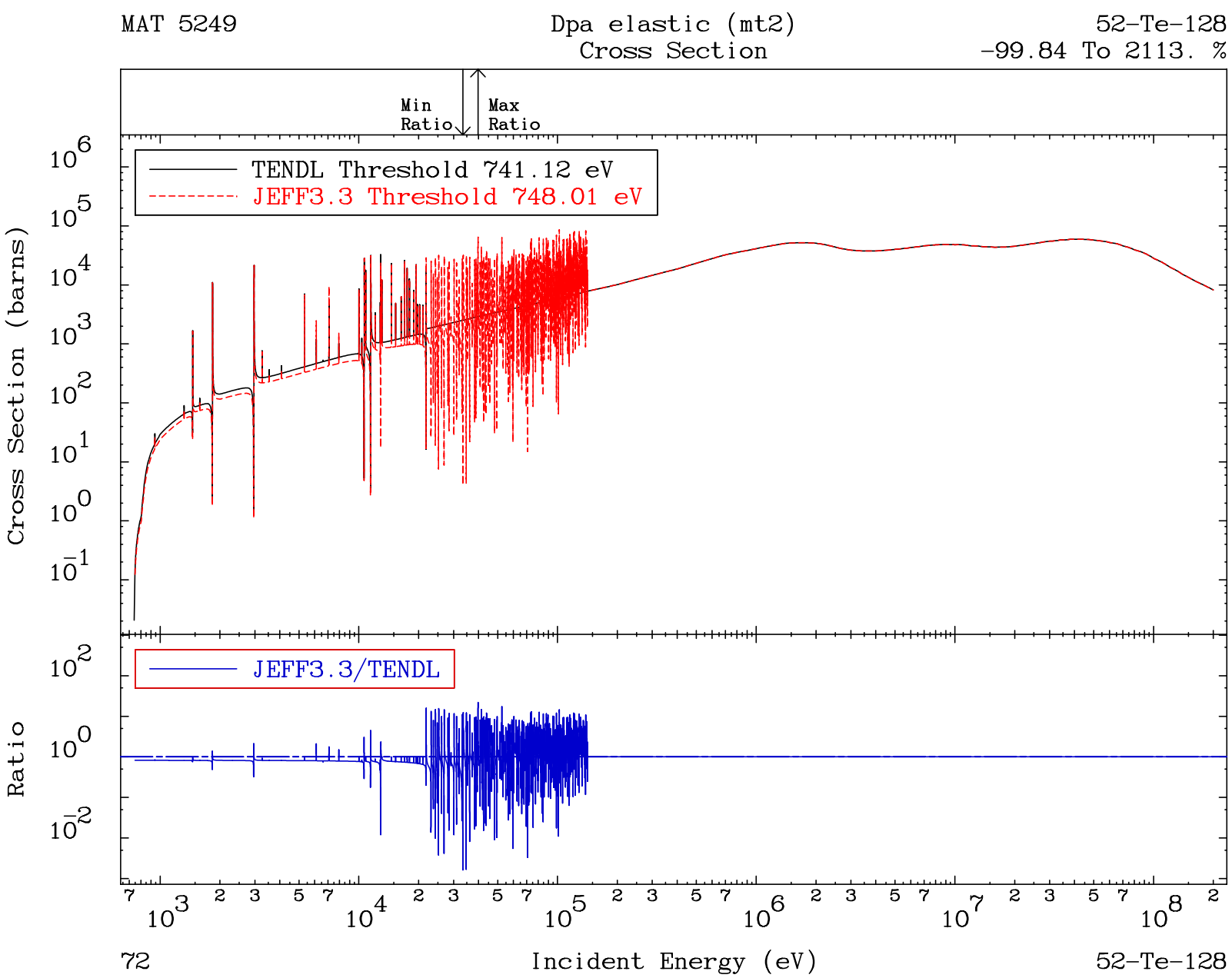

MAT 5249
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
52-Te-128
-5.681 To 5.369 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
67
Incident Energy (eV)
52-Te-128

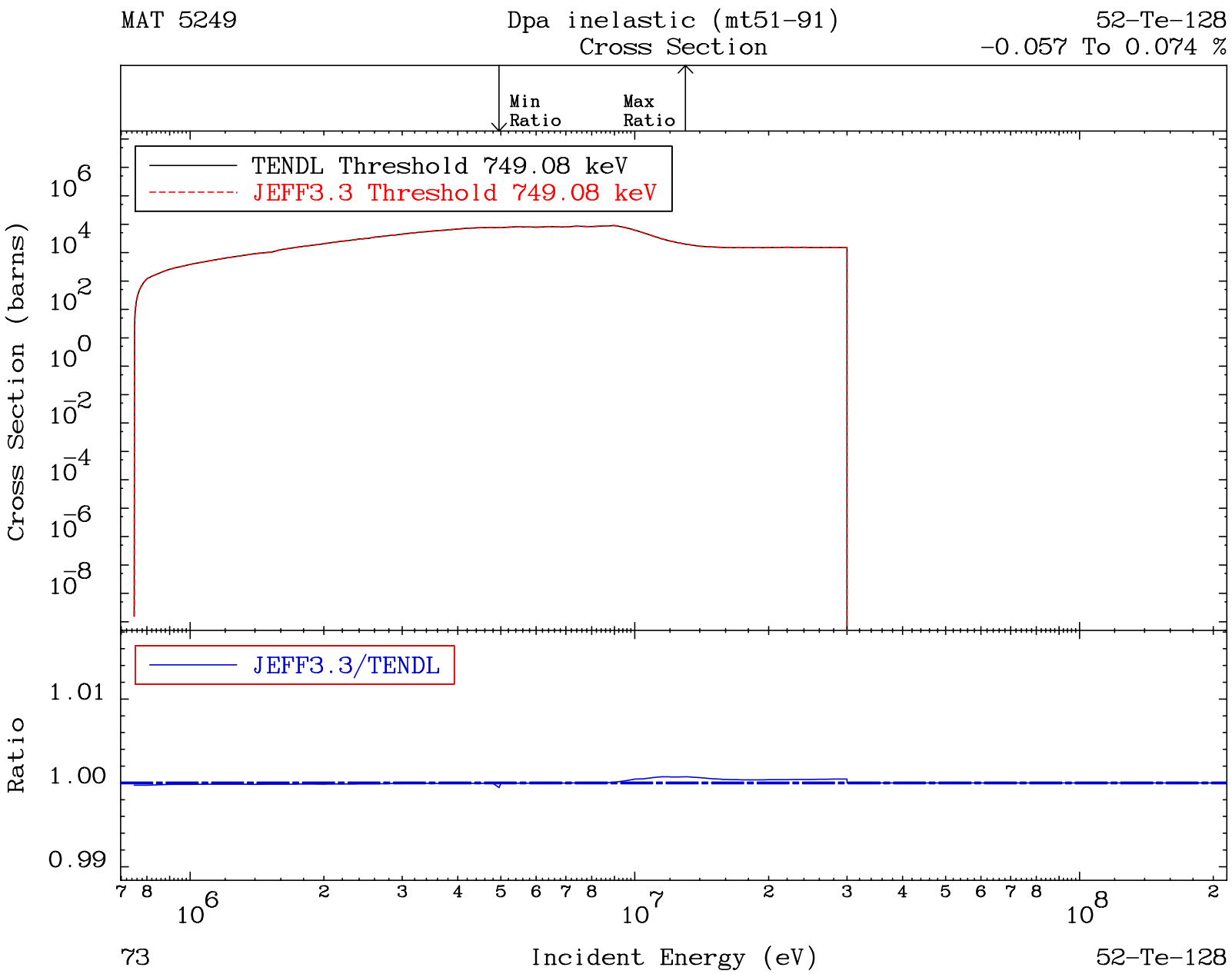

MAT 5249
Kerma capture (mt102)
Cross Section
52-Te-128
-100.0 To 5169. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
52-Te-128

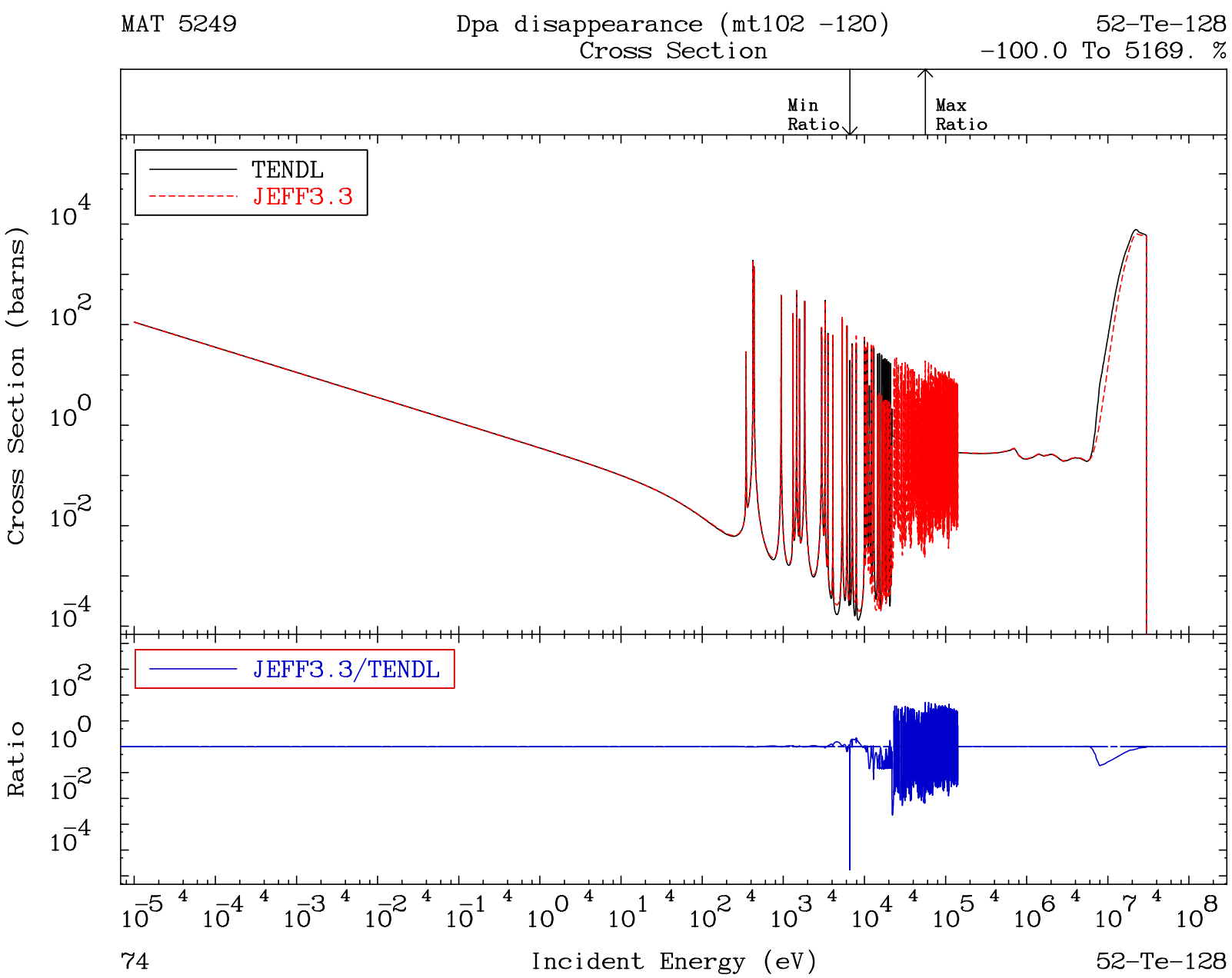

MAT 5249
Total photon (eV-barns)
Cross Section
52-Te-128
-100.0 To 5169. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
52-Te-128

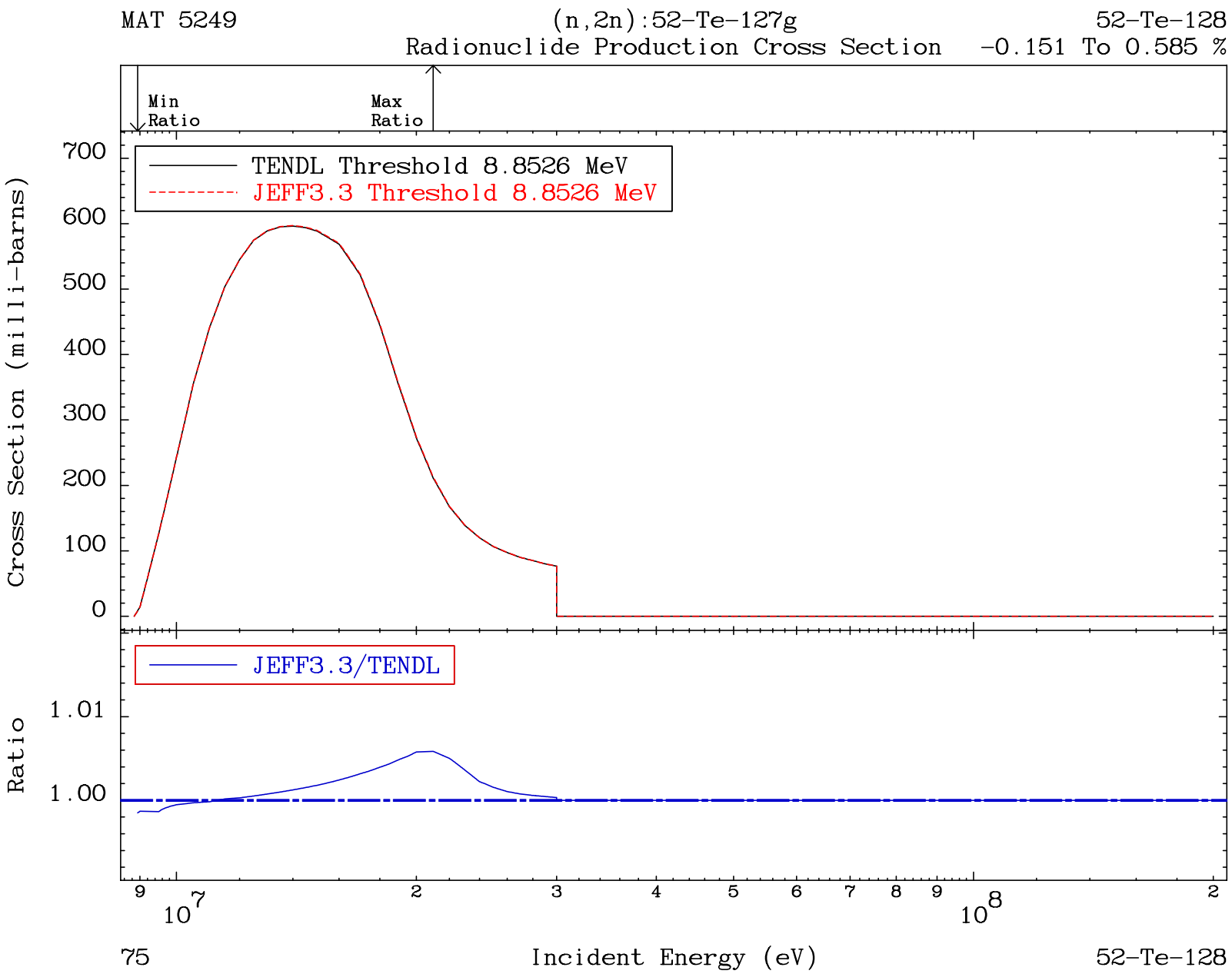

MAT 5249
Total kinematic kerma (high limit)
Cross Section
52-Te-128
-99.83 To 2113. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
52-Te-128

