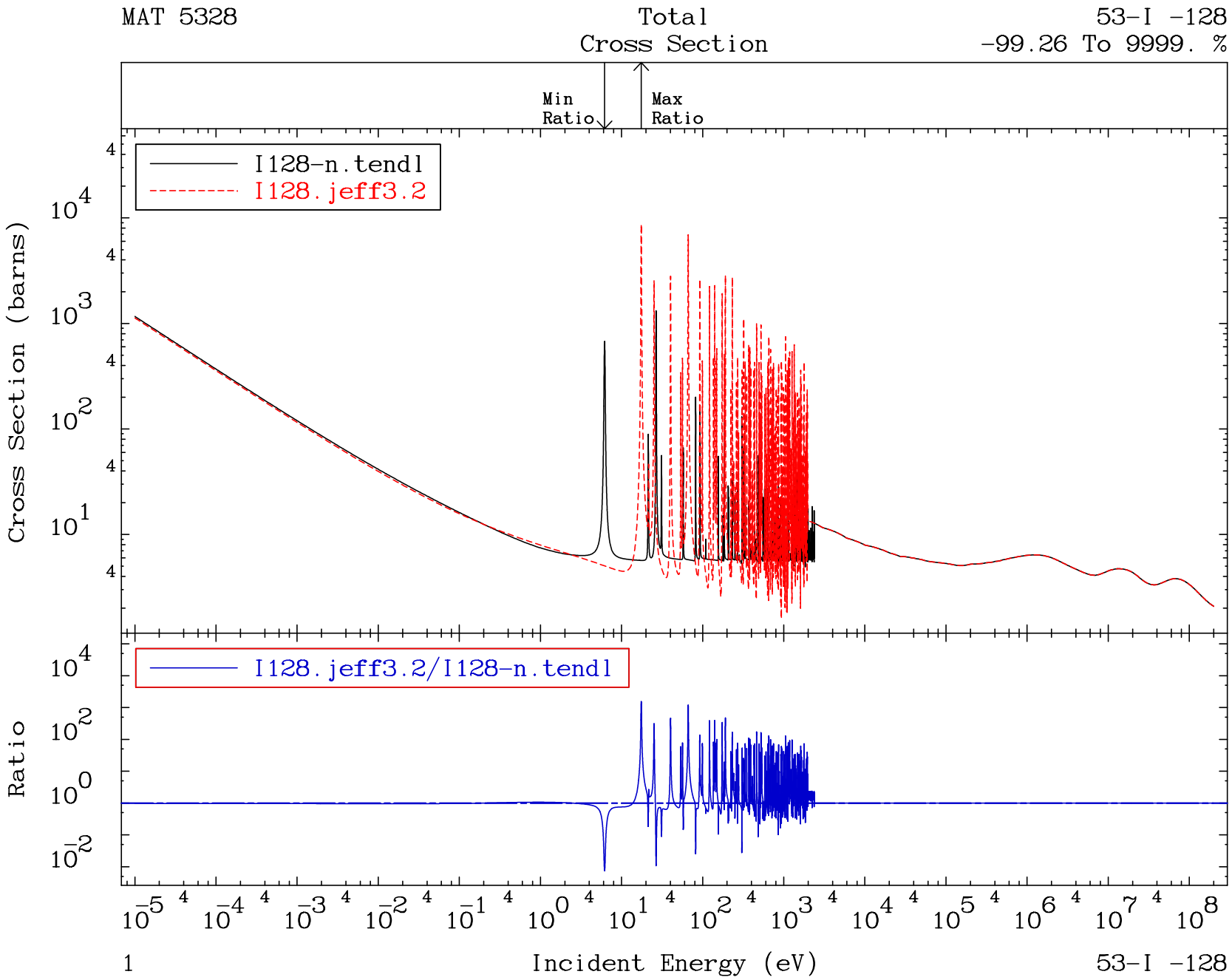
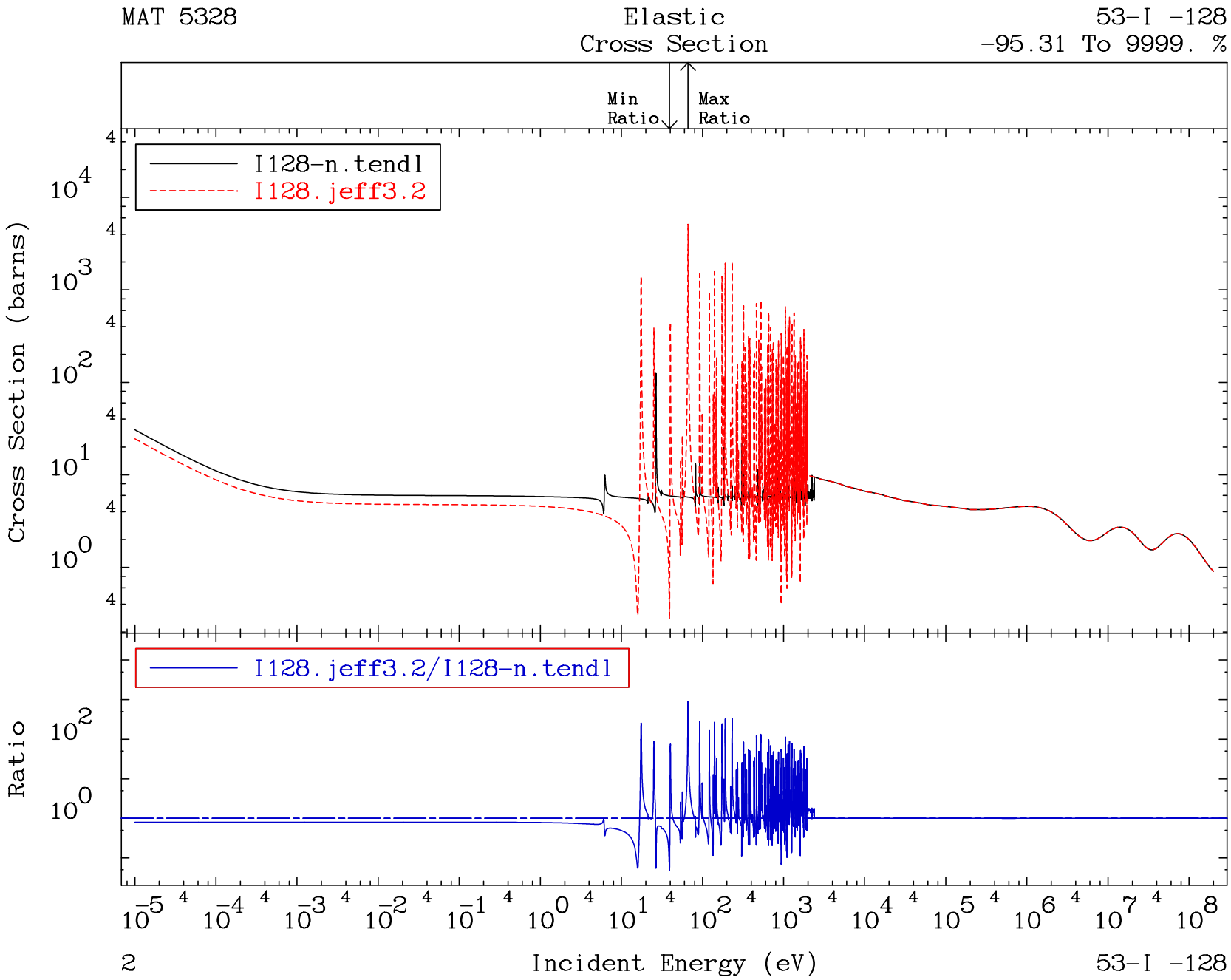
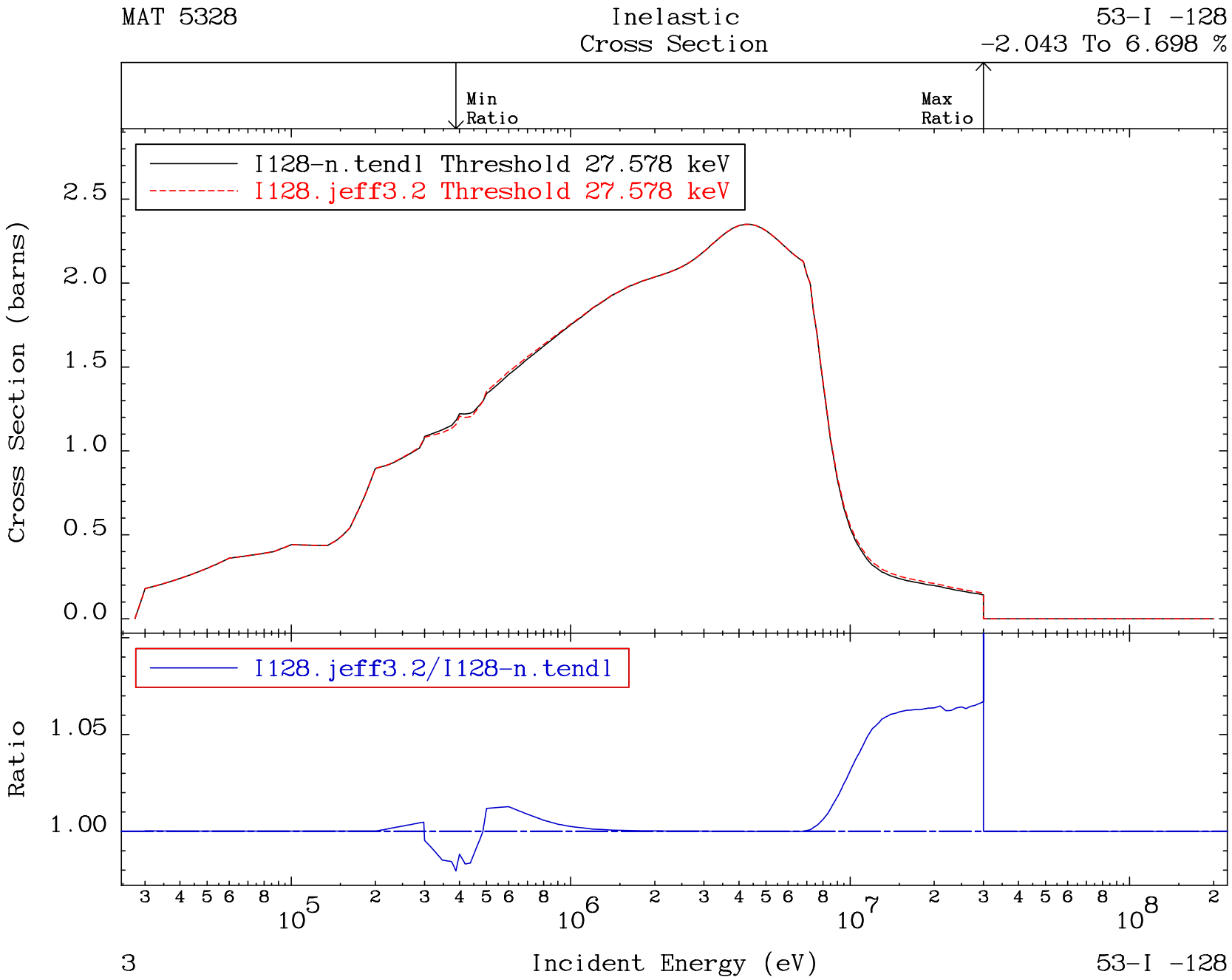
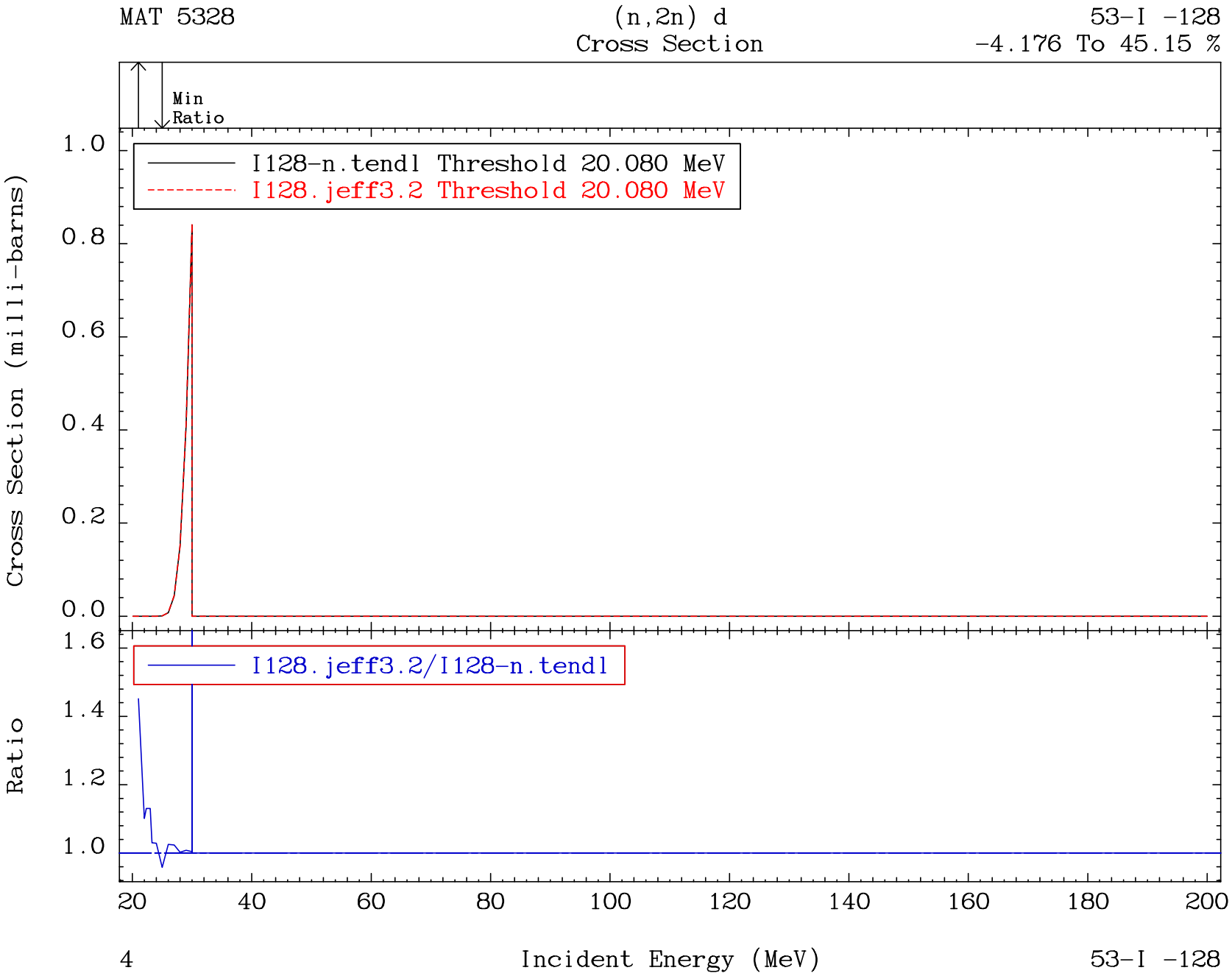
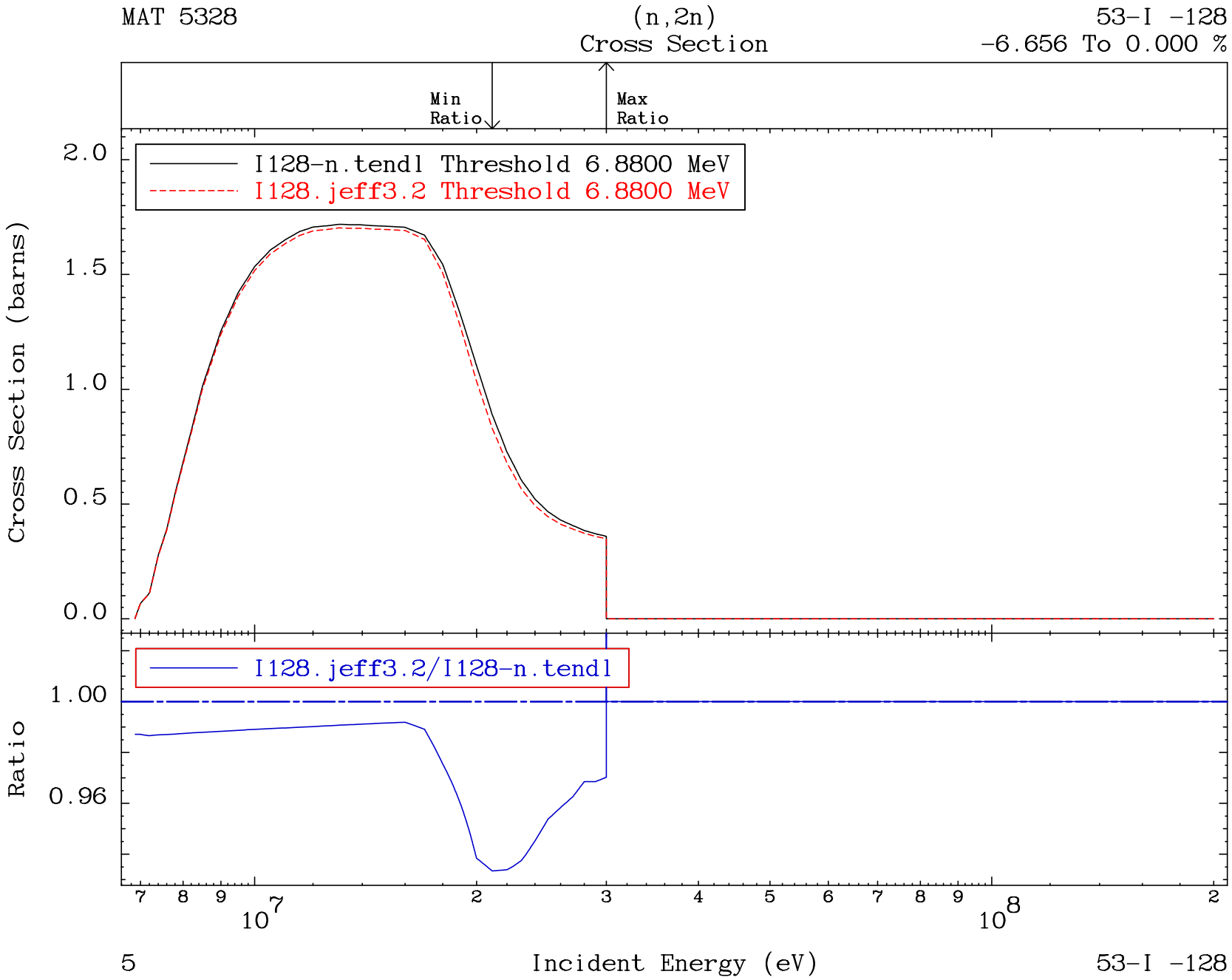
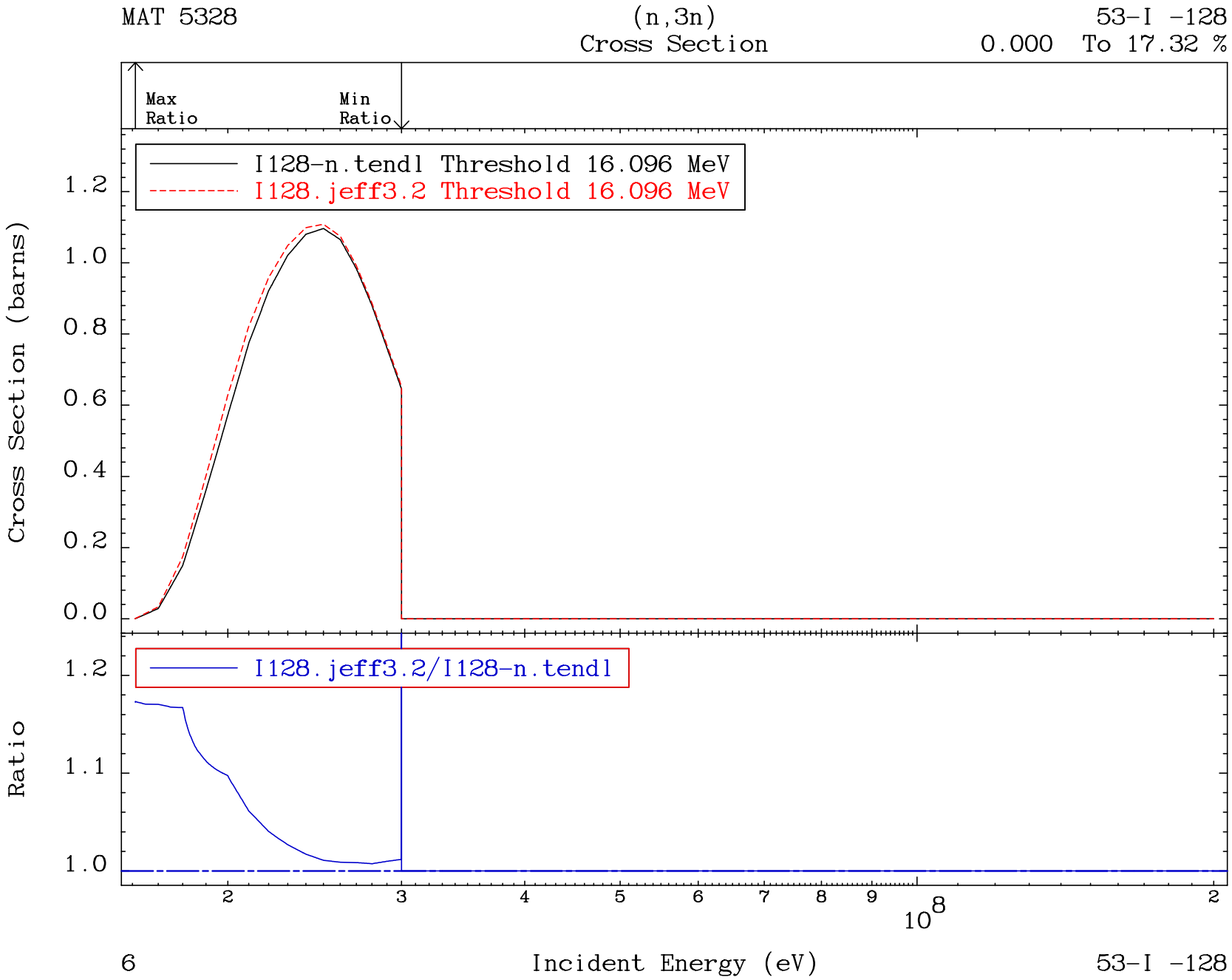