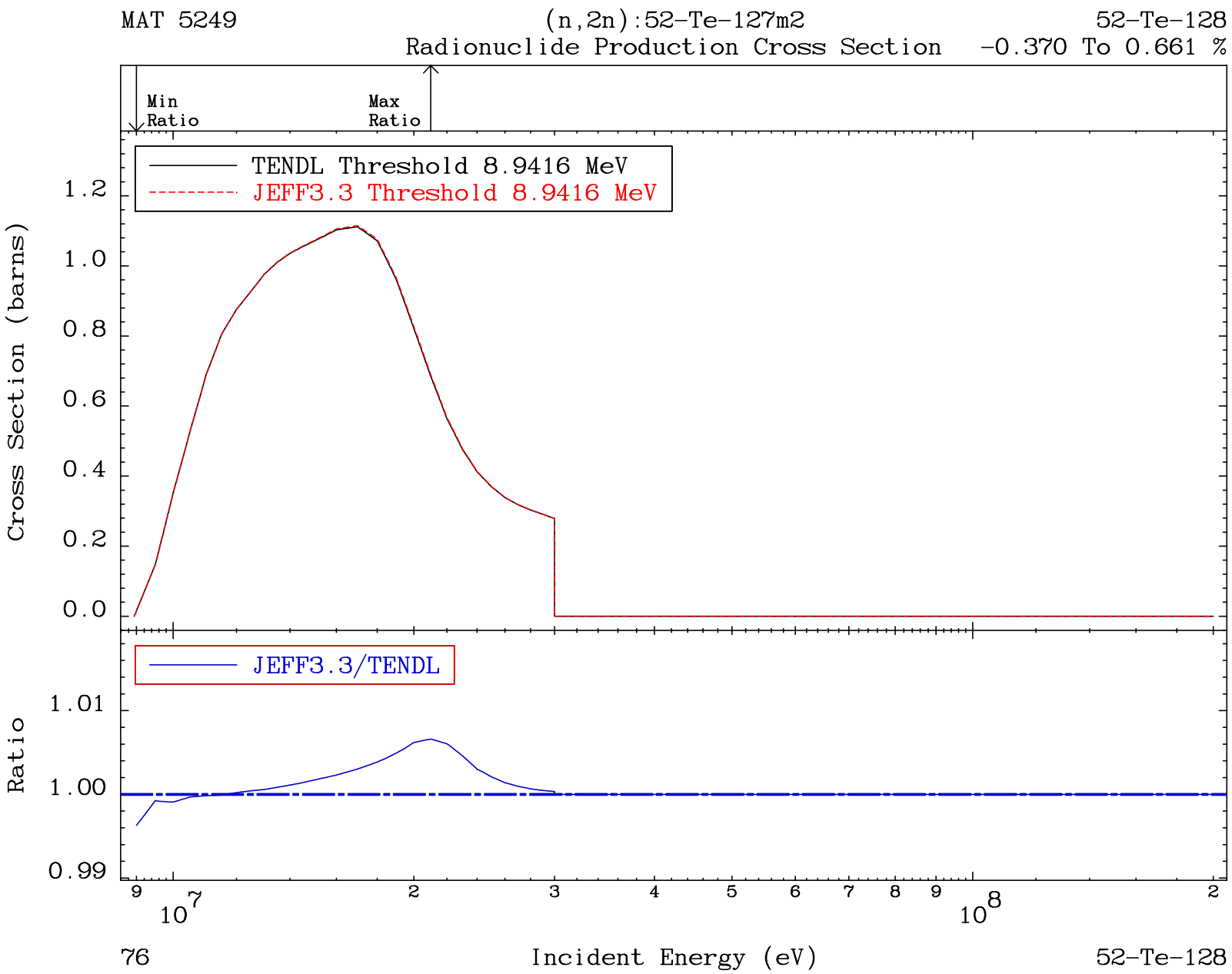

MAT 5249
Dpa total (eV-barns)
Cross Section
52-Te-128
-99.83 To 2112. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
52-Te-128

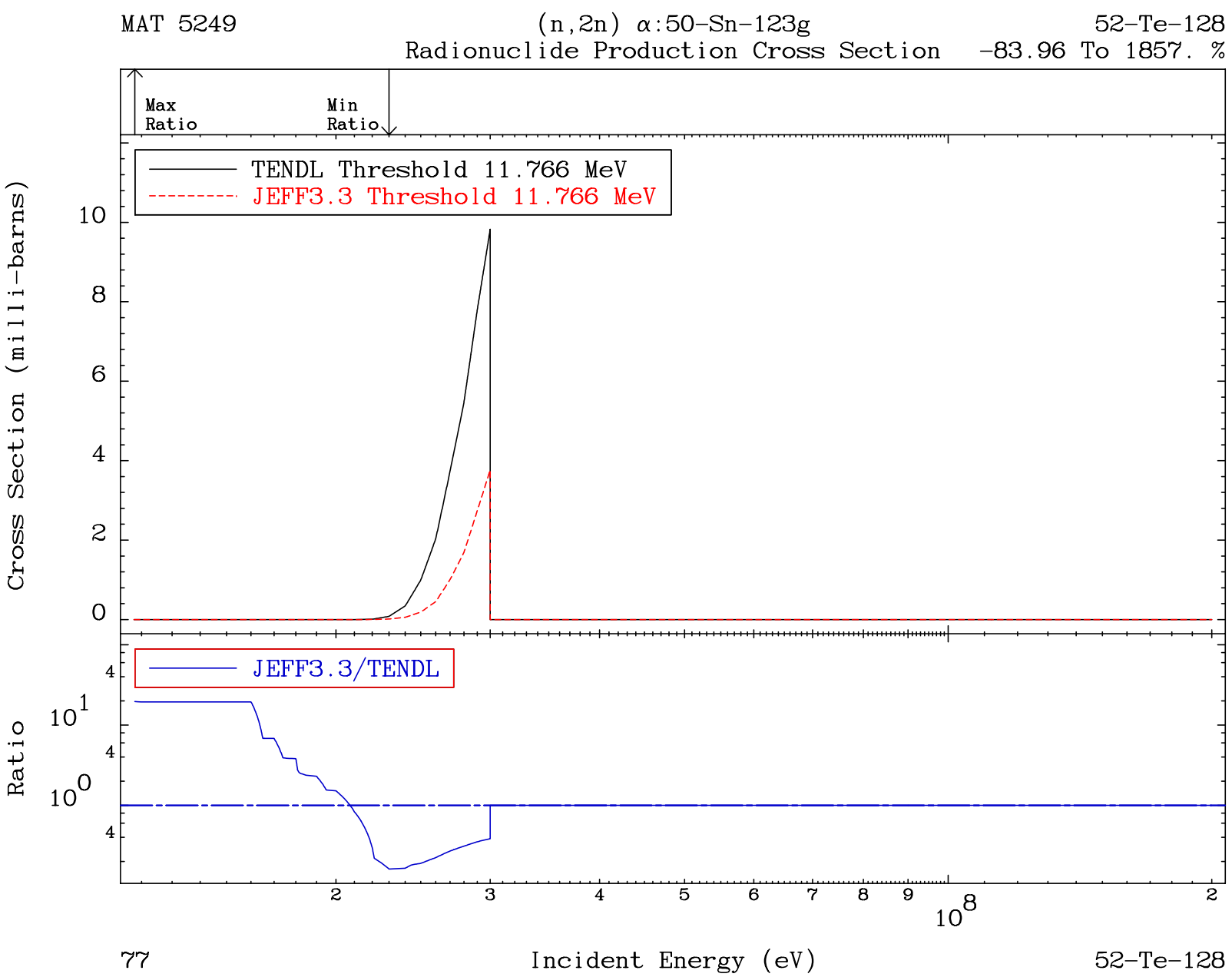

MAT 5249
Dpa elastic (mt2)
Cross Section
52-Te-128
-99.84 To 2113. %
Min Ratio
Max Ratio
TENDL Threshold 741.12 eV
JEFF3.3 Threshold 748.01 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
52-Te-128

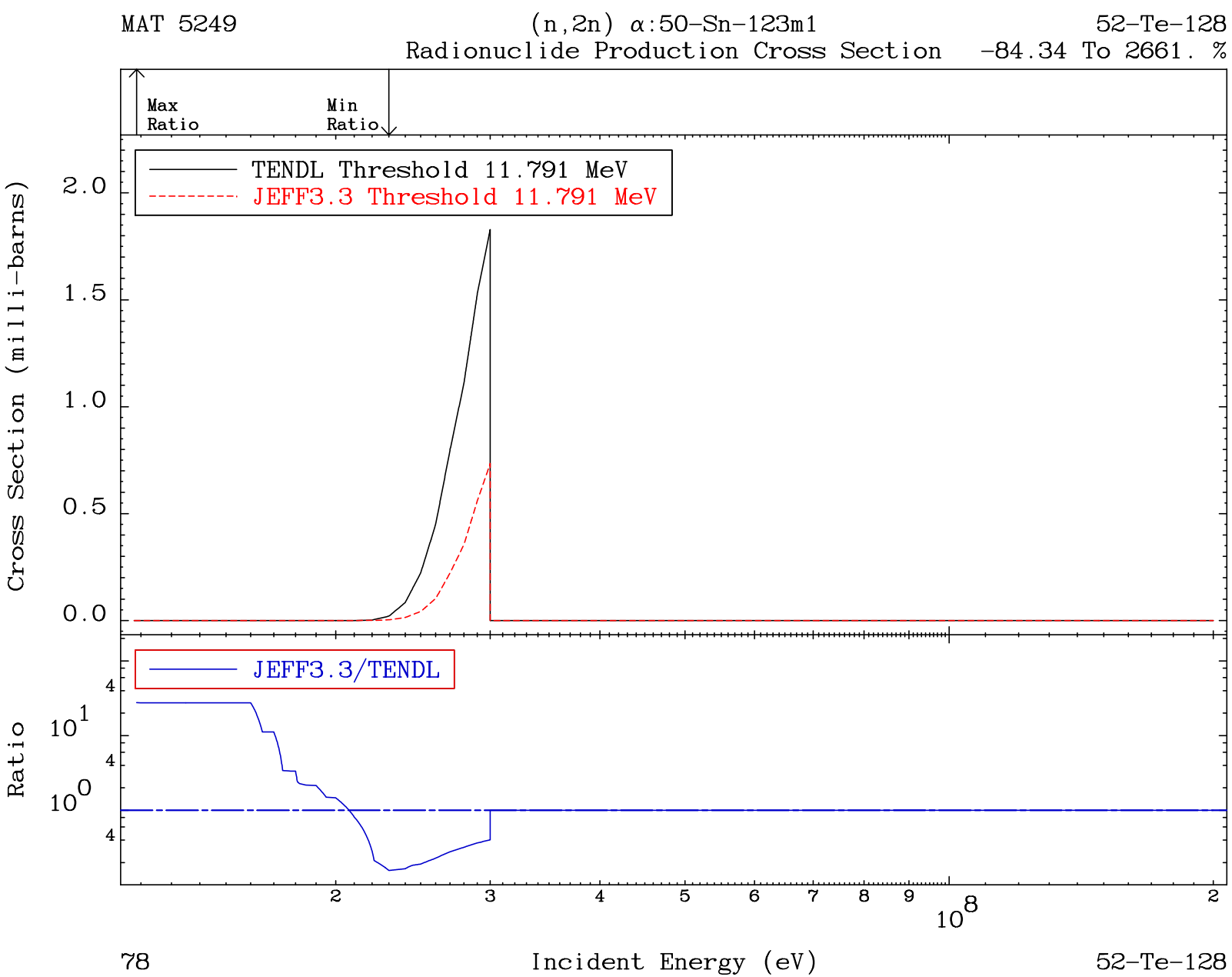

MAT 5249
Dpa inelastic (mt51-91)
Cross Section
52-Te-128
-0.057 To 0.074 %
Min Ratio
Max Ratio
TENDL Threshold 749.08 keV
JEFF3.3 Threshold 749.08 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
52-Te-128