MAT 5328
Total
Cross Section
53-I -128
-99.26 To 9999. %
Min
Ratio
Max
Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
1
53-I -128

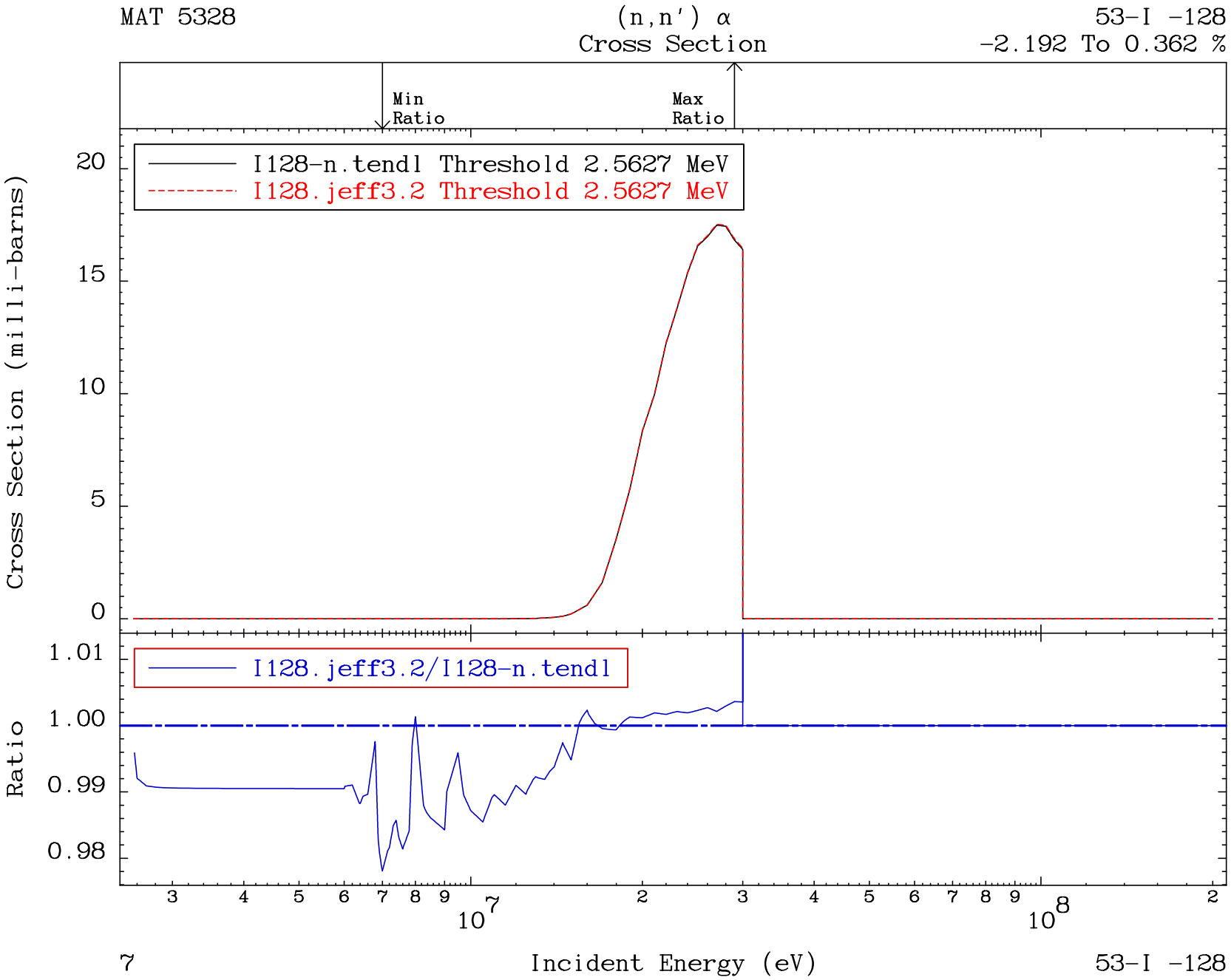

MAT 5328
Elastic
Cross Section
53-I -128
-95.31 To 9999. %
Min
Ratio
Max
Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
2
53-I -128

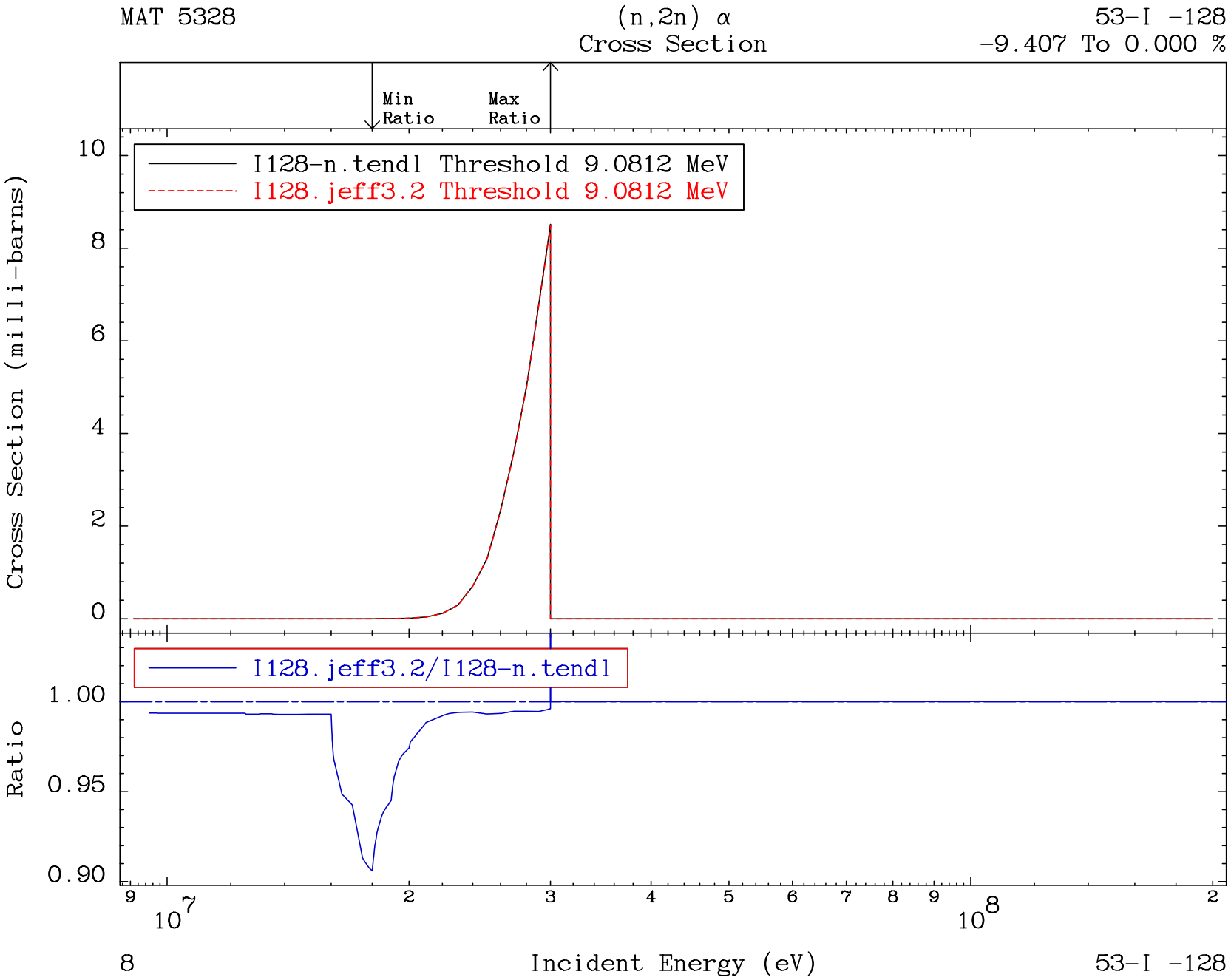

MAT 5328
Inelastic
Cross Section
53-I -128
-2.043 To 6.698 %
Min
Ratio
Max
Ratio
I128-n.tendl Threshold 27.578 keV
I128.jeff3.2 Threshold 27.578 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
I128.jeff3.2/I128-n.tendl
Ratio
1.05
1.00
3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
53-I -128