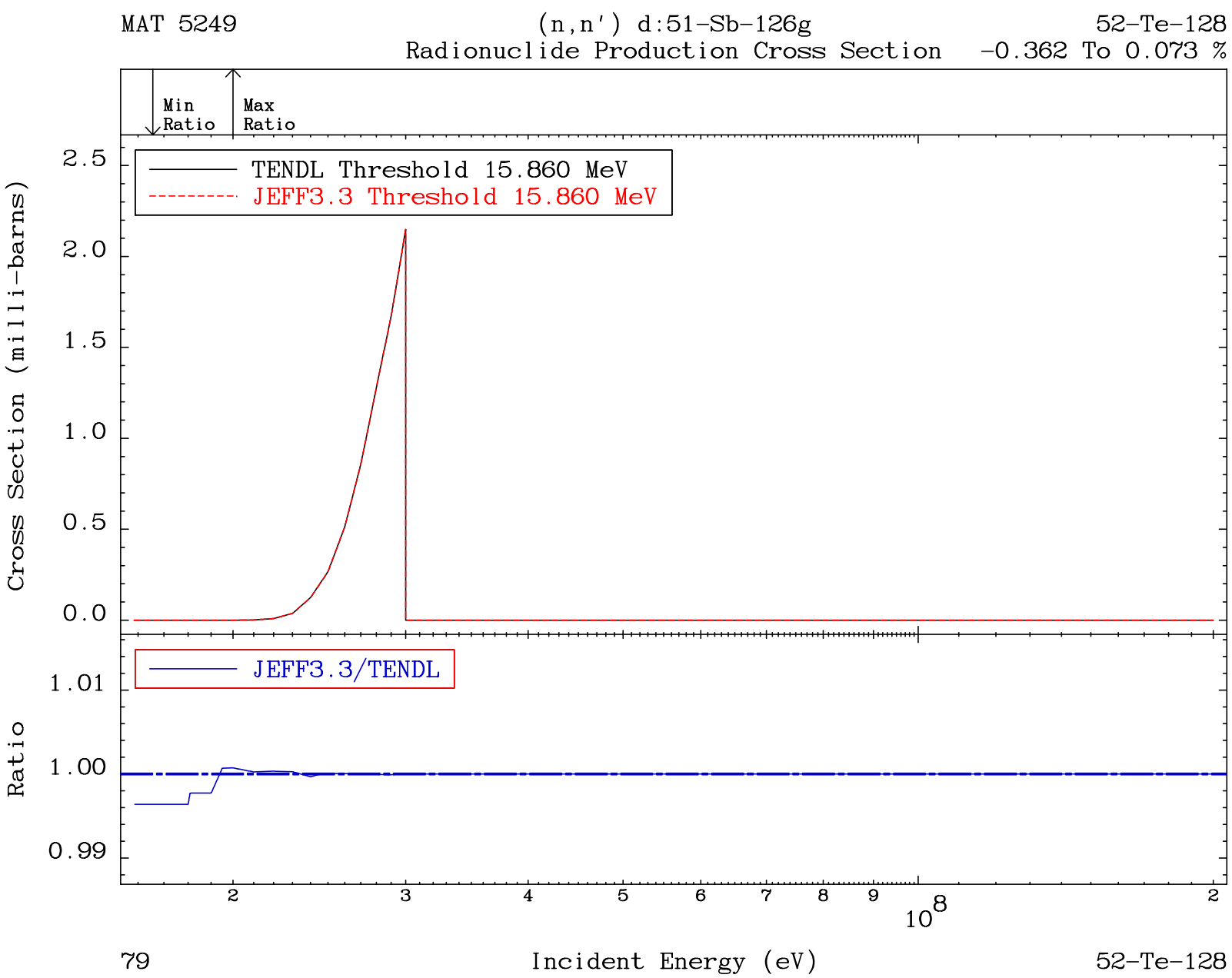

MAT 5249
Dpa disappearance (mt102 -120)
Cross Section
52-Te-128
-100.0 To 5169. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
74
52-Te-128

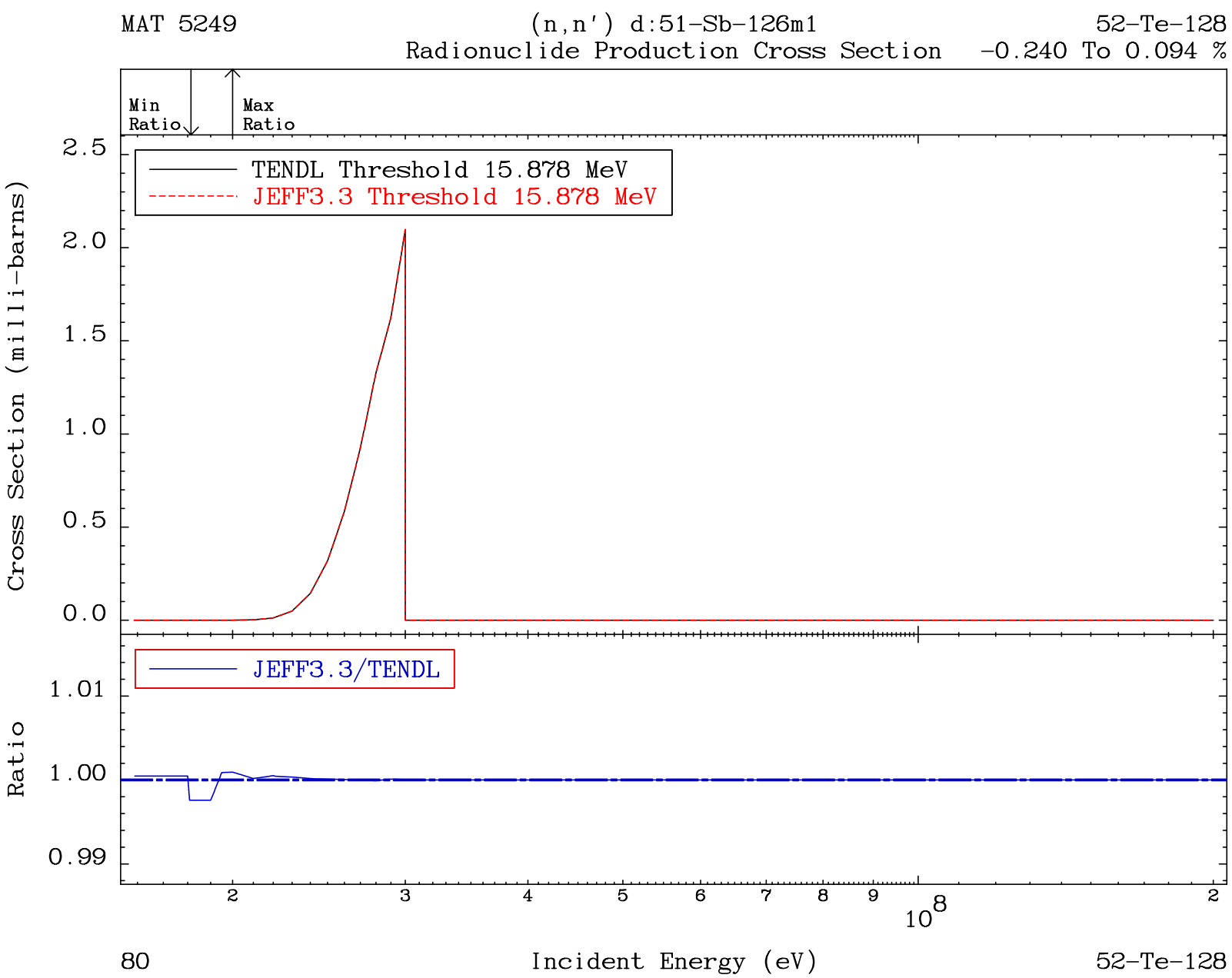

MAT 5249
(n,2n):52-Te-127g
52-Te-128
Radionuclide Production Cross Section -0.151 To 0.585 %
Min Ratio
Max Ratio
TENDL Threshold 8.8526 MeV
JEFF3.3 Threshold 8.8526 MeV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.01
1.00
9
10^7
2
3
4
5
6
7
8
9
10^8
2
75
Incident Energy (eV)
52-Te-128

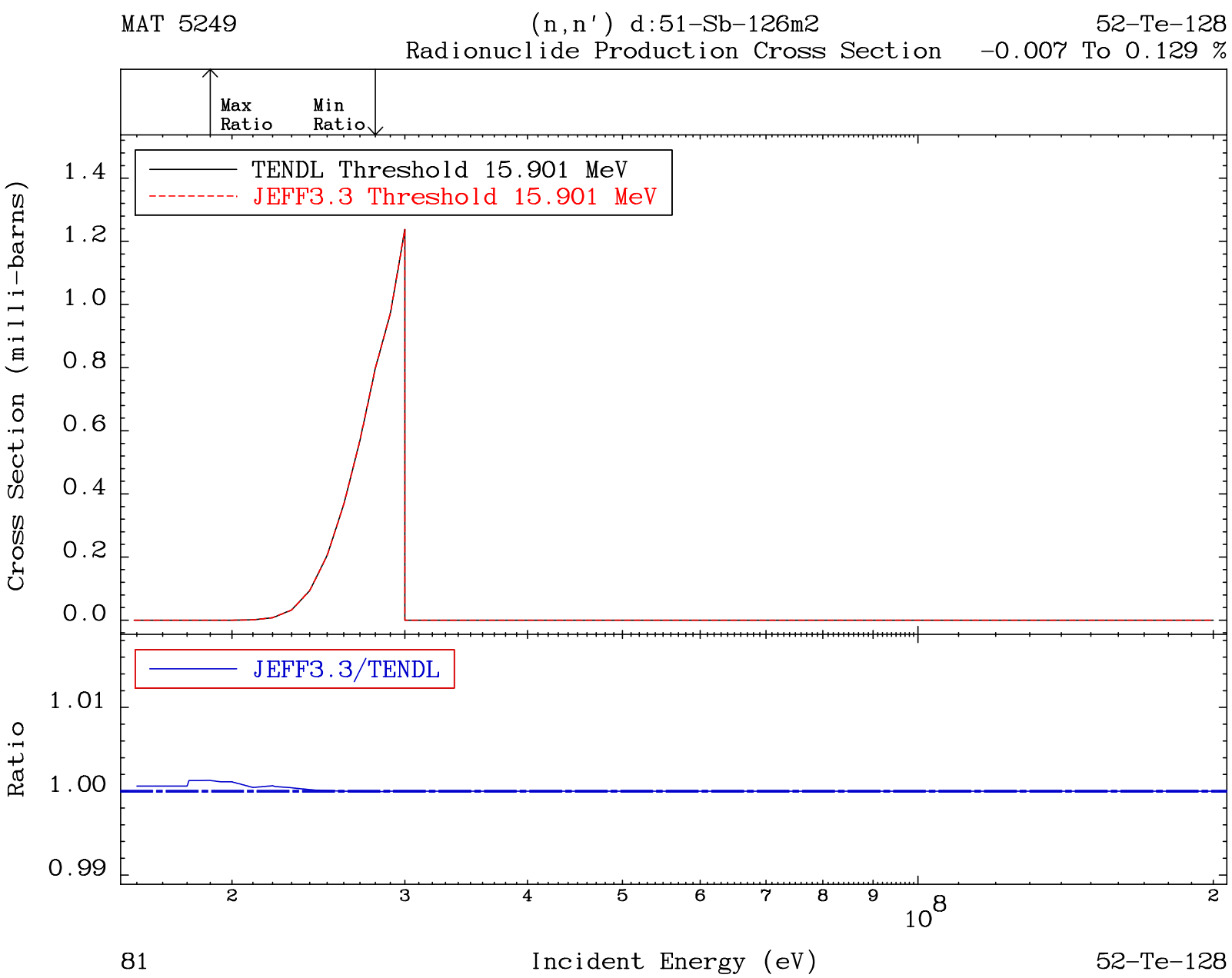

MAT 5249
(n,2n):52-Te-127m2
52-Te-128
Radionuclide Production Cross Section
-0.370 To 0.661 %
Min Ratio
Max Ratio
TENDL Threshold 8.9416 MeV
JEFF3.3 Threshold 8.9416 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
9
10^7
2
3
4
5
6
7
8
9
10^8
2
76
Incident Energy (eV)
52-Te-128

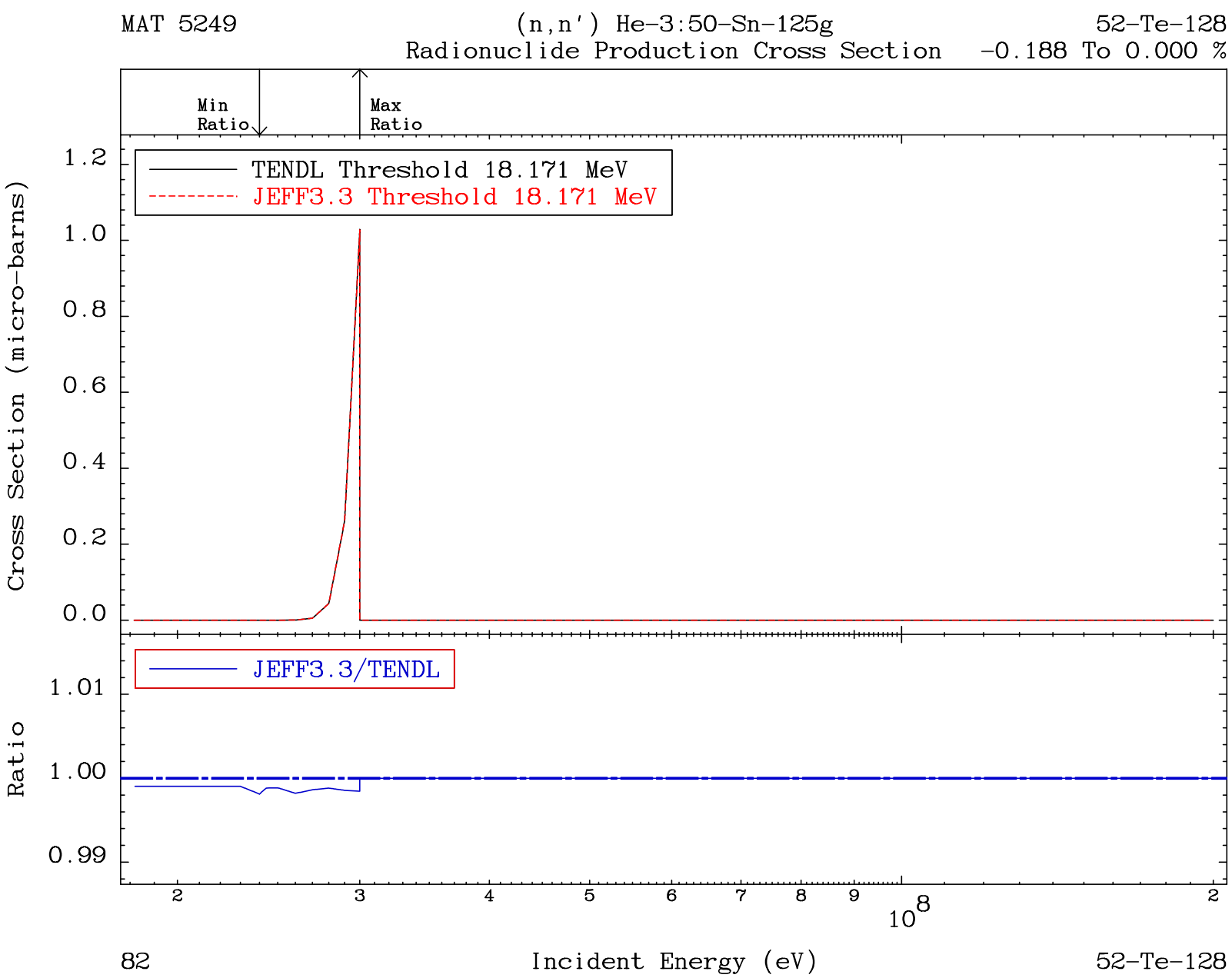

MAT 5249
(n,2n) α:50-Sn-123g
52-Te-128
Radionuclide Production Cross Section -83.96 To 1857. %
Max Ratio
Min Ratio
TENDL Threshold 11.766 MeV
JEFF3.3 Threshold 11.766 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
52-Te-128

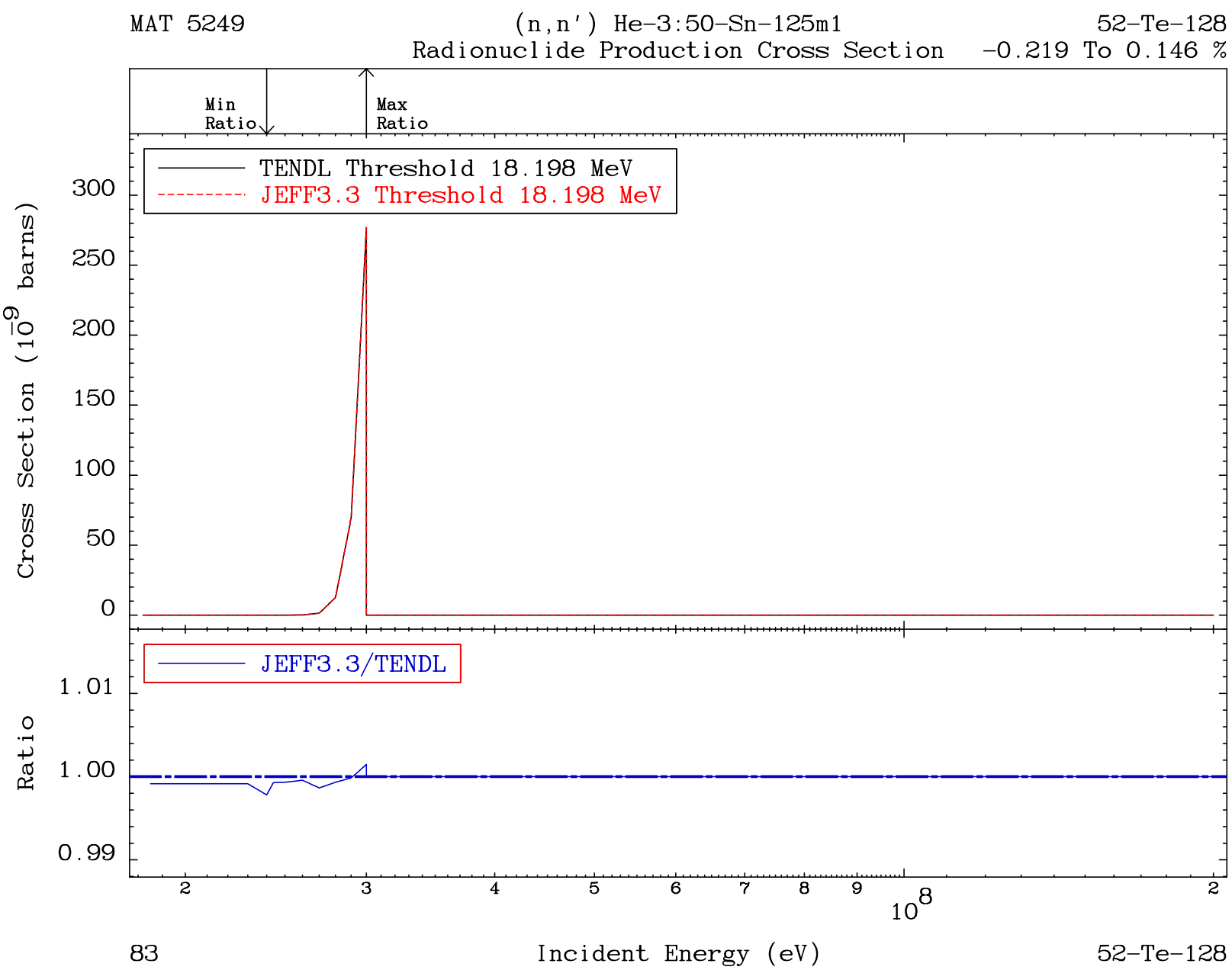

MAT 5249
(n,2n) α:50-Sn-123m1
52-Te-128
Radionuclide Production Cross Section -84.34 To 2661. %
Max Ratio
Min Ratio
TENDL Threshold 11.791 MeV
JEFF3.3 Threshold 11.791 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
78
Incident Energy (eV)
52-Te-128

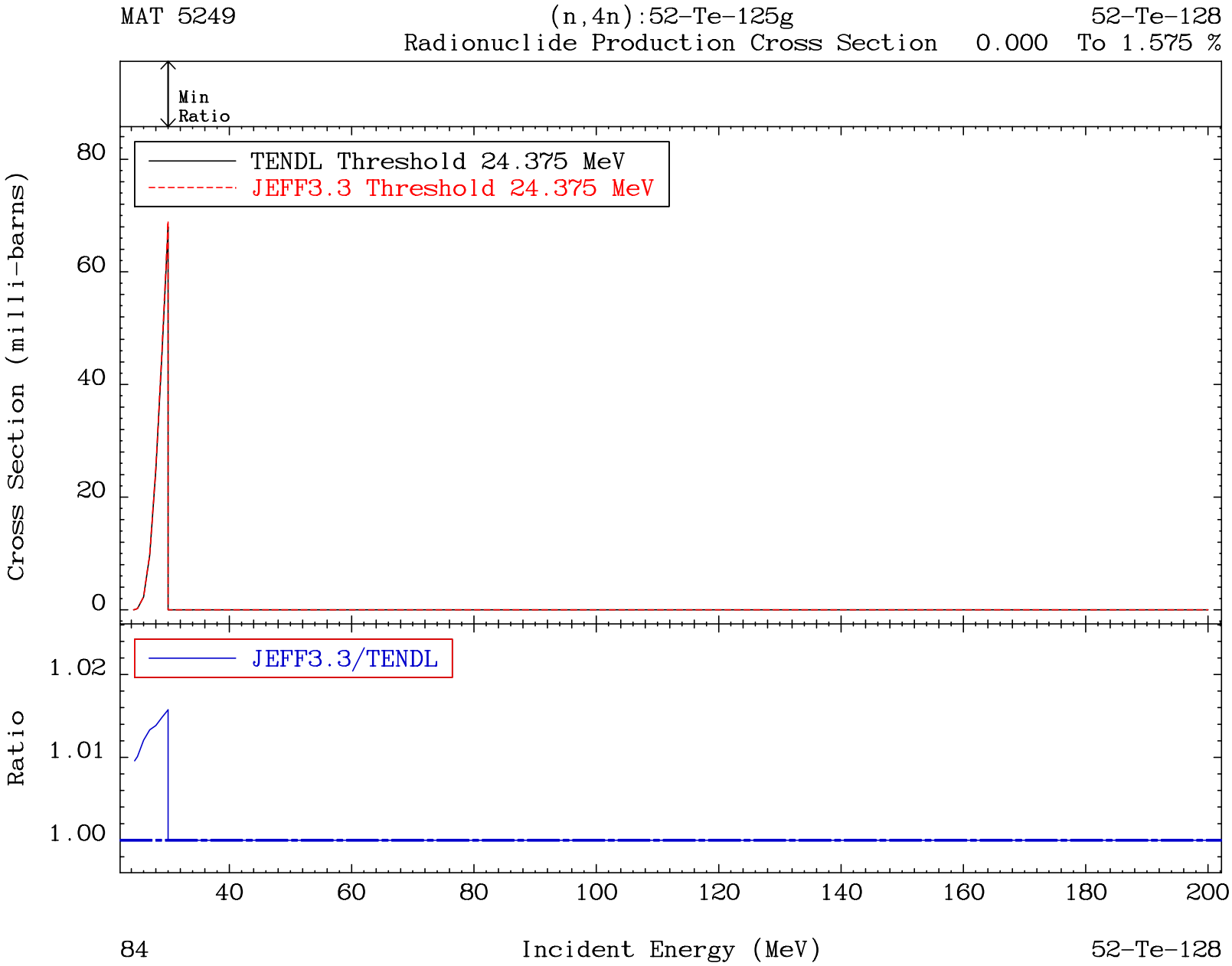

MAT 5249
(n,n') d:51-Sb-126g
52-Te-128
Radionuclide Production Cross Section
-0.362 To 0.073 %
Min Ratio
Max Ratio
TENDL Threshold 15.860 MeV
JEFF3.3 Threshold 15.860 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
52-Te-128

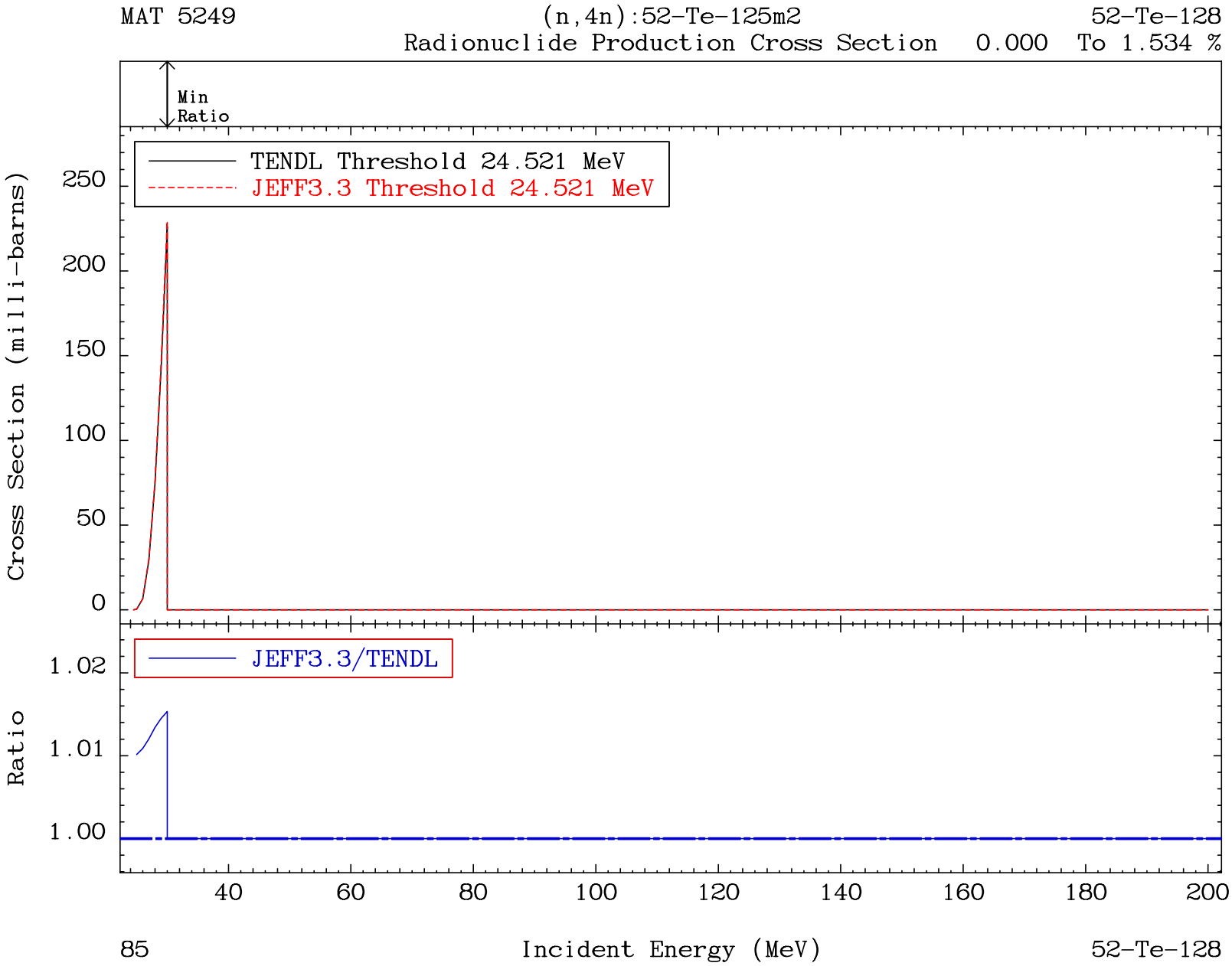

MAT 5249
(n,n') d:51-Sb-126m1
52-Te-128
Radionuclide Production Cross Section
-0.240 To 0.094 %
Min Ratio
Max Ratio
TENDL Threshold 15.878 MeV
JEFF3.3 Threshold 15.878 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
52-Te-128