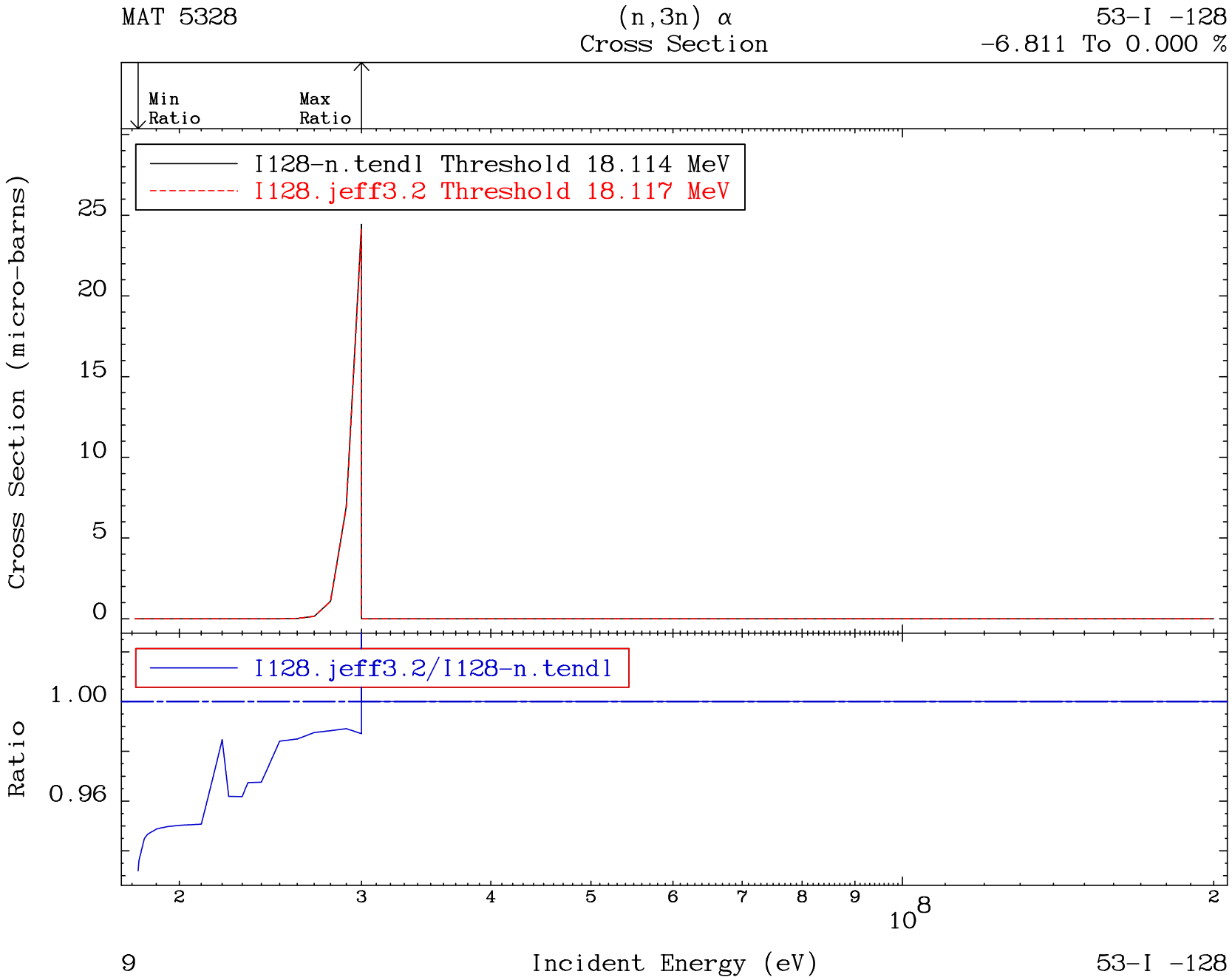

MAT 5328
(n,2n) d
Cross Section
53-I -128
-4.176 To 45.15 %
Min
Ratio
I128-n.tendl Threshold 20.080 MeV
I128.jeff3.2 Threshold 20.080 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
I128.jeff3.2/I128-n.tendl
Ratio
1.6
1.4
1.2
1.0
20
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
53-I -128

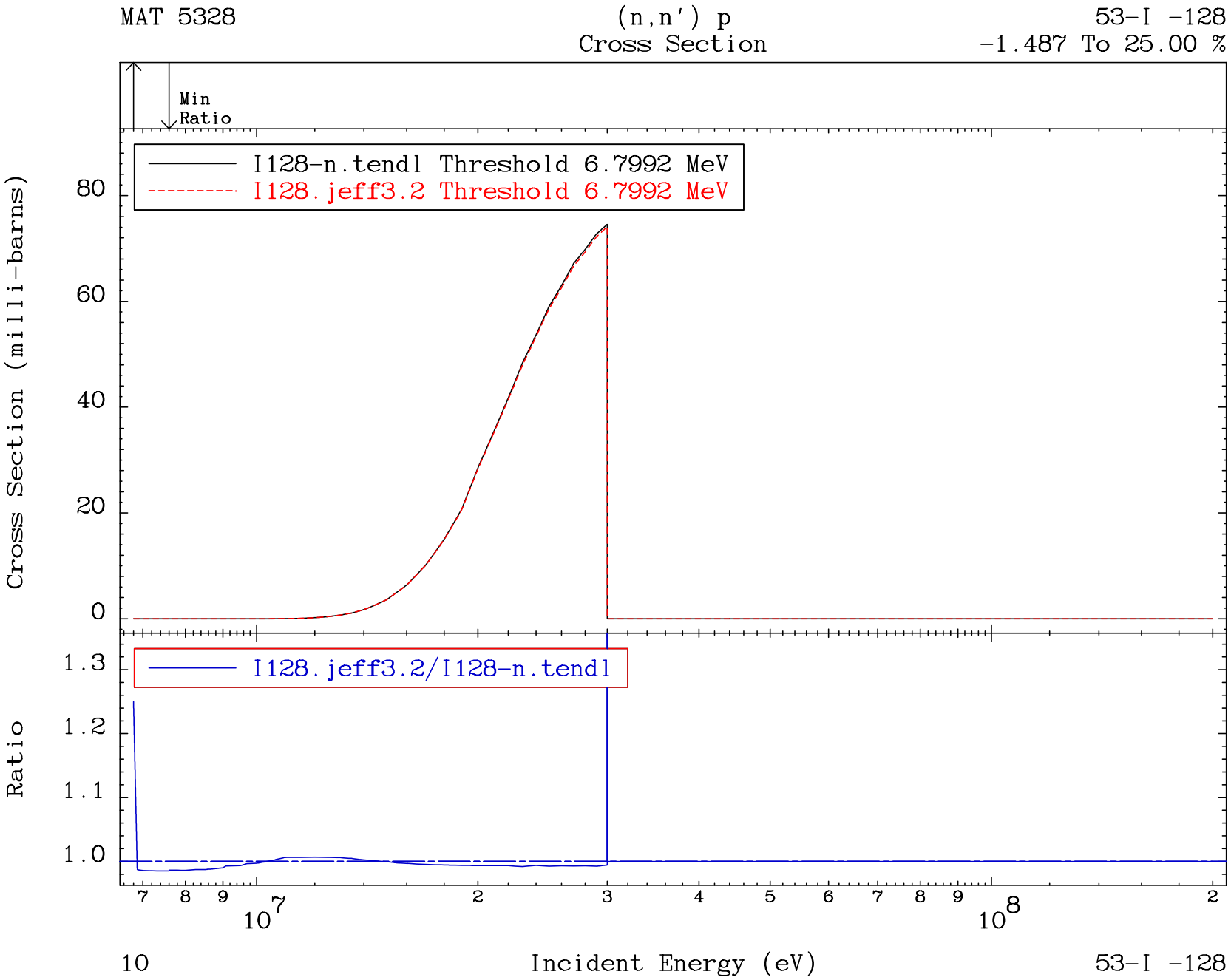

MAT 5328
(n,2n)
Cross Section
53-I -128
-6.656 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 6.8800 MeV
I128.jeff3.2 Threshold 6.8800 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.96
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
5
53-I -128

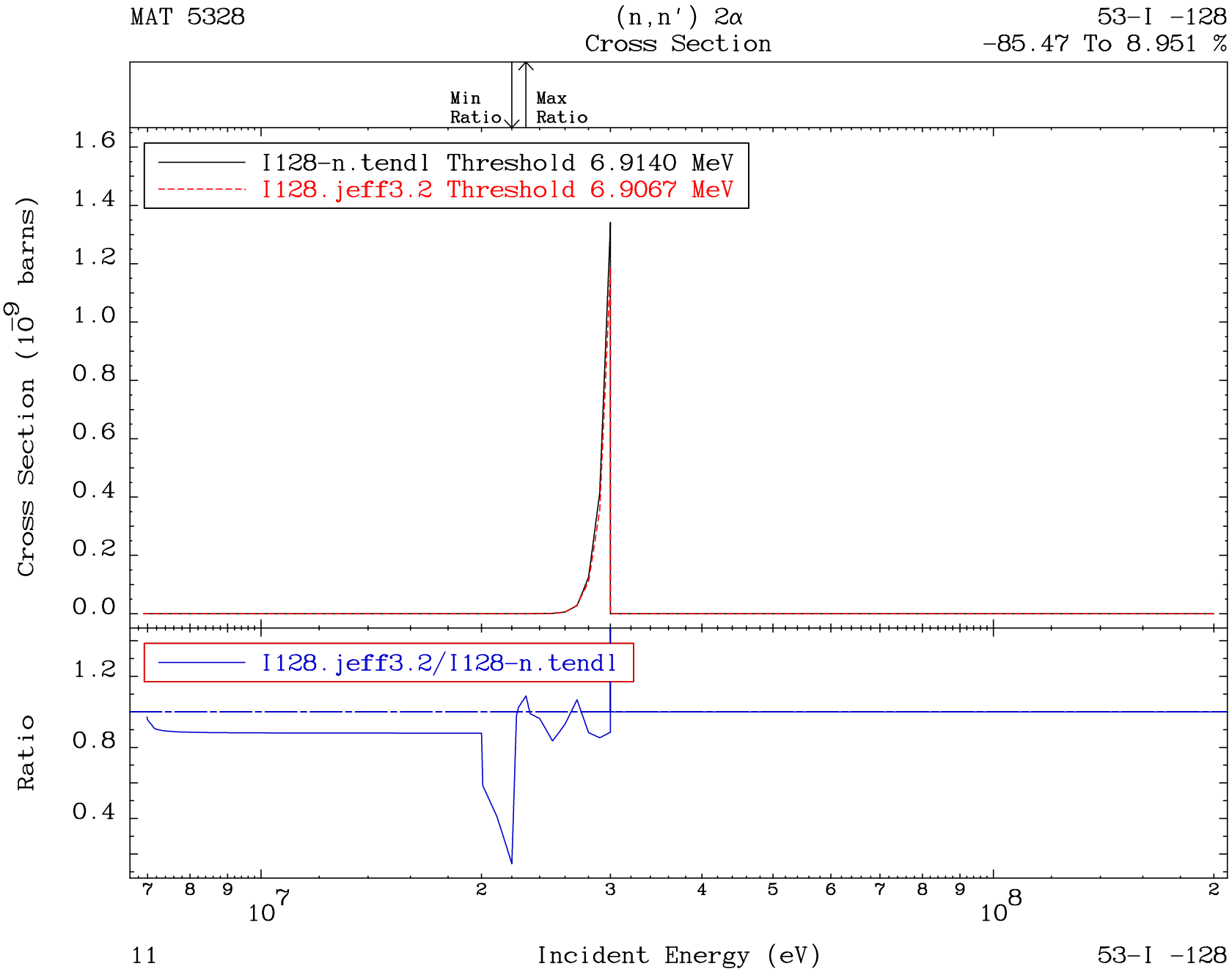

MAT 5328
(n,3n)
Cross Section
53-I -128
0.000 To 17.32 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 16.096 MeV
I128.jeff3.2 Threshold 16.096 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
I128.jeff3.2/I128-n.tendl
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
53-I -128

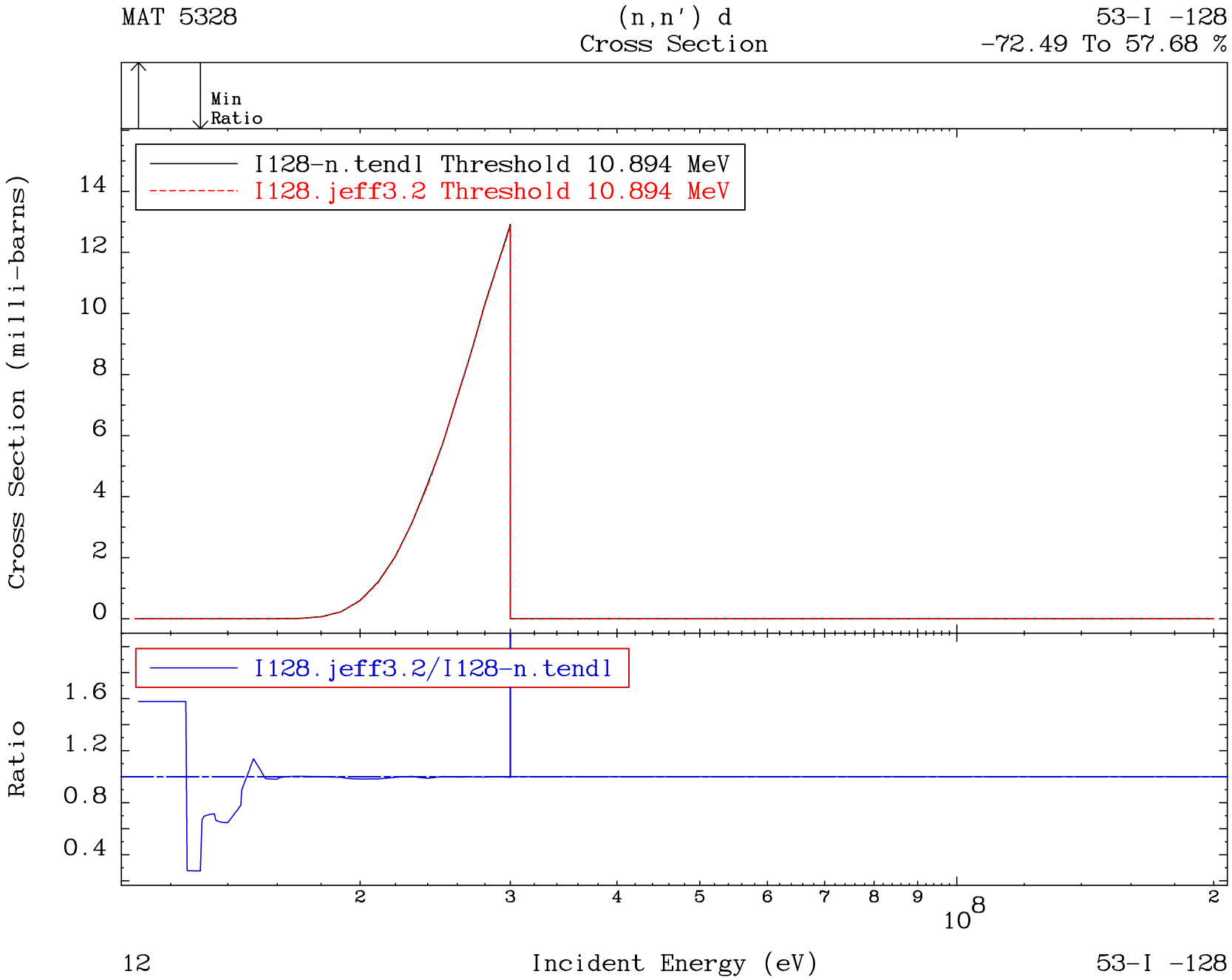

MAT 5328
(n,n') α
Cross Section
53-I -128
-2.192 To 0.362 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 2.5627 MeV
I128.jeff3.2 Threshold 2.5627 MeV
Cross Section (milli-barns)
20
15
10
5
0
I128.jeff3.2/I128-n.tendl
Ratio
1.01
1.00
0.99
0.98
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
53-I -128