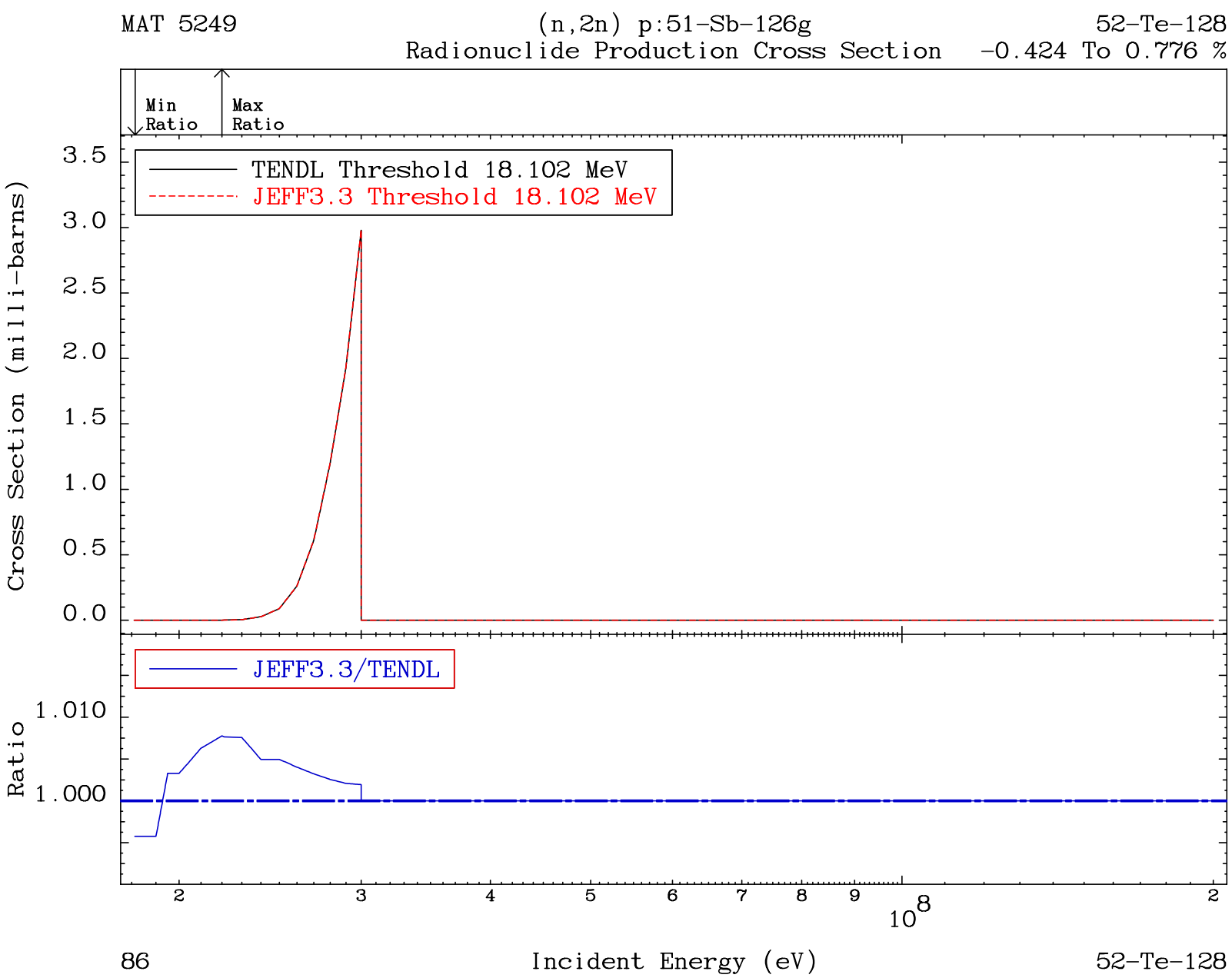

MAT 5249
(n,n') d:51-Sb-126m2
52-Te-128
Radionuclide Production Cross Section -0.007 To 0.129 %
Max Ratio
Min Ratio
TENDL Threshold 15.901 MeV
JEFF3.3 Threshold 15.901 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
52-Te-128

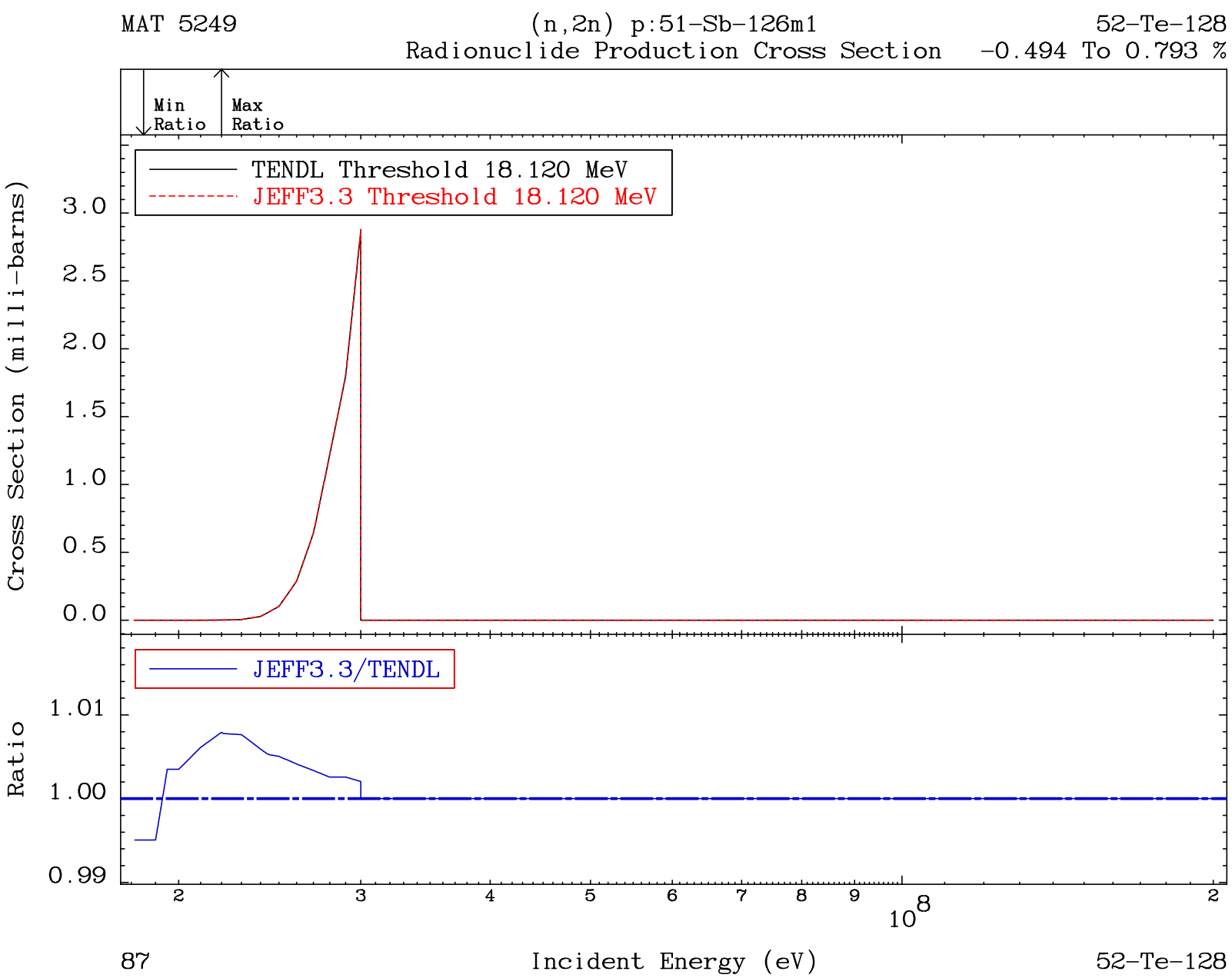

MAT 5249
(n,n') He-3:50-Sn-125g
52-Te-128
Radionuclide Production Cross Section
-0.188 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 18.171 MeV
JEFF3.3 Threshold 18.171 MeV
Cross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
52-Te-128

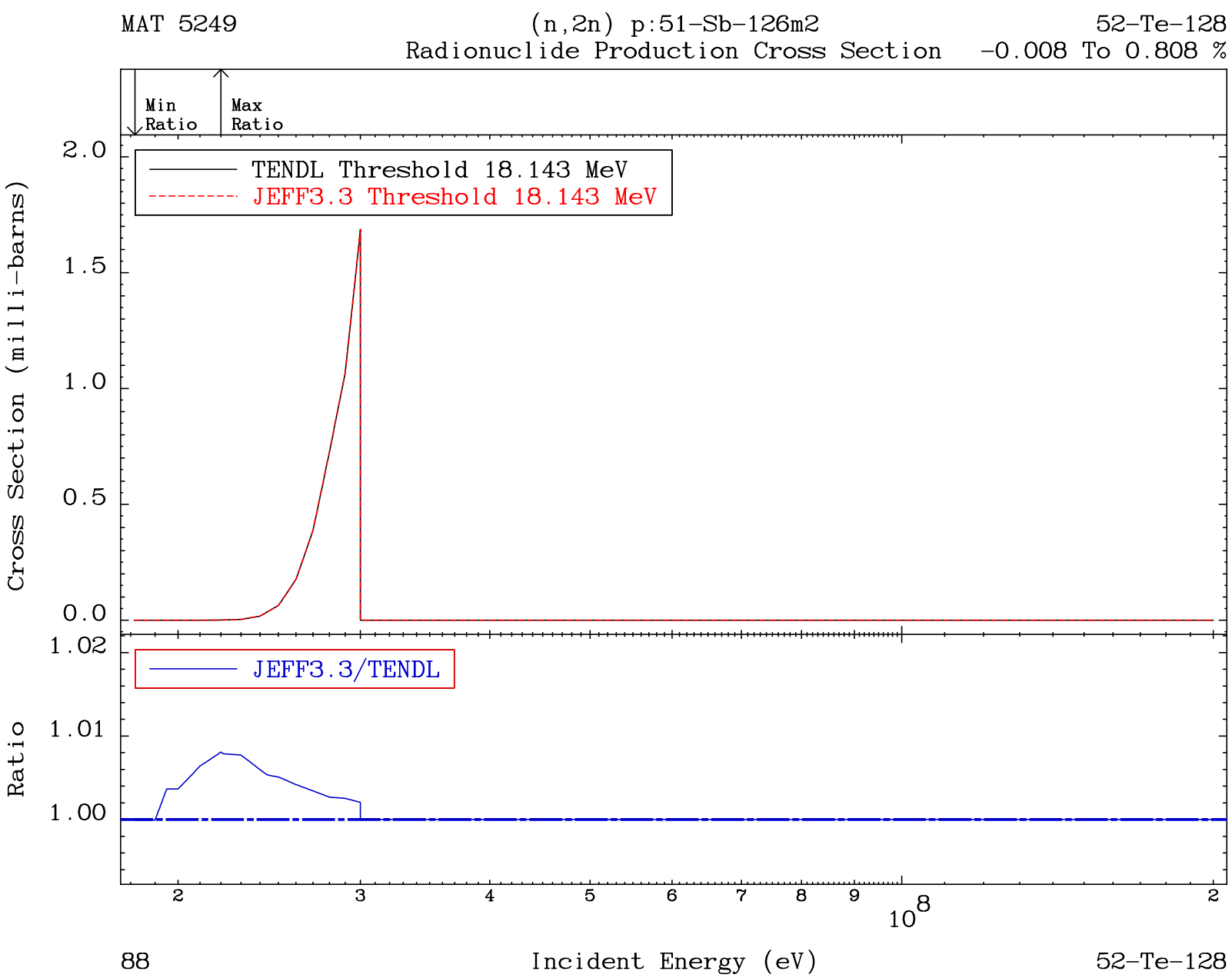

MAT 5249
(n,n') He-3:50-Sn-125m1
52-Te-128
Radionuclide Production Cross Section
-0.219 To 0.146 %
Min Ratio
Max Ratio
TENDL Threshold 18.198 MeV
JEFF3.3 Threshold 18.198 MeV
Cross Section (10^{-9} barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
52-Te-128

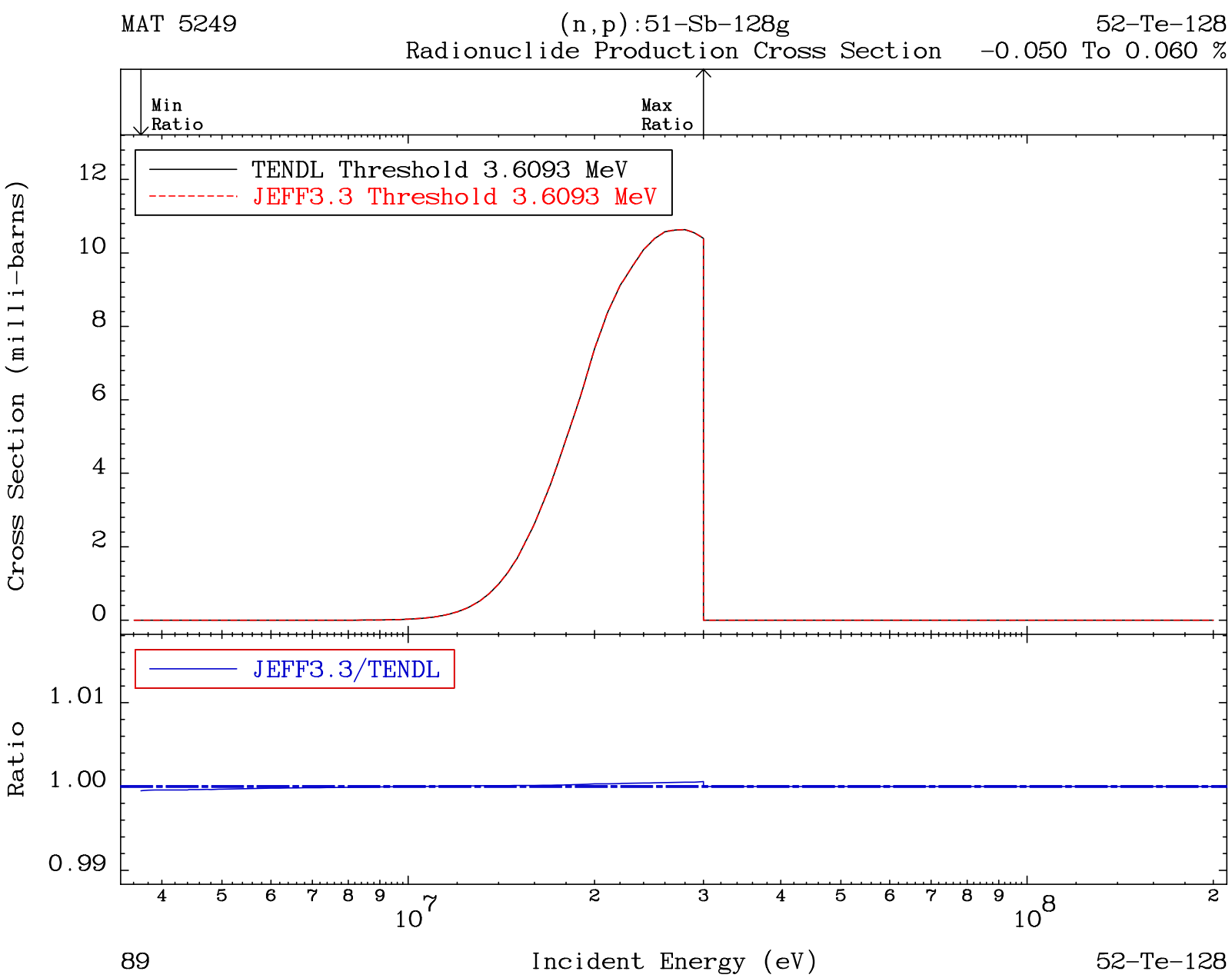

MAT 5249
(n,4n):52-Te-125g
52-Te-128
Radionuclide Production Cross Section 0.000 To 1.575 %
Min Ratio
TENDL Threshold 24.375 MeV
JEFF3.3 Threshold 24.375 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
84
Incident Energy (MeV)
52-Te-128

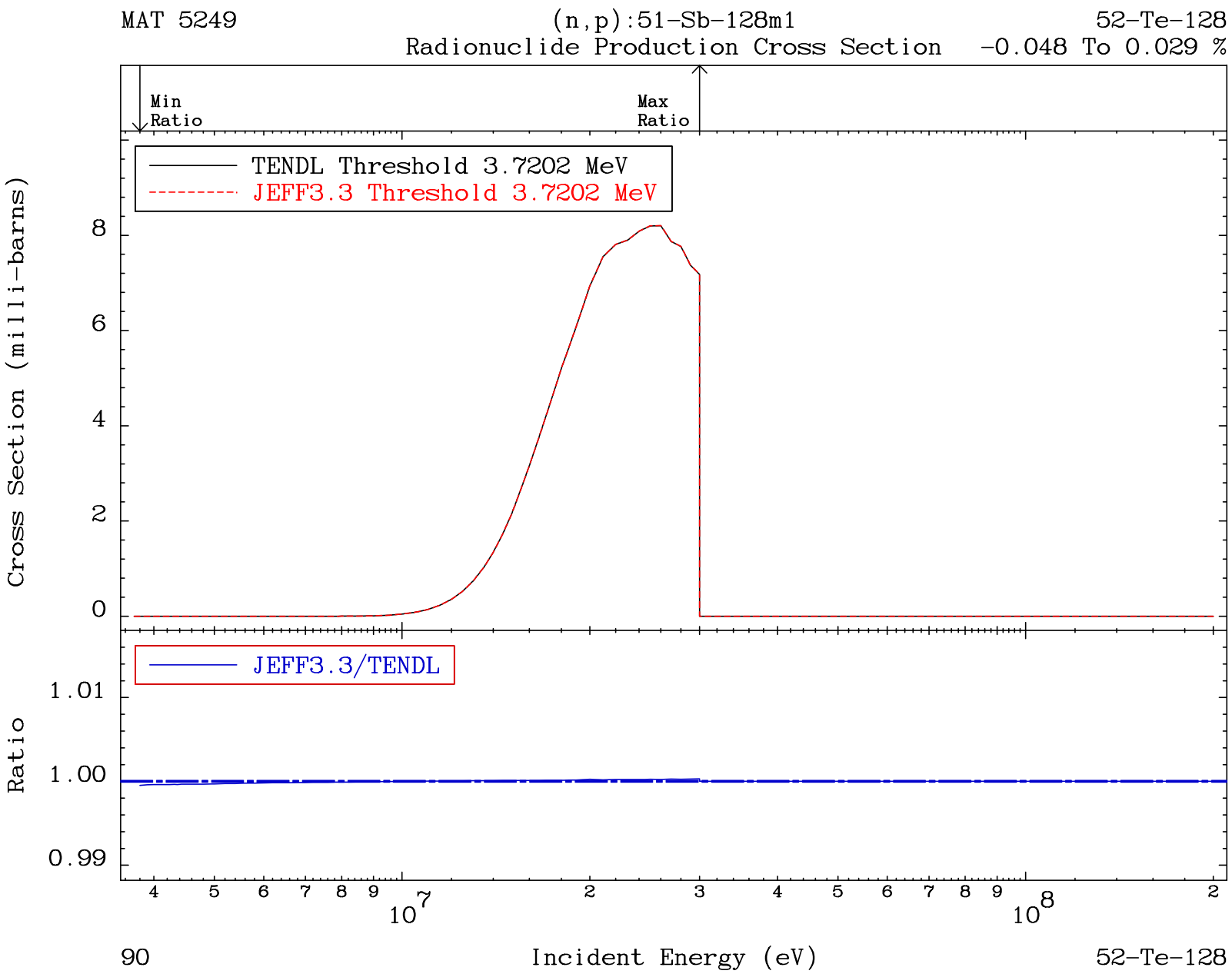

MAT 5249
(n,4n):52-Te-125m2
52-Te-128
Radionuclide Production Cross Section 0.000 To 1.534 %
Min Ratio
TENDL Threshold 24.521 MeV
JEFF3.3 Threshold 24.521 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
40
60
80
100
120
140
160
180
200
85
Incident Energy (MeV)
52-Te-128

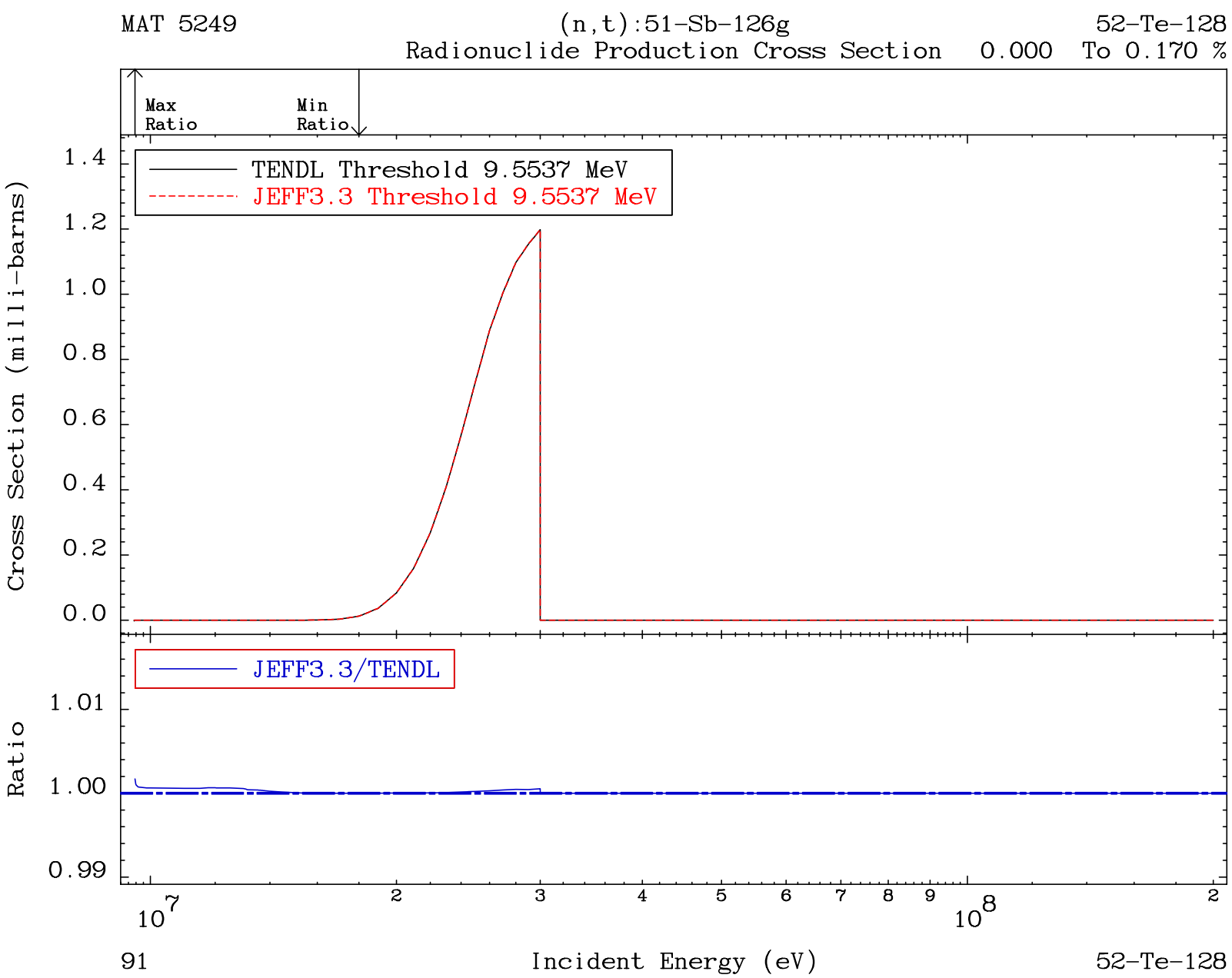

MAT 5249
(n,2n) p:51-Sb-126g
52-Te-128
Radionuclide Production Cross Section
-0.424 To 0.776 %
Min Ratio
Max Ratio
TENDL Threshold 18.102 MeV
JEFF3.3 Threshold 18.102 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.010
1.000
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
52-Te-128

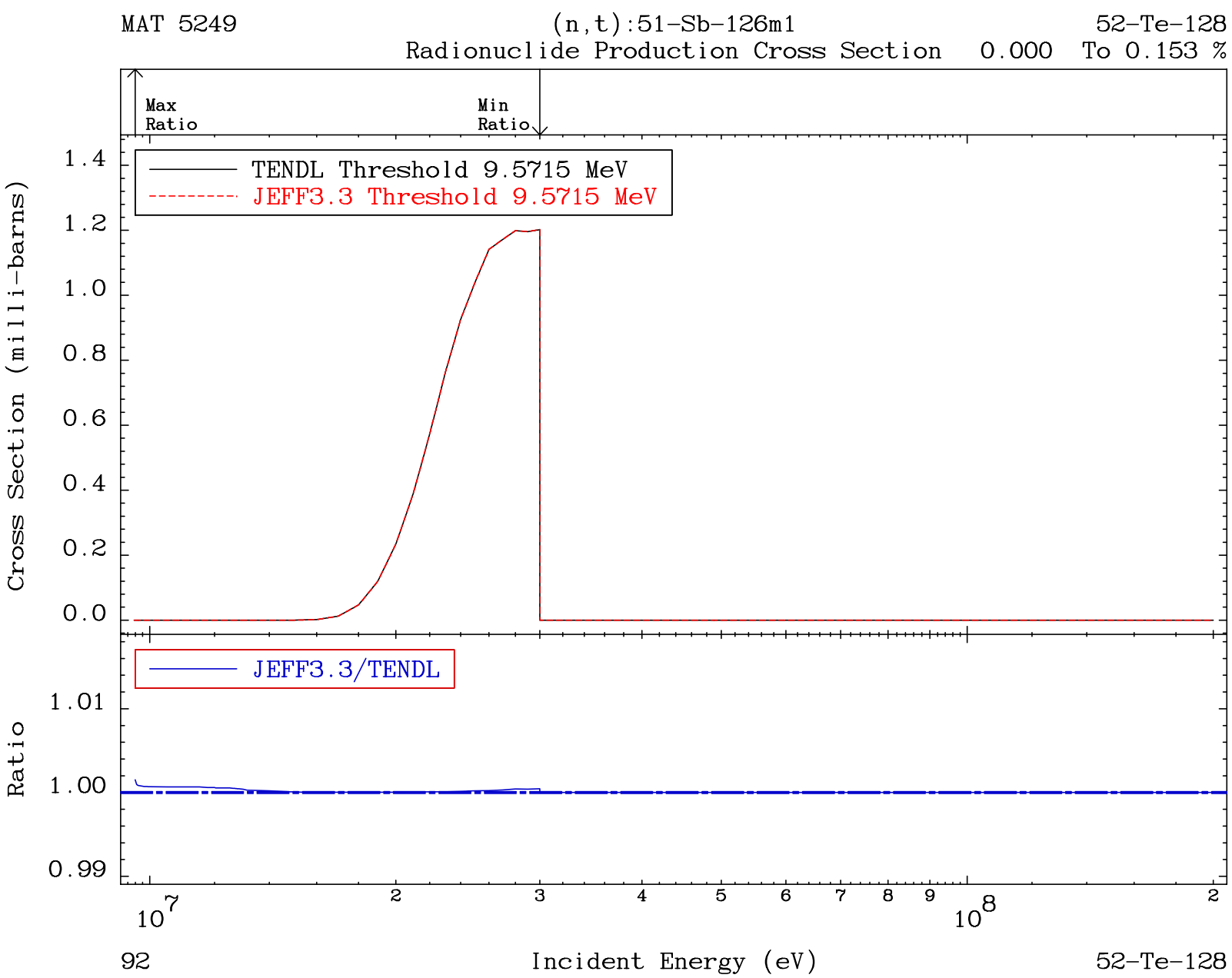

MAT 5249
(n,2n) p:51-Sb-126m1
52-Te-128
Radionuclide Production Cross Section
-0.494 To 0.793 %
Min Ratio
Max Ratio
TENDL Threshold 18.120 MeV
JEFF3.3 Threshold 18.120 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
52-Te-128