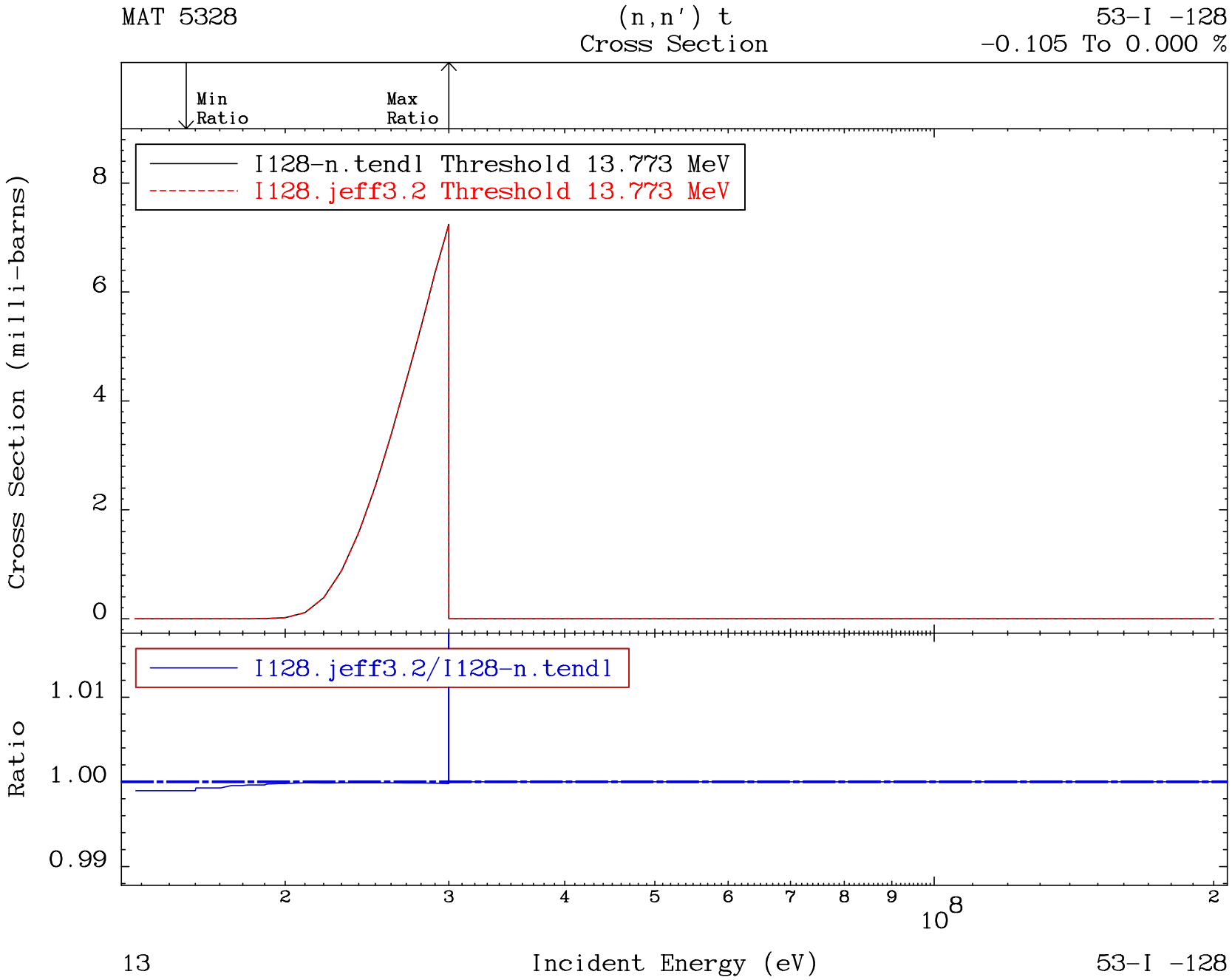

MAT 5328
(n,2n) α
Cross Section
53-I -128
-9.407 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 9.0812 MeV
I128.jeff3.2 Threshold 9.0812 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.95
0.90
9
10^7
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
53-I -128

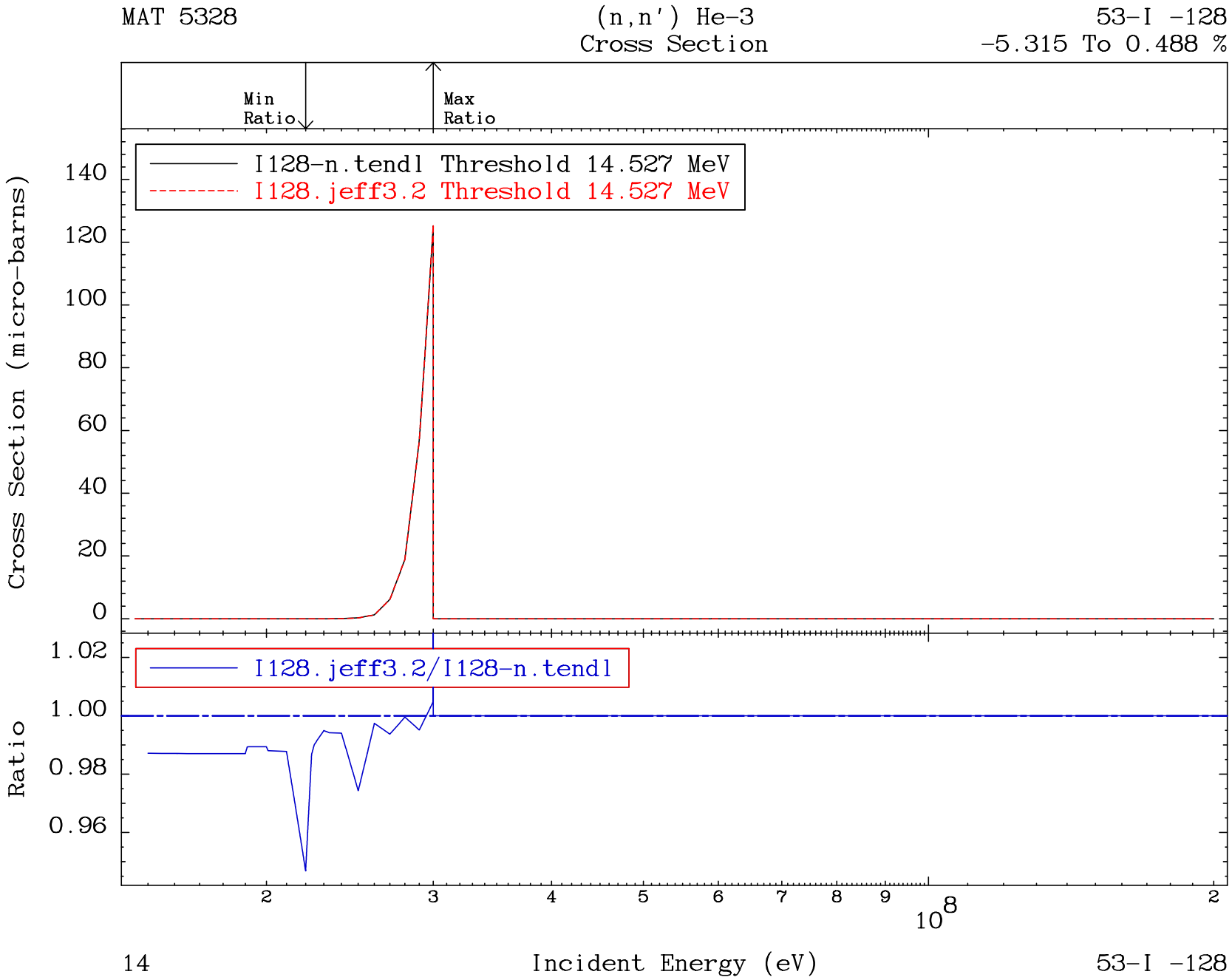

MAT 5328
(n,3n) α
Cross Section
53-I -128
-6.811 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 18.114 MeV
I128.jeff3.2 Threshold 18.117 MeV
Cross Section (micro-barns)
25
20
15
10
5
0
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.96
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
53-I -128

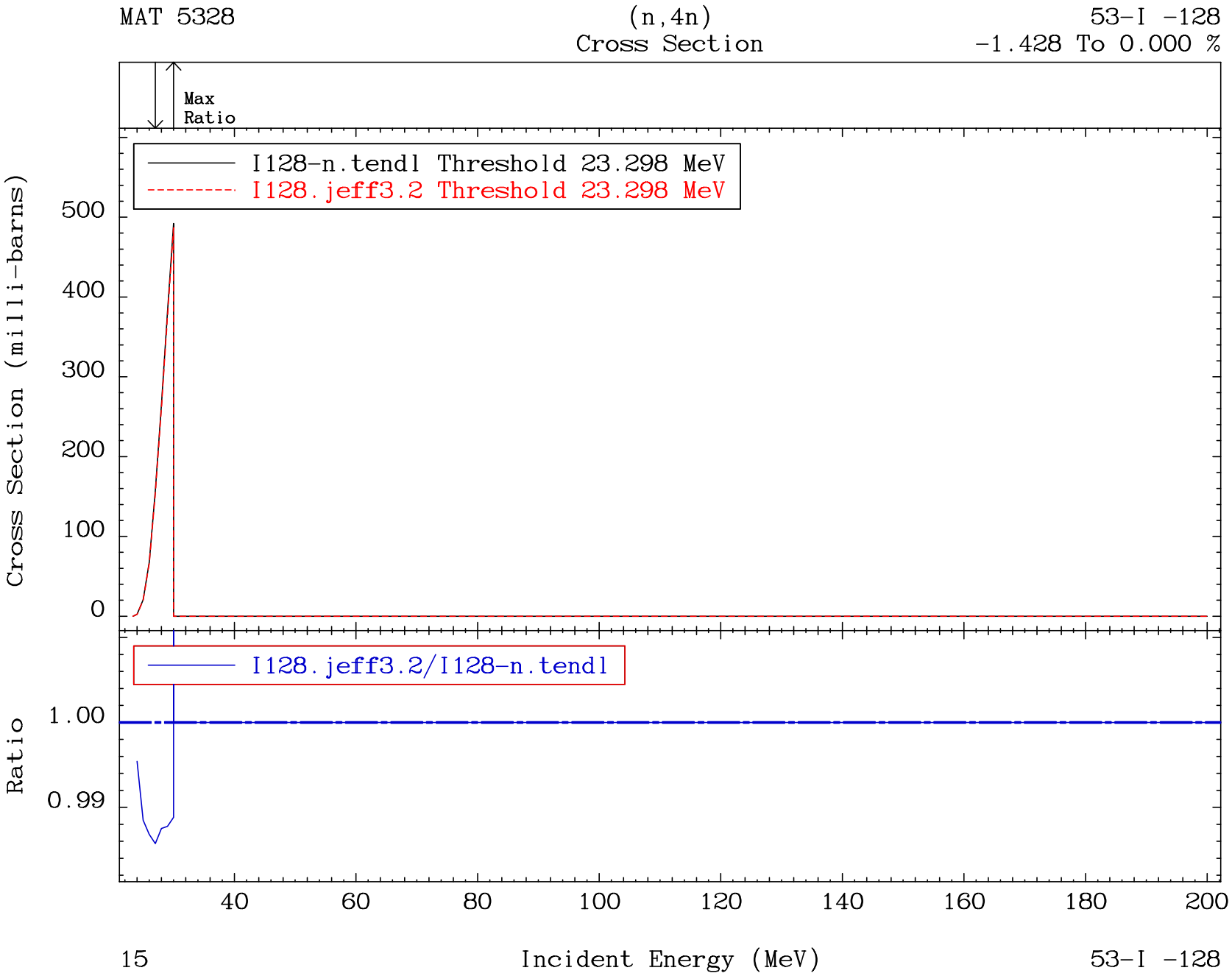

MAT 5328
(n,n') p
Cross Section
53-I -128
-1.487 To 25.00 %
Min
Ratio
I128-n.tendl Threshold 6.7992 MeV
I128.jeff3.2 Threshold 6.7992 MeV
Cross Section (milli-barns)
80
60
40
20
0
I128.jeff3.2/I128-n.tendl
Ratio
1.3
1.2
1.1
1.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
53-I -128