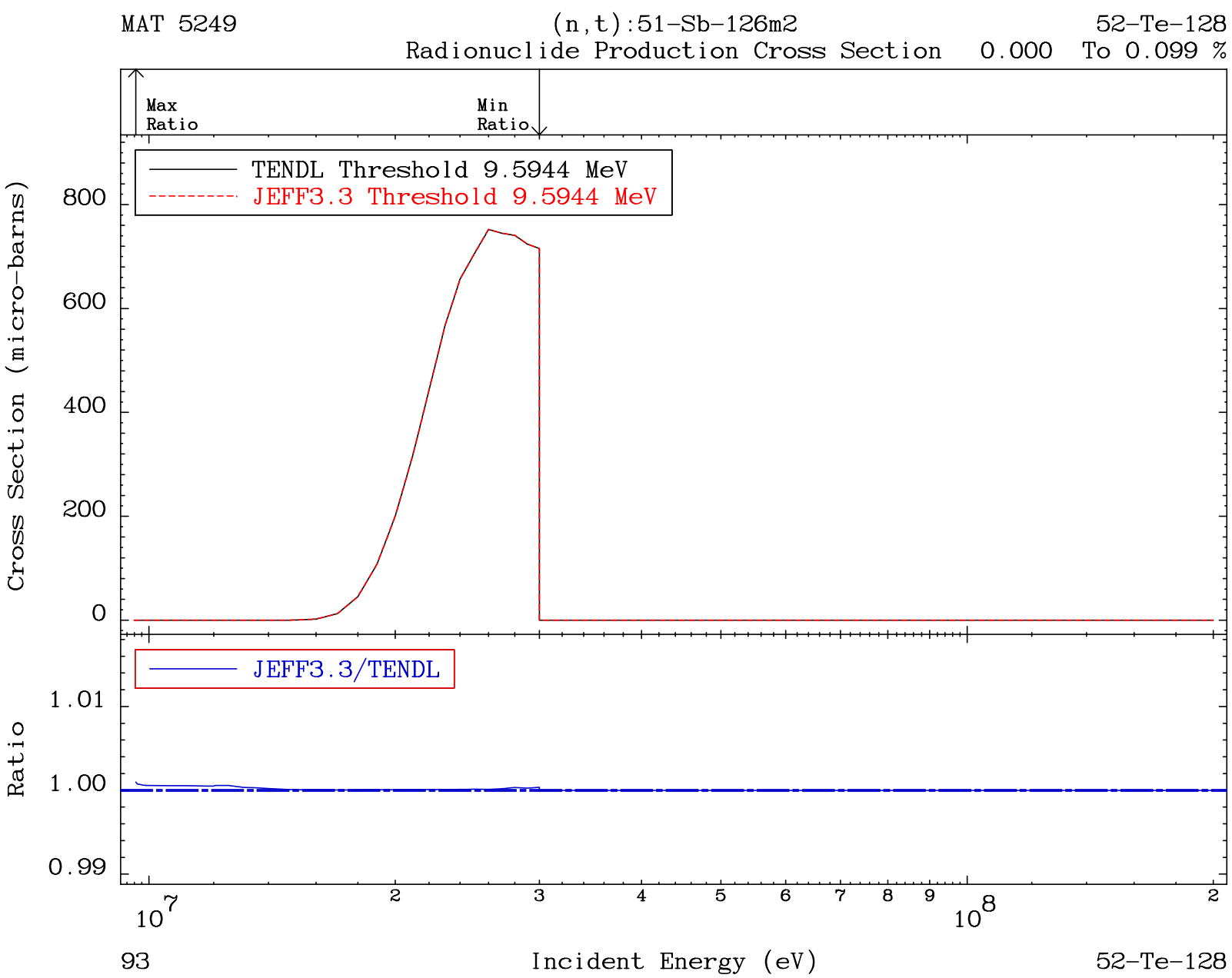

MAT 5249
(n,2n) p:51-Sb-126m2
52-Te-128
Radionuclide Production Cross Section
-0.008 To 0.808 %
Min Ratio
Max Ratio
TENDL Threshold 18.143 MeV
JEFF3.3 Threshold 18.143 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
52-Te-128

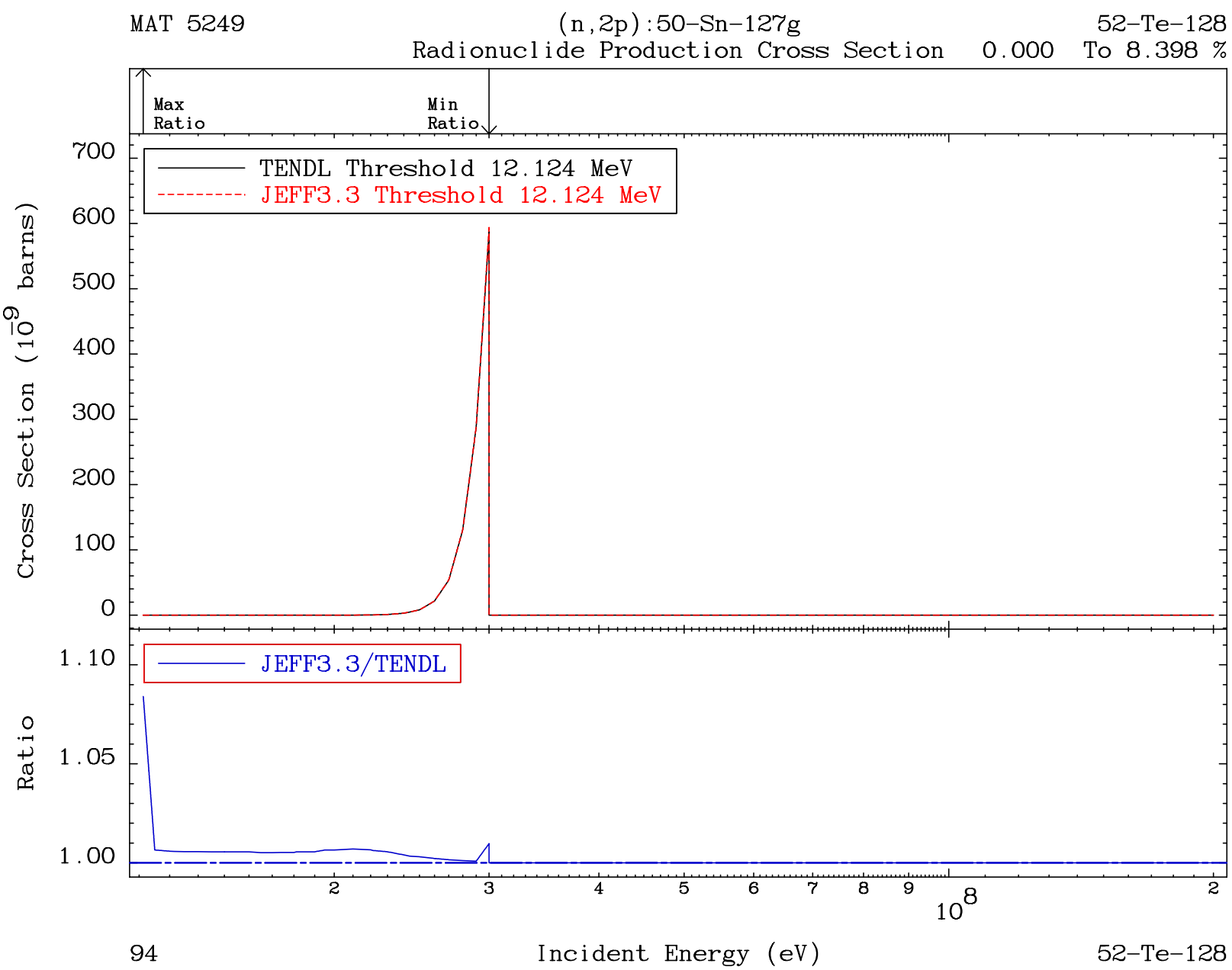

MAT 5249
(n,p):51-Sb-128g
52-Te-128
Radionuclide Production Cross Section
-0.050 To 0.060 %
Min Ratio
Max Ratio
TENDL Threshold 3.6093 MeV
JEFF3.3 Threshold 3.6093 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
89
Incident Energy (eV)
52-Te-128

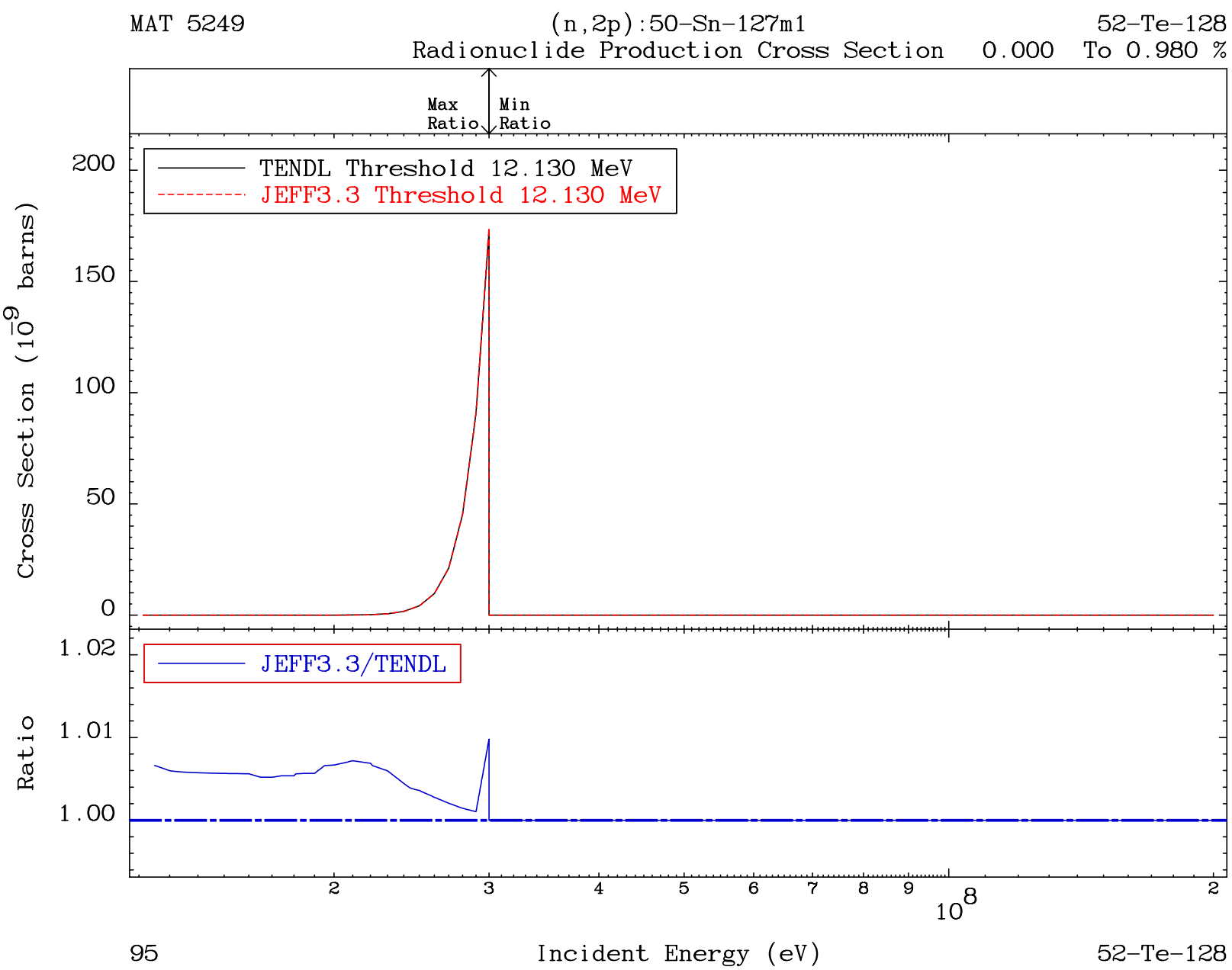

MAT 5249
(n,p):51-Sb-128m1
52-Te-128
Radionuclide Production Cross Section
-0.048 To 0.029 %
Min Ratio
Max Ratio
TENDL Threshold 3.7202 MeV
JEFF3.3 Threshold 3.7202 MeV
Cross Section (milli-barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
0.99
1.00
1.01
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
90
Incident Energy (eV)
52-Te-128

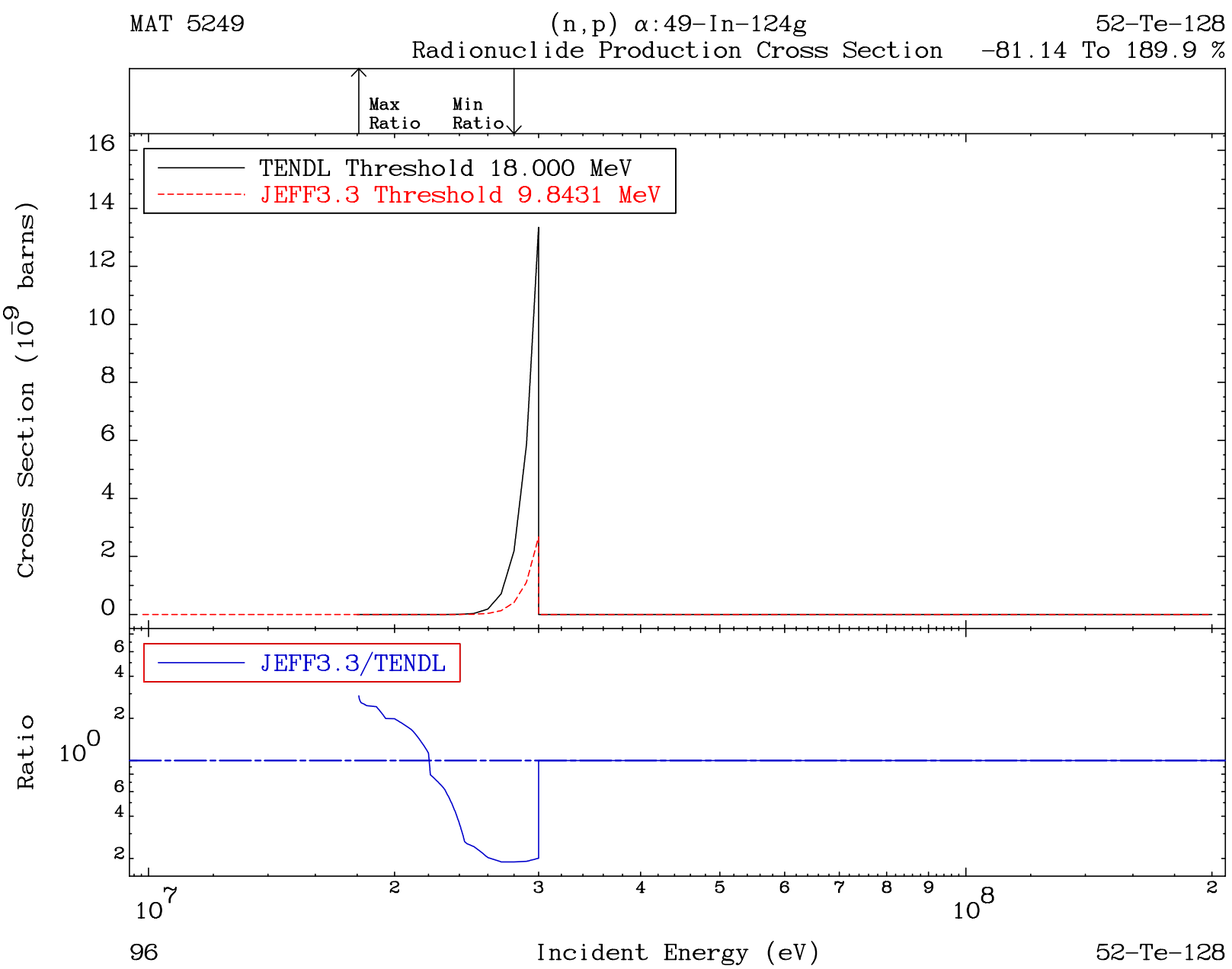

MAT 5249
(n,t):51-Sb-126g
52-Te-128
Radionuclide Production Cross Section 0.000 To 0.170 %
Max Ratio
Min Ratio
TENDL Threshold 9.5537 MeV
JEFF3.3 Threshold 9.5537 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^7
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
52-Te-128