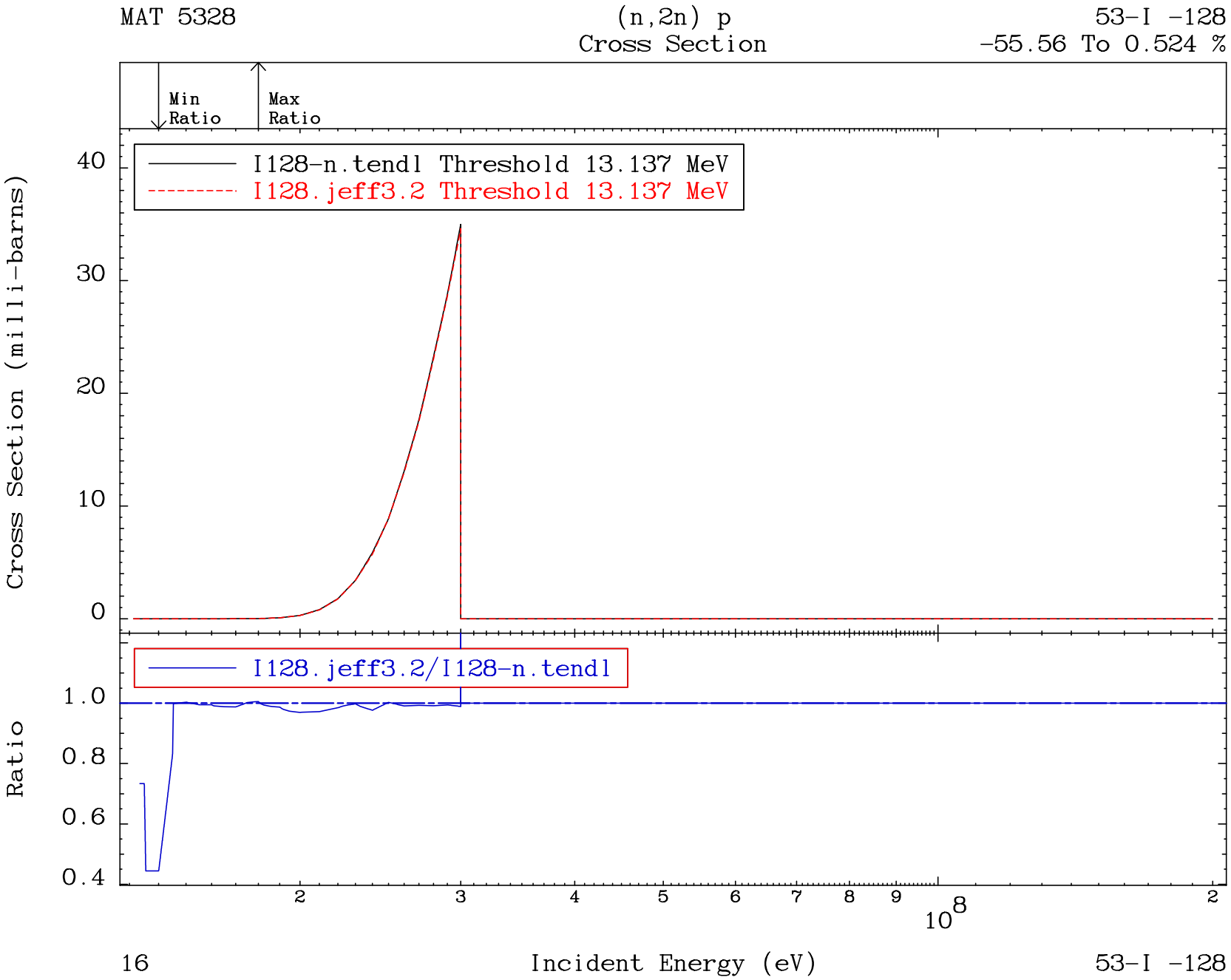

MAT 5328
(n,n') 2α
Cross Section
53-I -128
-85.47 To 8.951 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 6.9140 MeV
I128.jeff3.2 Threshold 6.9067 MeV
Cross Section (10^-9 barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
I128.jeff3.2/I128-n.tendl
Ratio
1.2
0.8
0.4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
53-I -128

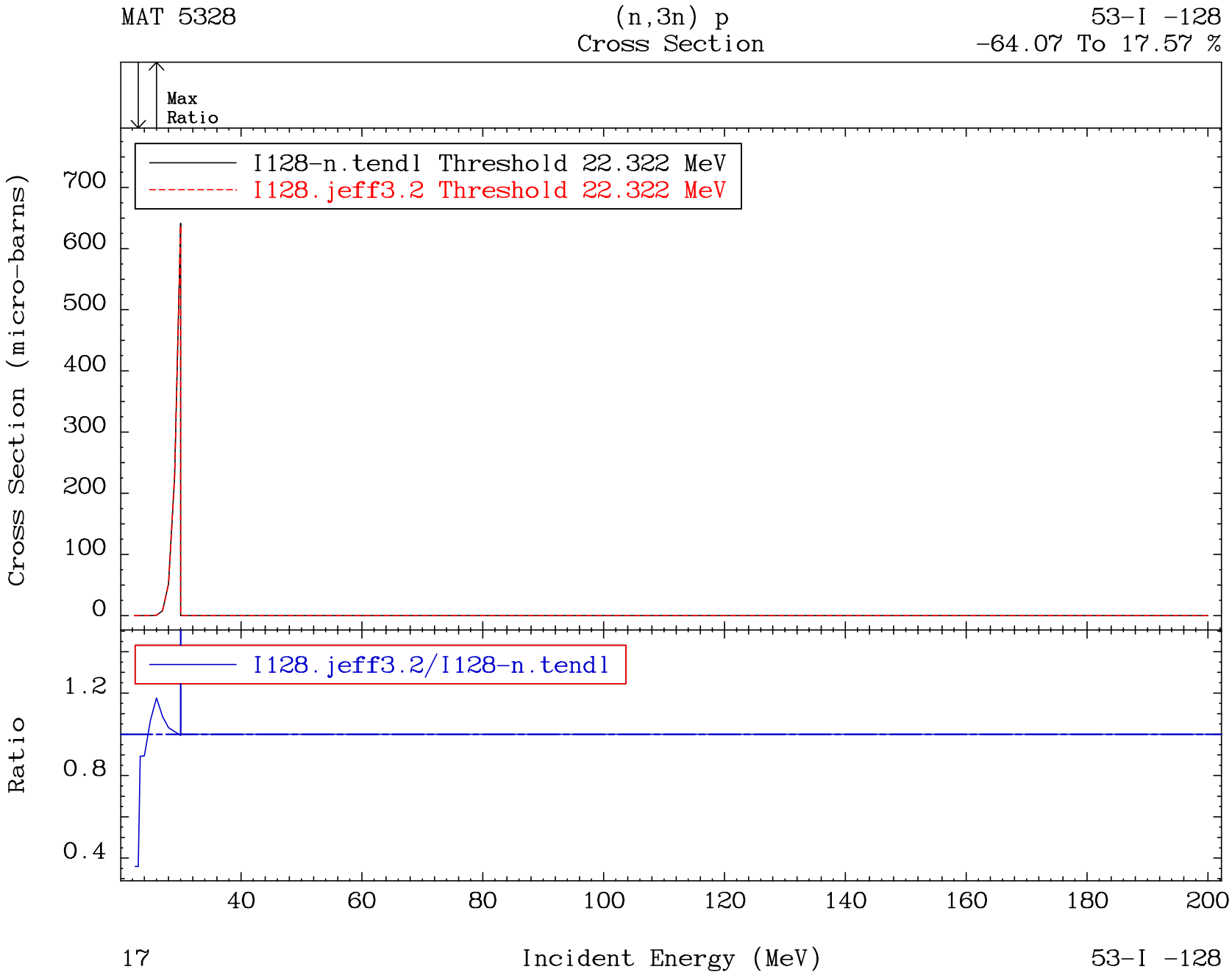

MAT 5328
(n,n') d
Cross Section
53-I -128
-72.49 To 57.68 %
Min
Ratio
I128-n.tendl Threshold 10.894 MeV
I128.jeff3.2 Threshold 10.894 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
I128.jeff3.2/I128-n.tendl
Ratio
1.6
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
53-I -128

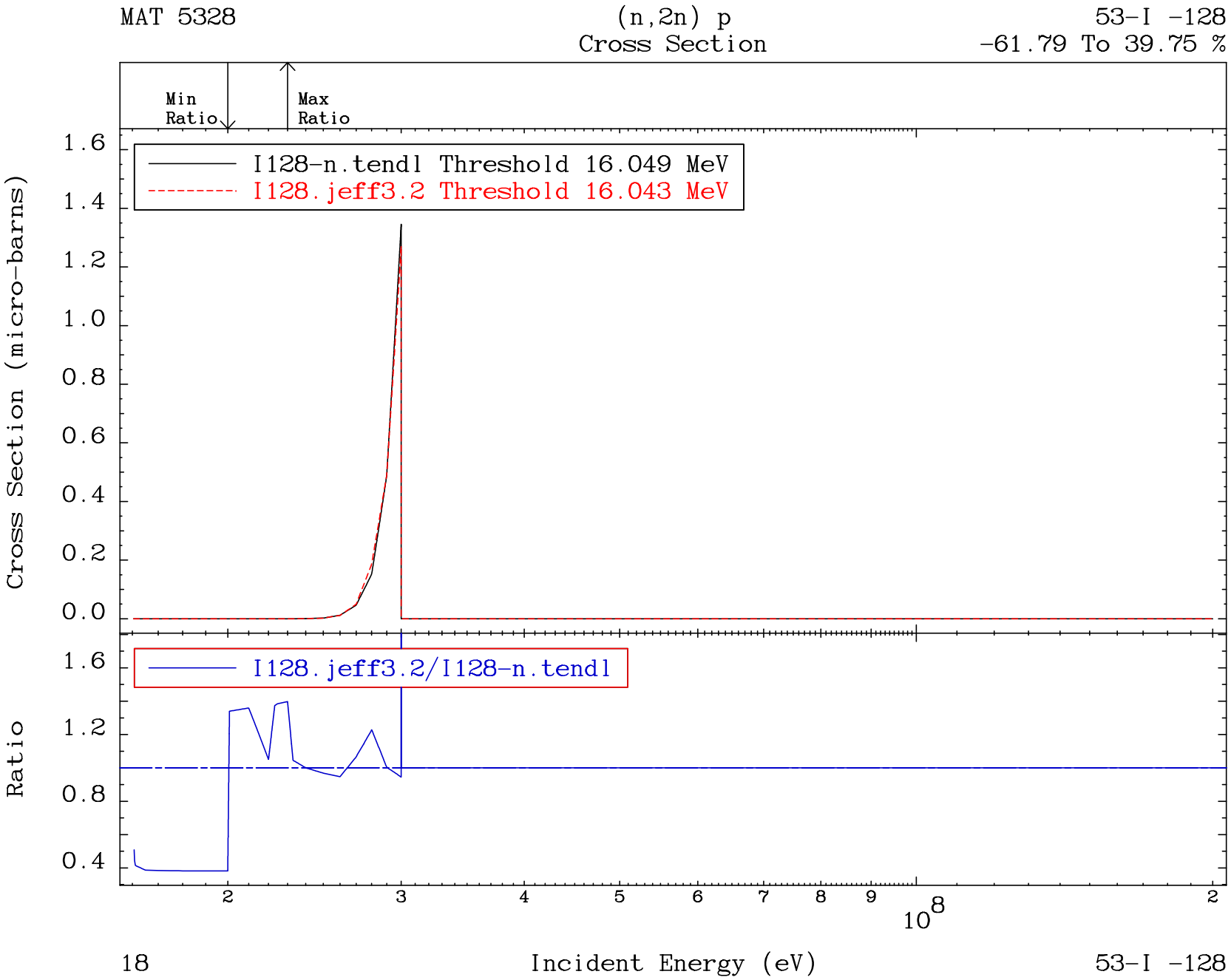

MAT 5328
(n,n') t
Cross Section
53-I -128
-0.105 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 13.773 MeV
I128.jeff3.2 Threshold 13.773 MeV
Cross Section (milli-barns)
8
6
4
2
0
I128.jeff3.2/I128-n.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
53-I -128

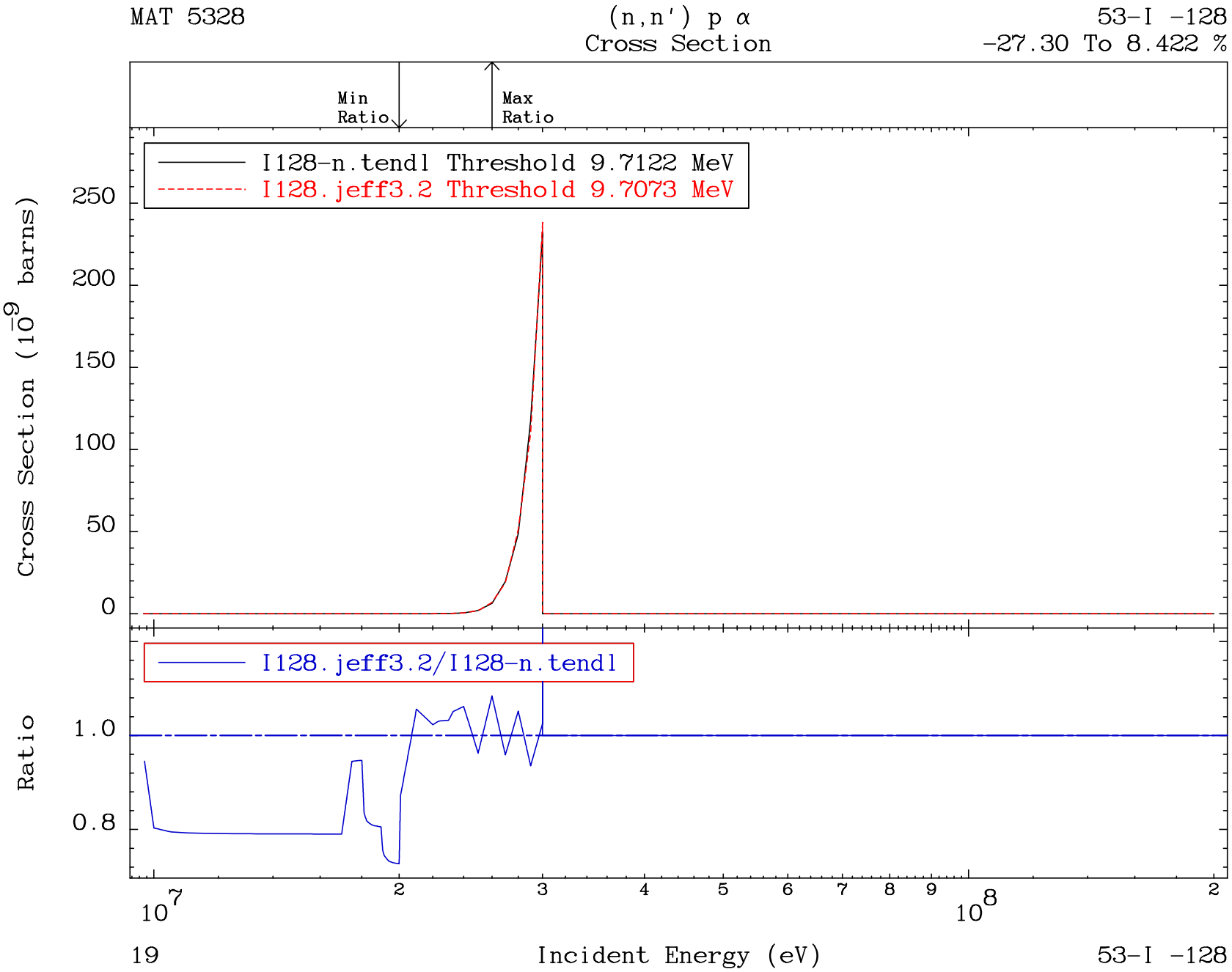

MAT 5328
(n,n') He-3
Cross Section
53-I -128
-5.315 To 0.488 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 14.527 MeV
I128.jeff3.2 Threshold 14.527 MeV
Cross Section (micro-barns)
140
120
100
80
60
40
20
0
I128.jeff3.2/I128-n.tendl
Ratio
1.02
1.00
0.98
0.96
2
3
4
5
6
7
8
9
2
10^8
14
Incident Energy (eV)
53-I -128