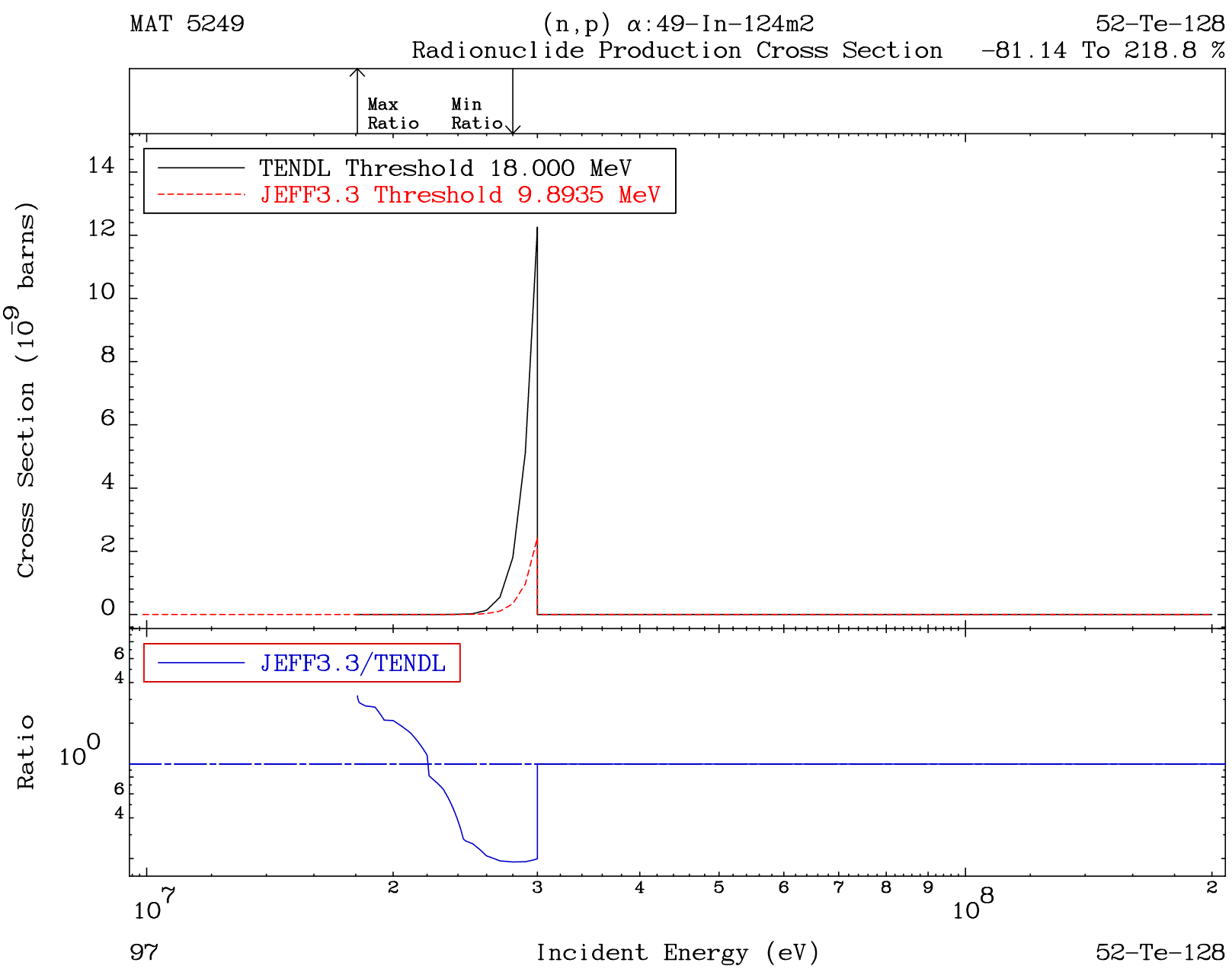

MAT 5249
(n,t):51-Sb-126m1
52-Te-128
Radionuclide Production Cross Section 0.000 To 0.153 %
Max Ratio
Min Ratio
TENDL Threshold 9.5715 MeV
JEFF3.3 Threshold 9.5715 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^7
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
52-Te-128

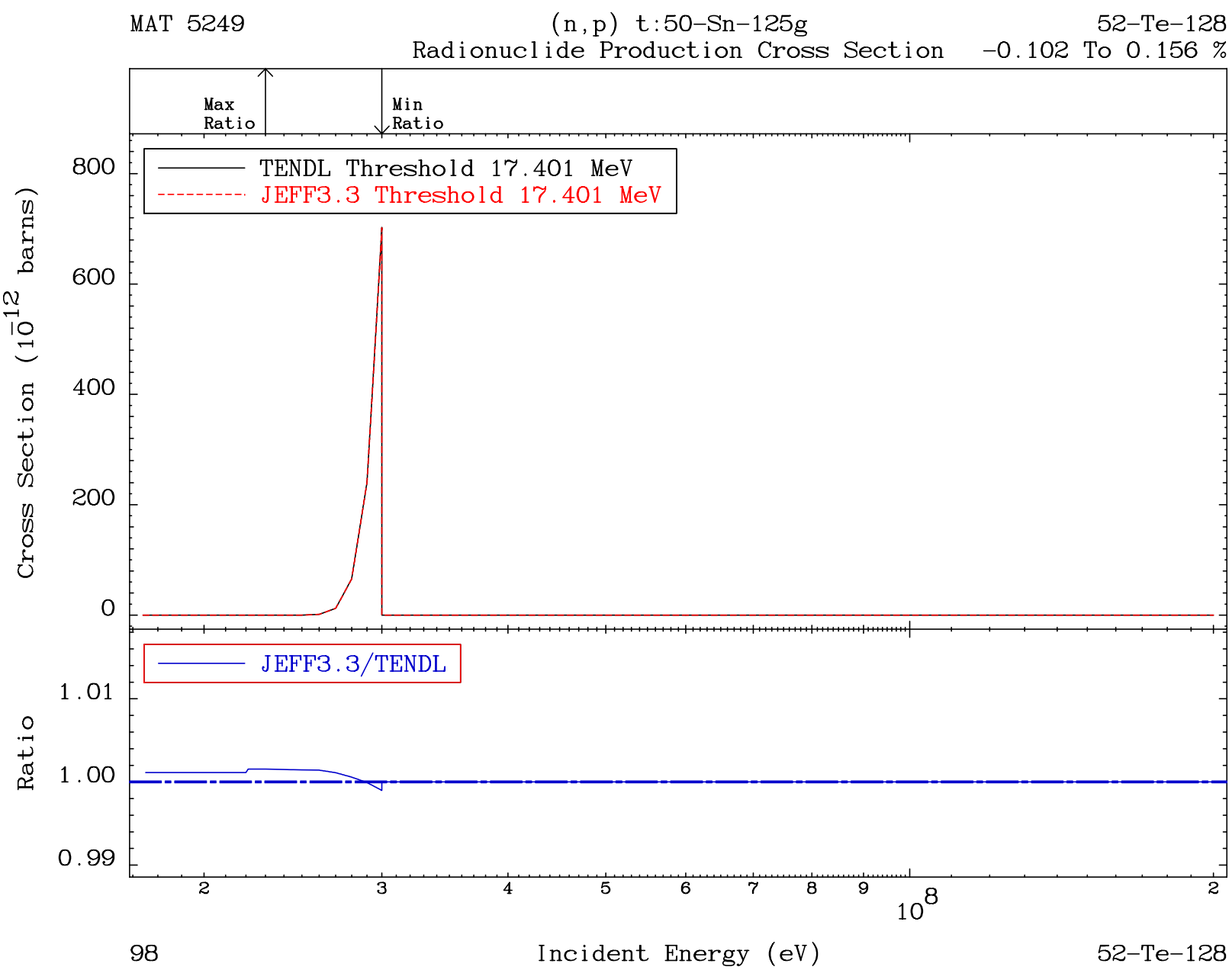

MAT 5249
(n,t):51-Sb-126m2
52-Te-128
Radionuclide Production Cross Section 0.000 To 0.099 %
Max Ratio
Min Ratio
TENDL Threshold 9.5944 MeV
JEFF3.3 Threshold 9.5944 MeV
Cross Section (micro-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
10^7
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
52-Te-128

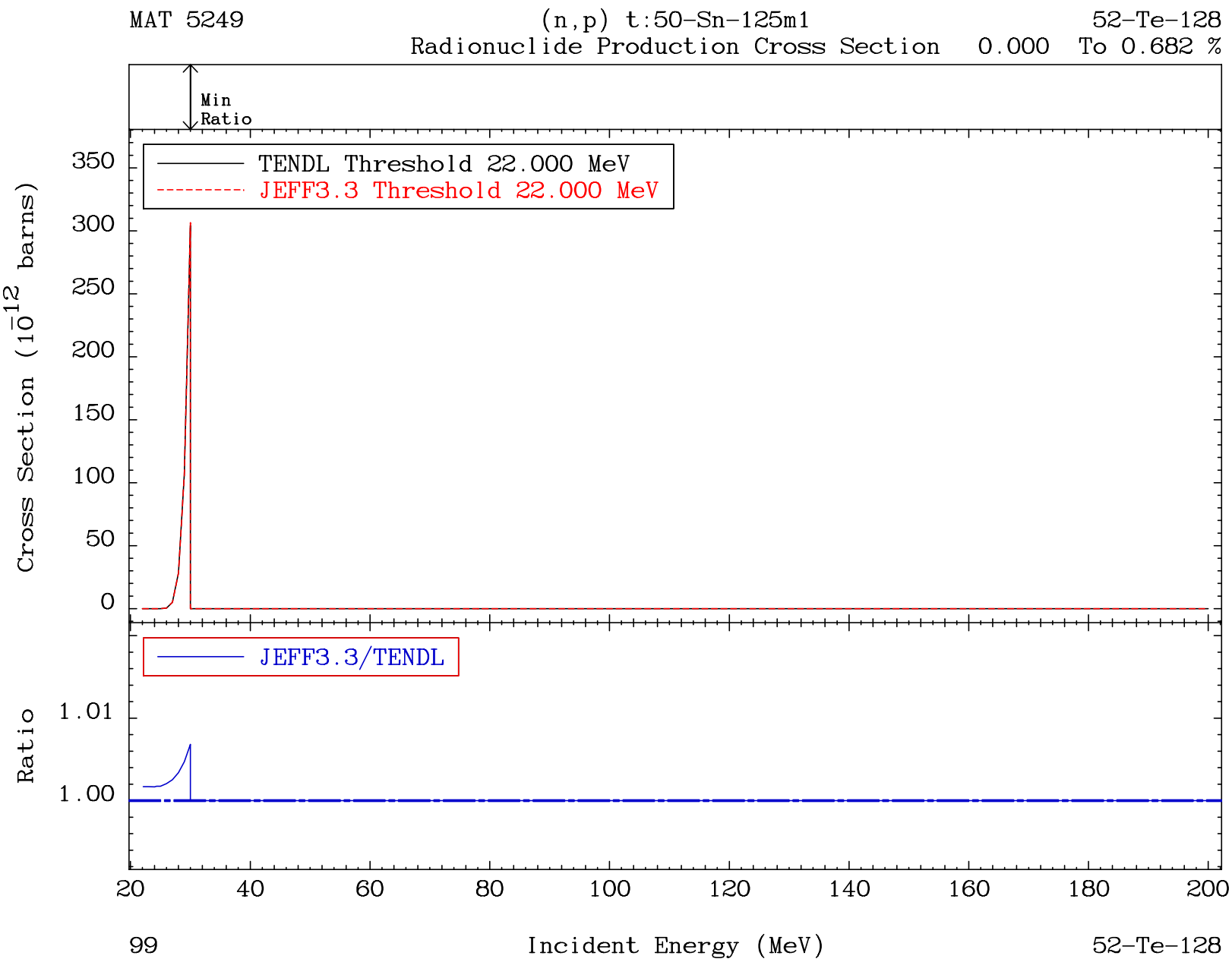

MAT 5249
(n,2p):50-Sn-127g
52-Te-128
Radionuclide Production Cross Section 0.000 To 8.398 %
Max Ratio
Min Ratio
TENDL Threshold 12.124 MeV
JEFF3.3 Threshold 12.124 MeV
Cross Section (10^{-9} barns)
700
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
52-Te-128


MAT 5249
(n,2p):50-Sn-127m1
52-Te-128
Radionuclide Production Cross Section 0.000 To 0.980 %
Max Ratio
Min Ratio
TENDL Threshold 12.130 MeV
JEFF3.3 Threshold 12.130 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
95
Incident Energy (eV)
52-Te-128


MAT 5249
(n,p) α:49-In-124g
52-Te-128
Radionuclide Production Cross Section -81.14 To 189.9 %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 9.8431 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
96
52-Te-128


MAT 5249
(n,p) α:49-In-124m2
52-Te-128
Radionuclide Production Cross Section -81.14 To 218.8 %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 9.8935 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
97
52-Te-128


MAT 5249
(n,p) t:50-Sn-125g
52-Te-128
Radionuclide Production Cross Section
-0.102 To 0.156 %
Max Ratio
Min Ratio
TENDL Threshold 17.401 MeV
JEFF3.3 Threshold 17.401 MeV
Cross Section (10^{-12} barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
98
Incident Energy (eV)
52-Te-128


MAT 5249
(n,p) t:50-Sn-125m1
52-Te-128
Radionuclide Production Cross Section 0.000 To 0.682 %
Min Ratio
TENDL Threshold 22.000 MeV
JEFF3.3 Threshold 22.000 MeV
Cross Section (10^{-12} barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.01
1.00
20
40
60
80
100
120
140
160
180
200
99
Incident Energy (MeV)
52-Te-128