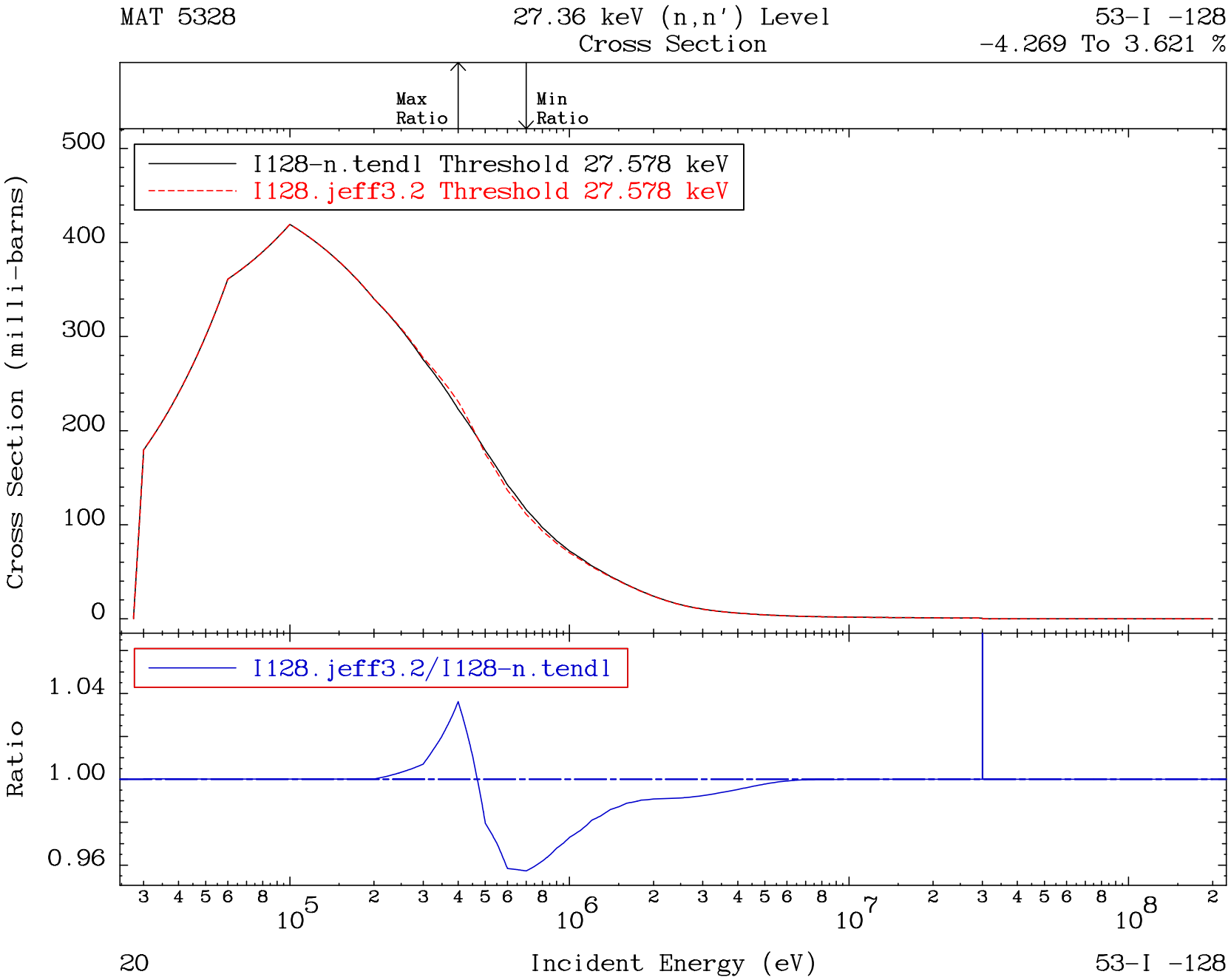

MAT 5328
(n,4n)
Cross Section
53-I -128
-1.428 To 0.000 %
Max
Ratio
I128-n.tendl Threshold 23.298 MeV
I128.jeff3.2 Threshold 23.298 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.99
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
53-I -128

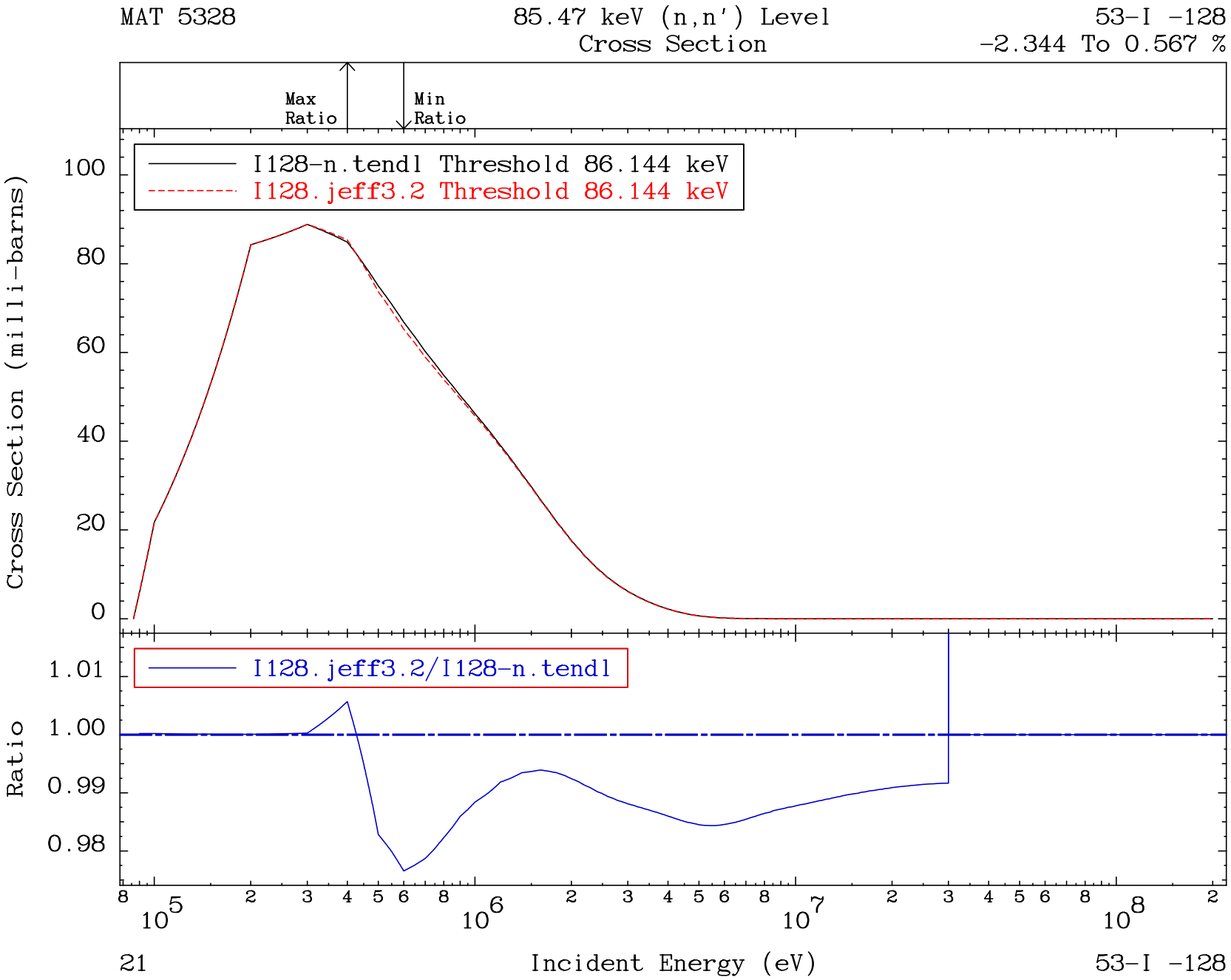

MAT 5328
(n,2n) p
Cross Section
53-I -128
-55.56 To 0.524 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 13.137 MeV
I128.jeff3.2 Threshold 13.137 MeV
Cross Section (milli-barns)
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
1.0
0.8
0.6
0.4
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
53-I -128

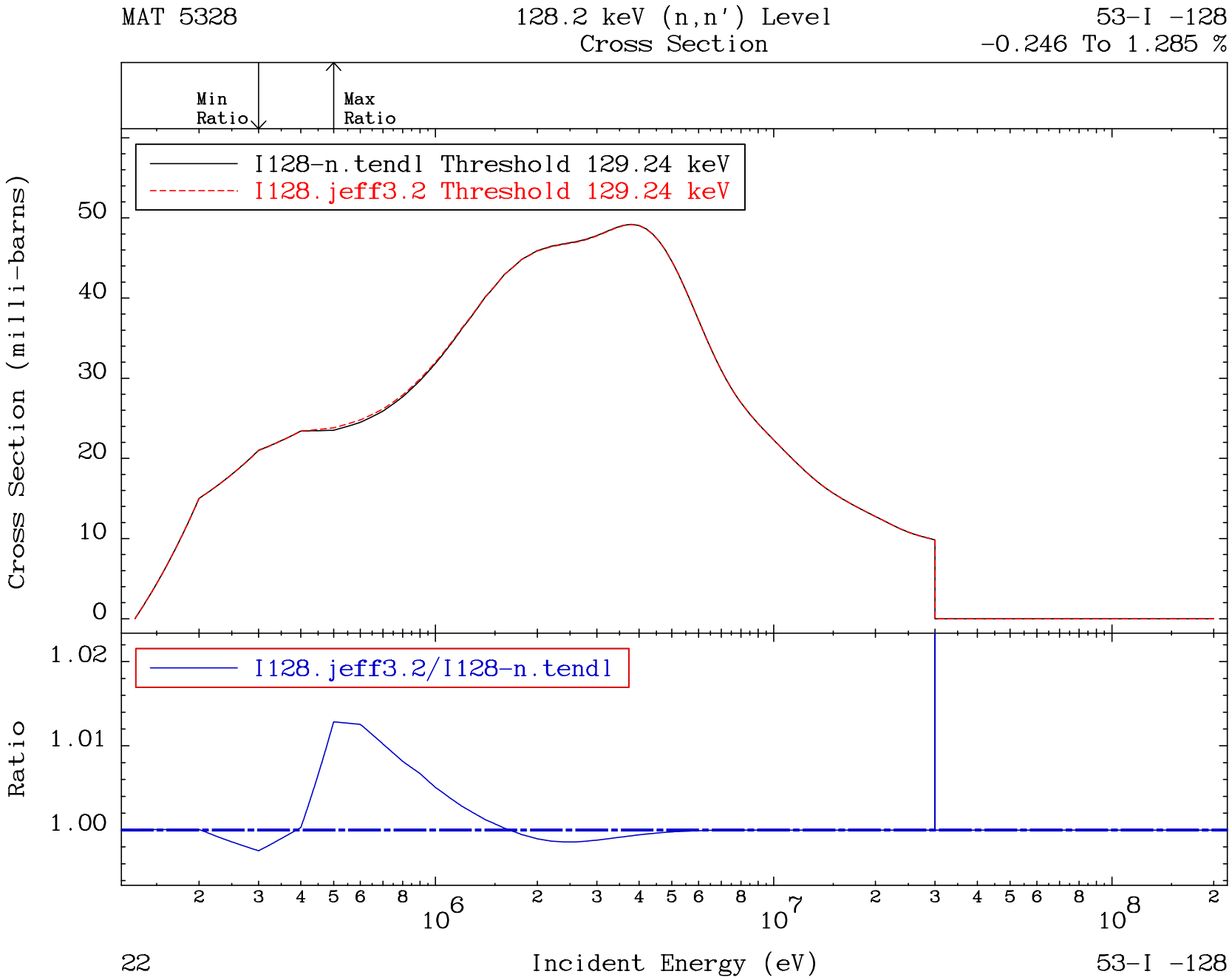

MAT 5328
(n,3n) p
Cross Section
53-I -128
-64.07 To 17.57 %
Max
Ratio
I128-n.tendl Threshold 22.322 MeV
I128.jeff3.2 Threshold 22.322 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
I128.jeff3.2/I128-n.tendl
Ratio
1.2
0.8
0.4
40
60
80
100
120
140
160
180
200
17
Incident Energy (MeV)
53-I -128

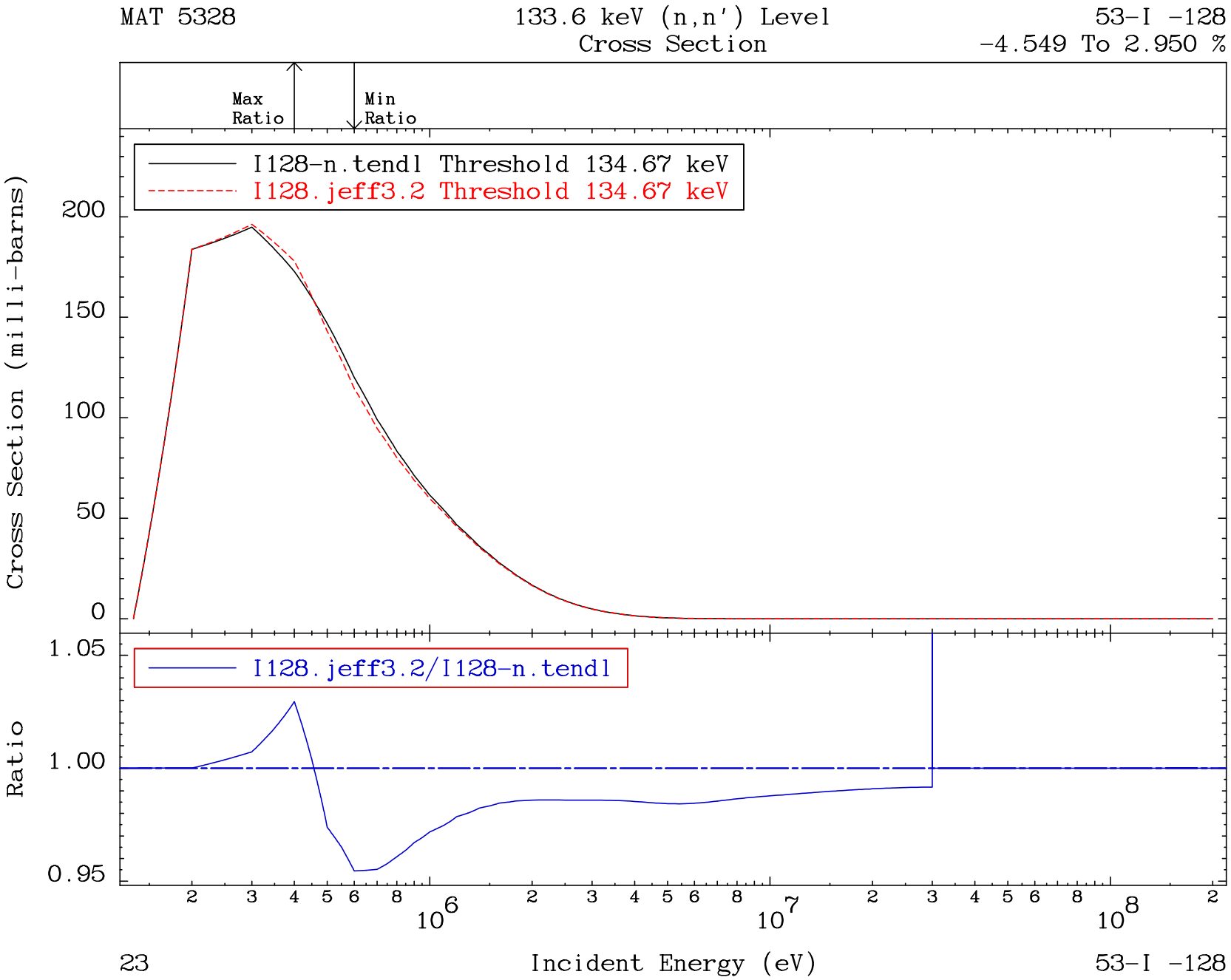

MAT 5328
(n,2n) p
Cross Section
53-I -128
-61.79 To 39.75 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 16.049 MeV
I128.jeff3.2 Threshold 16.043 MeV
Cross Section (micro-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
I128.jeff3.2/I128-n.tendl
Ratio
1.6
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
18
Incident Energy (eV)
53-I -128

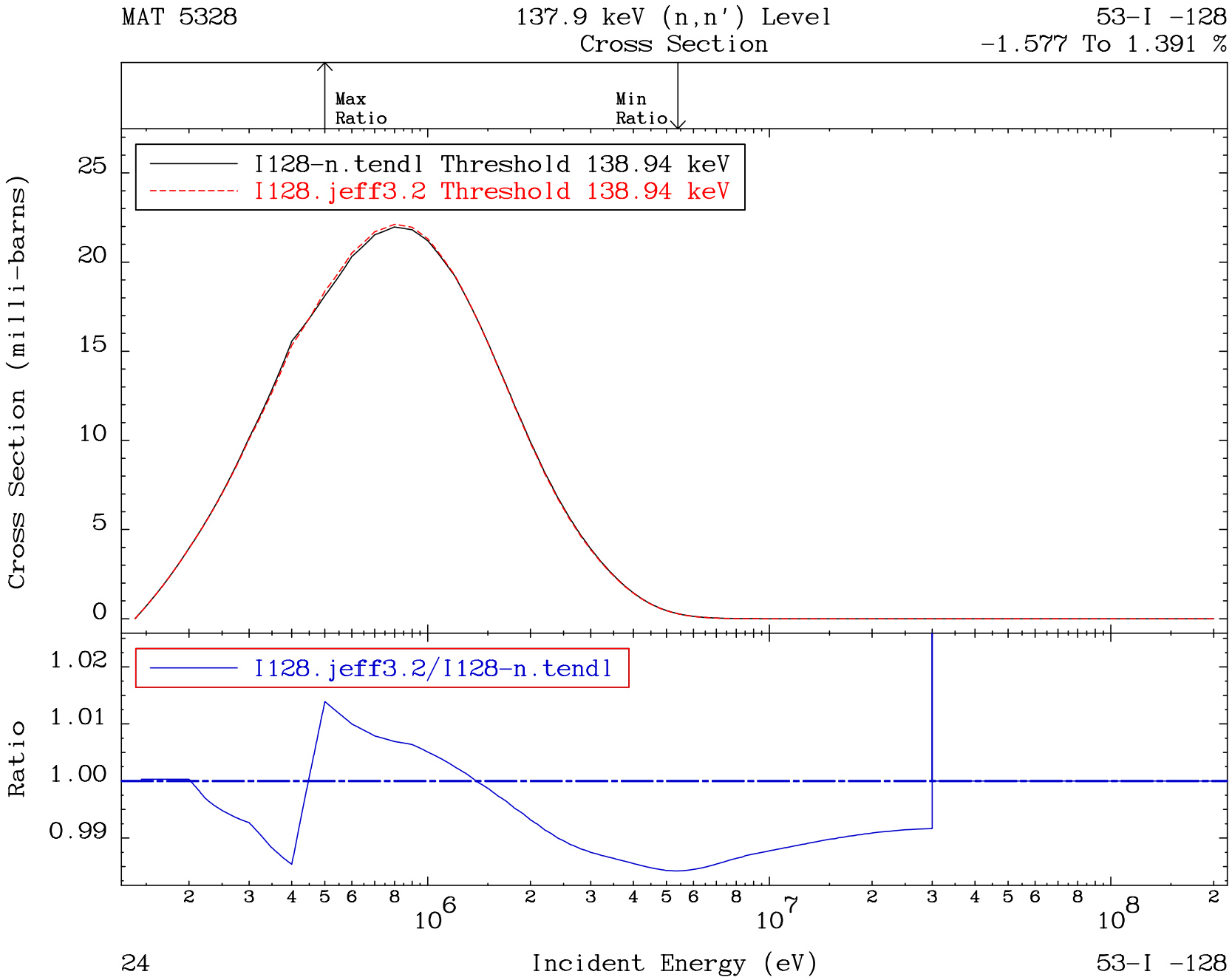

MAT 5328
(n,n') p α
Cross Section
53-I -128
-27.30 To 8.422 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 9.7122 MeV
I128.jeff3.2 Threshold 9.7073 MeV
Cross Section (10^-9 barns)
250
200
150
100
50
0
I128.jeff3.2/I128-n.tendl
Ratio
1.0
0.8
10^7
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
53-I -128

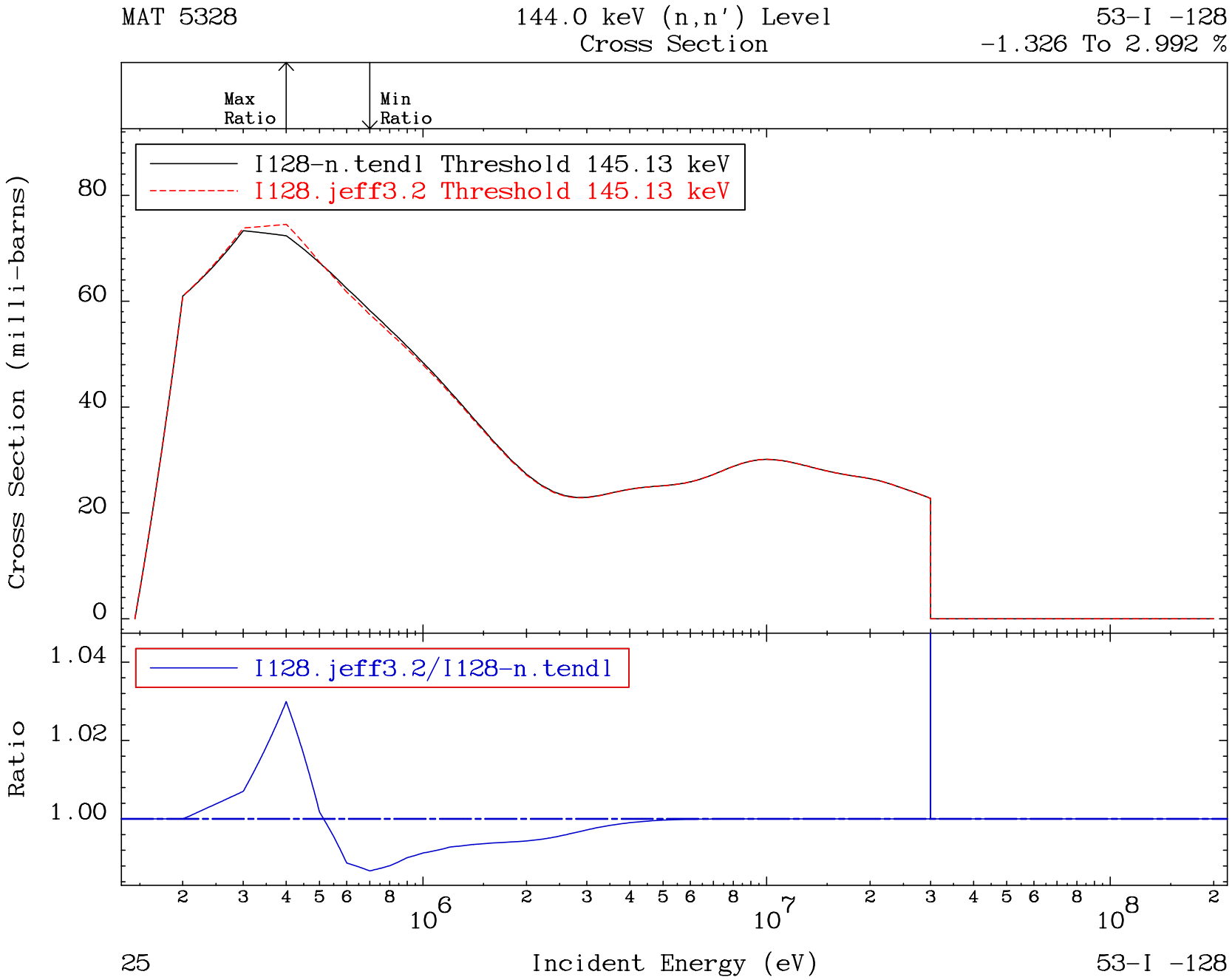

MAT 5328
27.36 keV (n,n') Level
Cross Section
53-I -128
-4.269 To 3.621 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 27.578 keV
I128.jeff3.2 Threshold 27.578 keV
Cross Section (milli-barns)
500
400
300
200
100
0
I128.jeff3.2/I128-n.tendl
Ratio
1.04
1.00
0.96
3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
20
Incident Energy (eV)
53-I -128

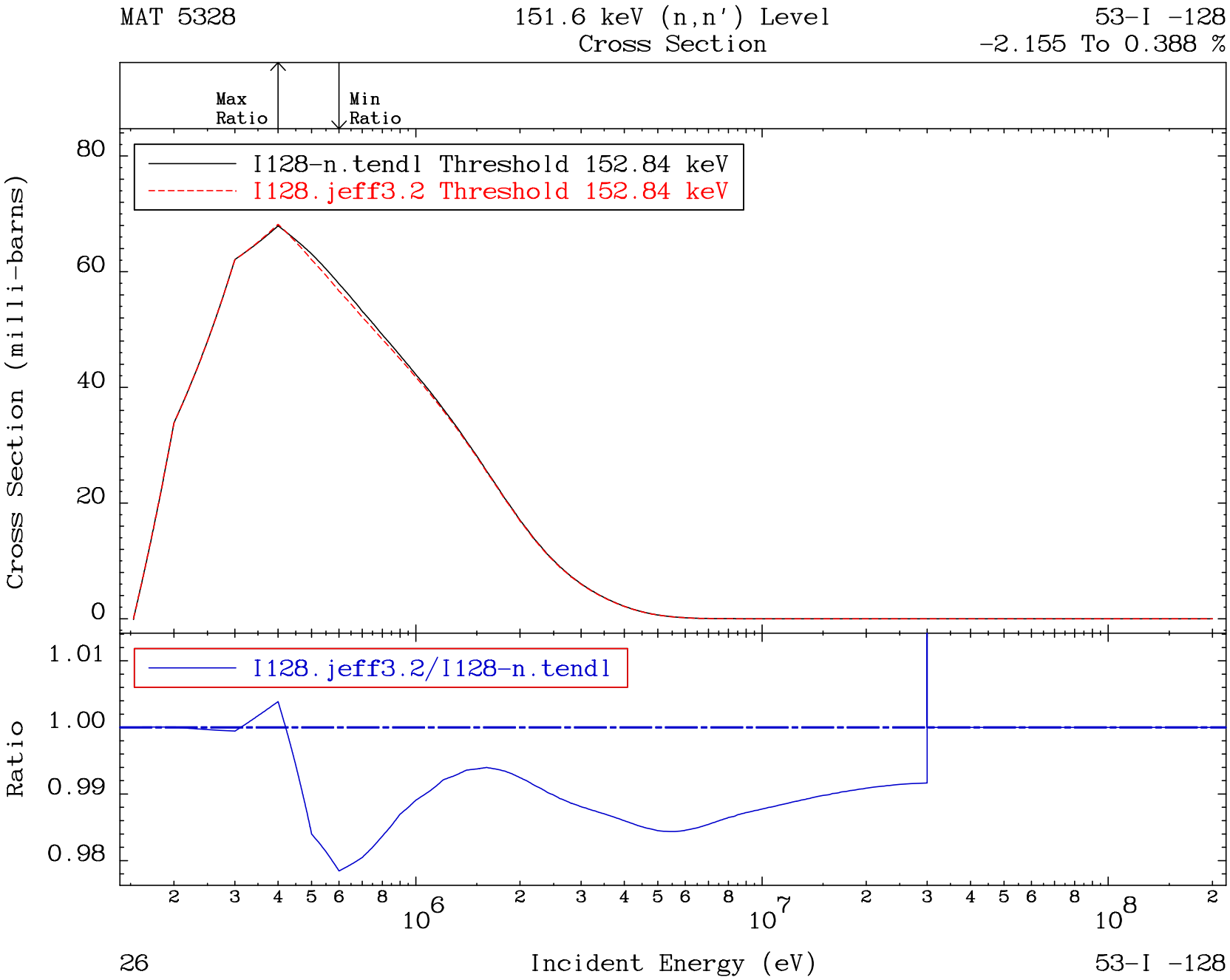

MAT 5328
85.47 keV (n,n') Level
Cross Section
53-I -128
-2.344 To 0.567 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 86.144 keV
I128.jeff3.2 Threshold 86.144 keV
Cross Section (milli-barns)
100
80
60
40
20
0
I128.jeff3.2/I128-n.tendl
Ratio
1.01
1.00
0.99
0.98
8 2 3 4 5 6 8 2 3 4 5 6 8 2 3 4 5 6 8 2
10^5
10^6
10^7
10^8
21
Incident Energy (eV)
53-I -128

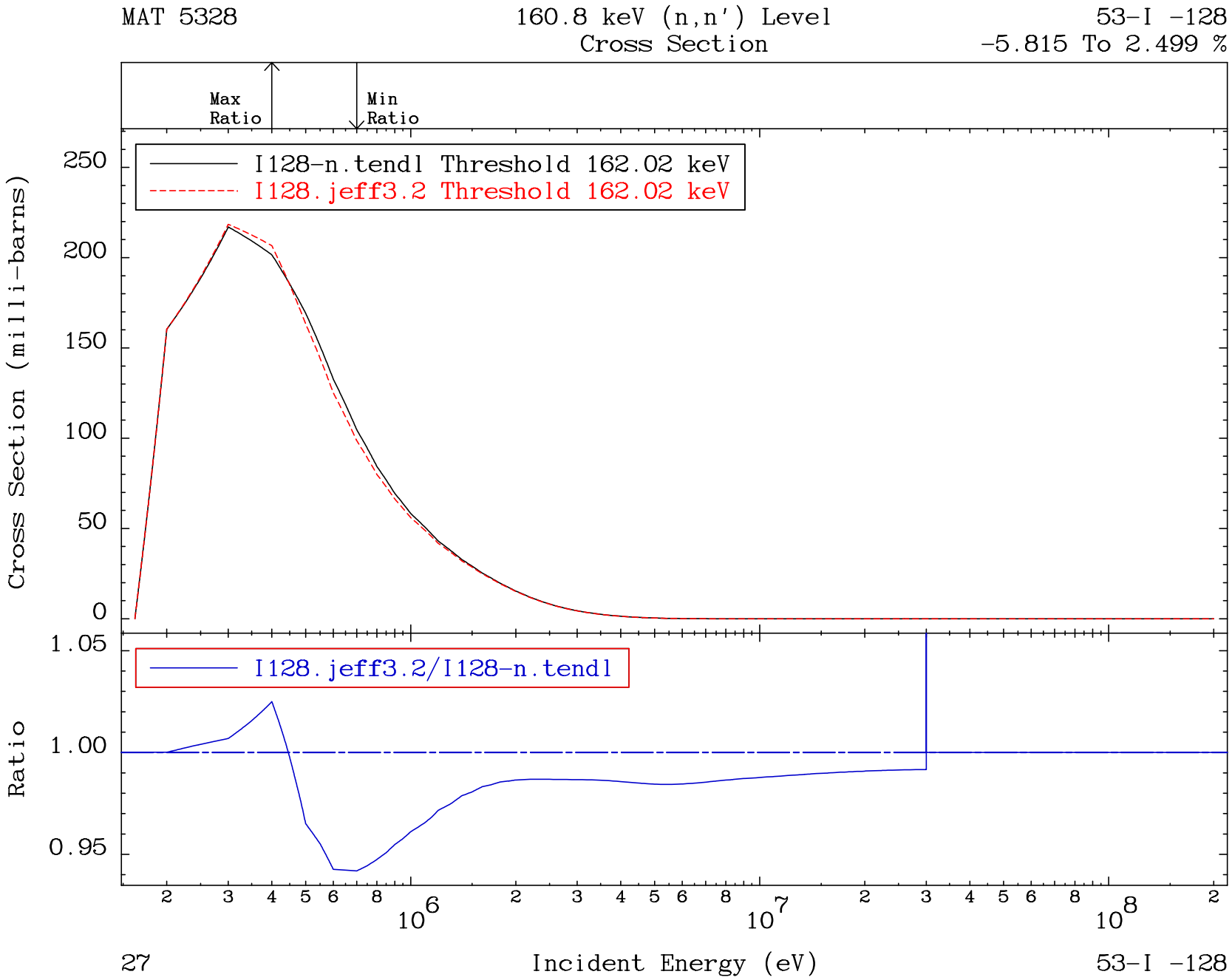

MAT 5328
128.2 keV (n,n') Level
Cross Section
53-I -128
-0.246 To 1.285 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 129.24 keV
I128.jeff3.2 Threshold 129.24 keV
Cross Section (milli-barns)
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
1.02
1.01
1.00
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
22
Incident Energy (eV)
53-I -128

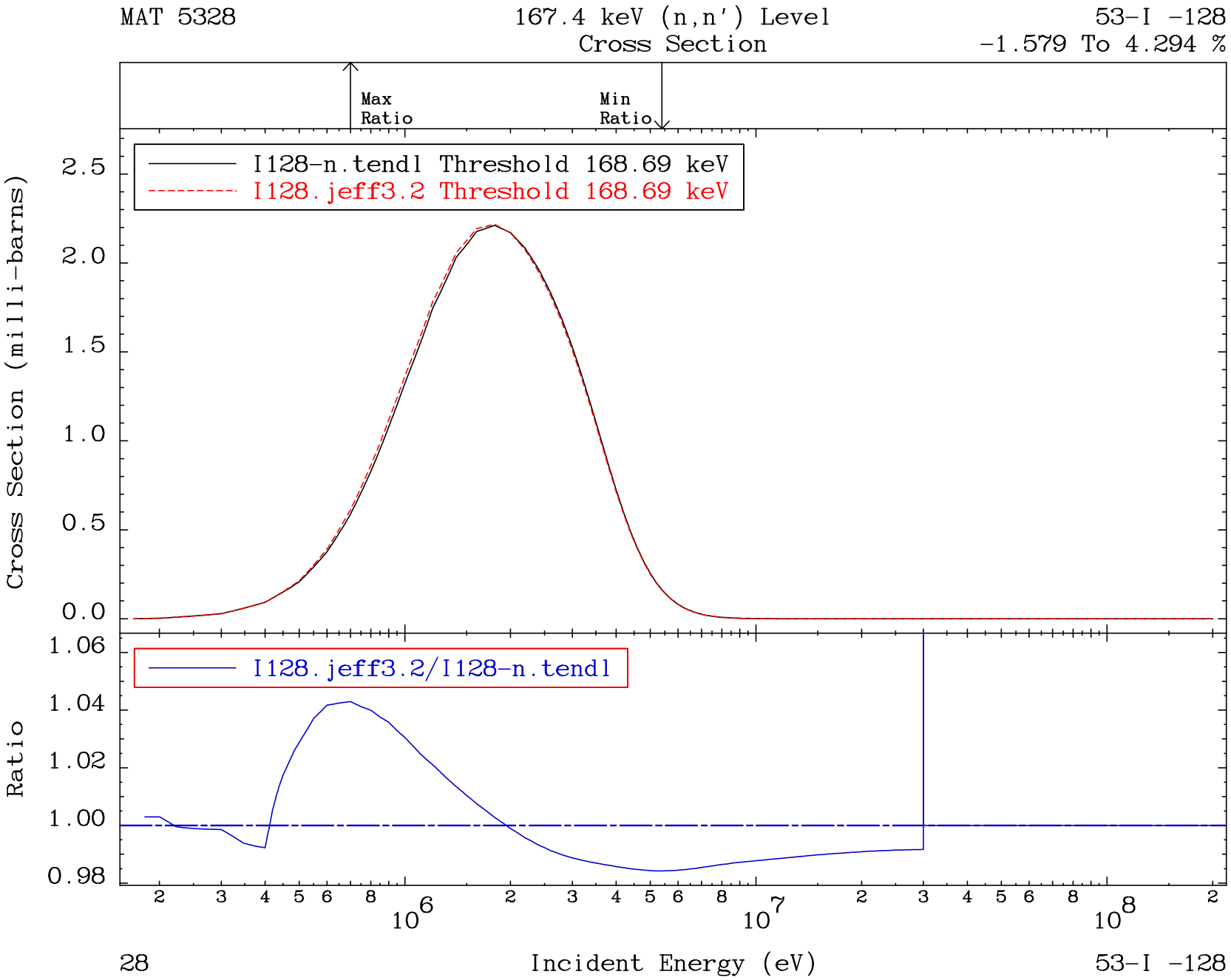

MAT 5328
133.6 keV (n,n') Level
Cross Section
53-I -128
-4.549 To 2.950 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 134.67 keV
I128.jeff3.2 Threshold 134.67 keV
Cross Section (milli-barns)
200
150
100
50
0
I128.jeff3.2/I128-n.tendl
Ratio
1.05
1.00
0.95
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
23
Incident Energy (eV)
53-I -128

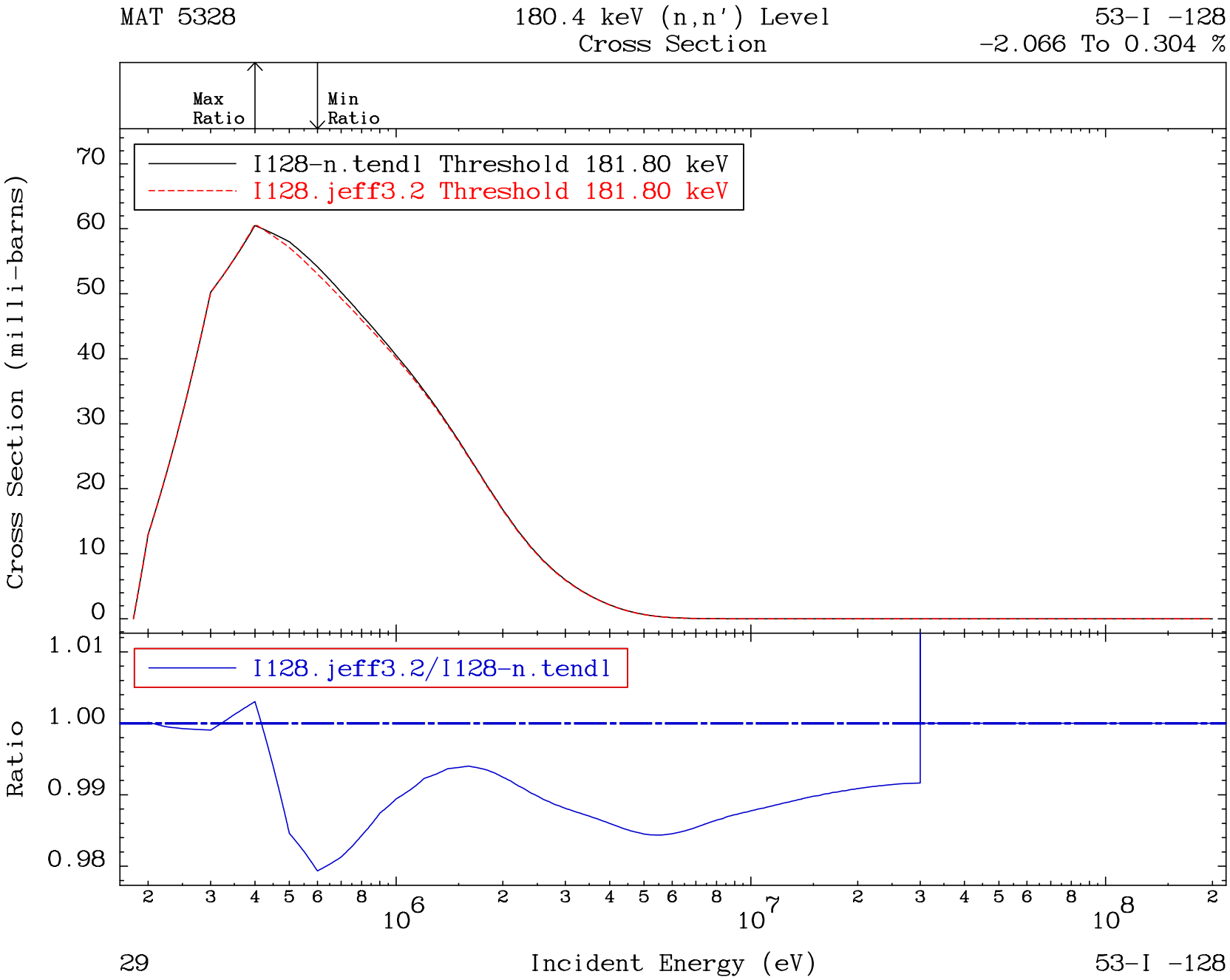

MAT 5328
137.9 keV (n,n') Level
Cross Section
53-I -128
-1.577 To 1.391 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 138.94 keV
I128.jeff3.2 Threshold 138.94 keV
Cross Section (milli-barns)
25
20
15
10
5
0
I128.jeff3.2/I128-n.tendl
Ratio
1.02
1.01
1.00
0.99
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
24
Incident Energy (eV)
53-I -128

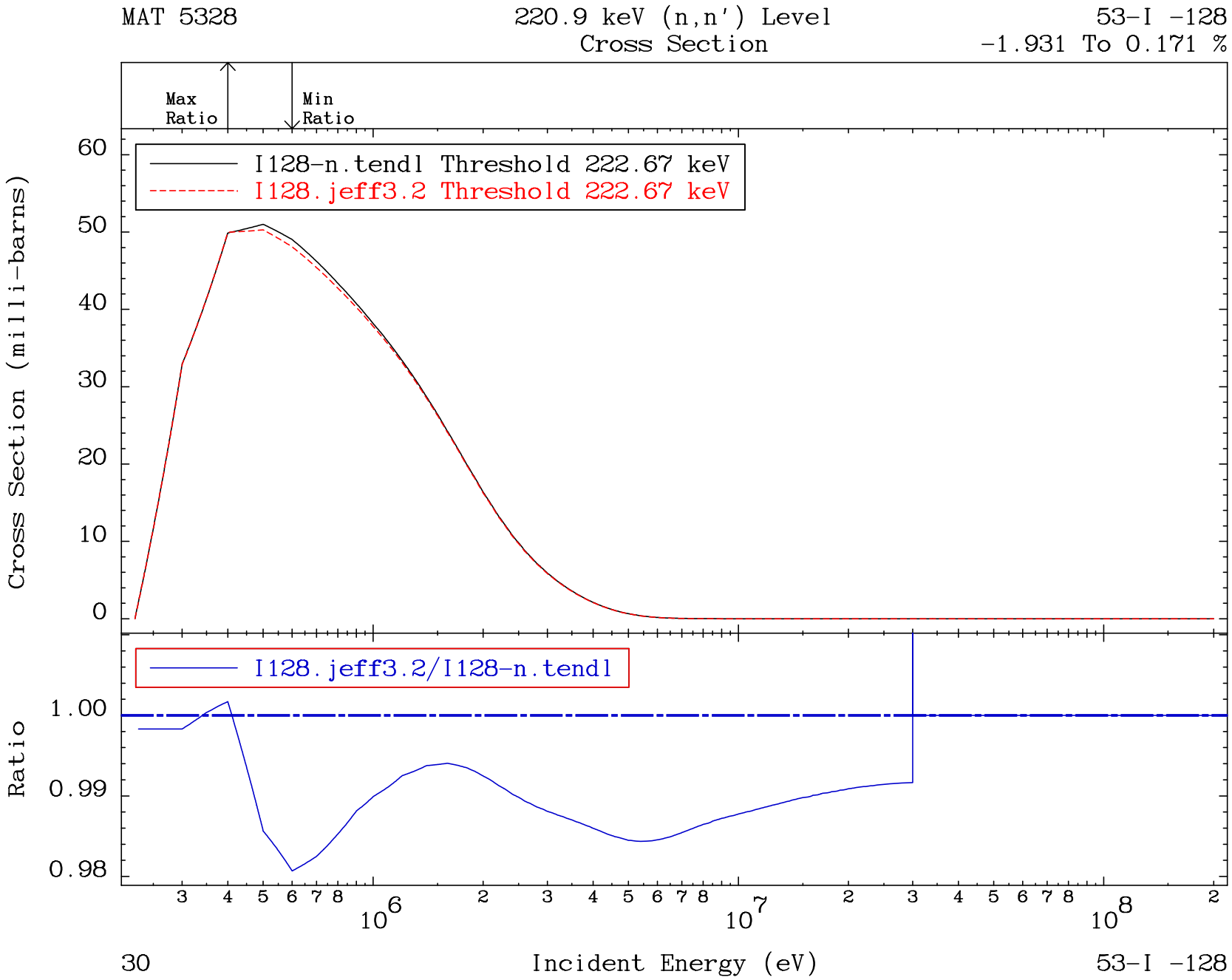

MAT 5328
144.0 keV (n,n') Level
Cross Section
53-I -128
-1.326 To 2.992 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 145.13 keV
I128.jeff3.2 Threshold 145.13 keV
Cross Section (milli-barns)
80
60
40
20
0
I128.jeff3.2/I128-n.tendl
Ratio
1.04
1.02
1.00
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
25
Incident Energy (eV)
53-I -128

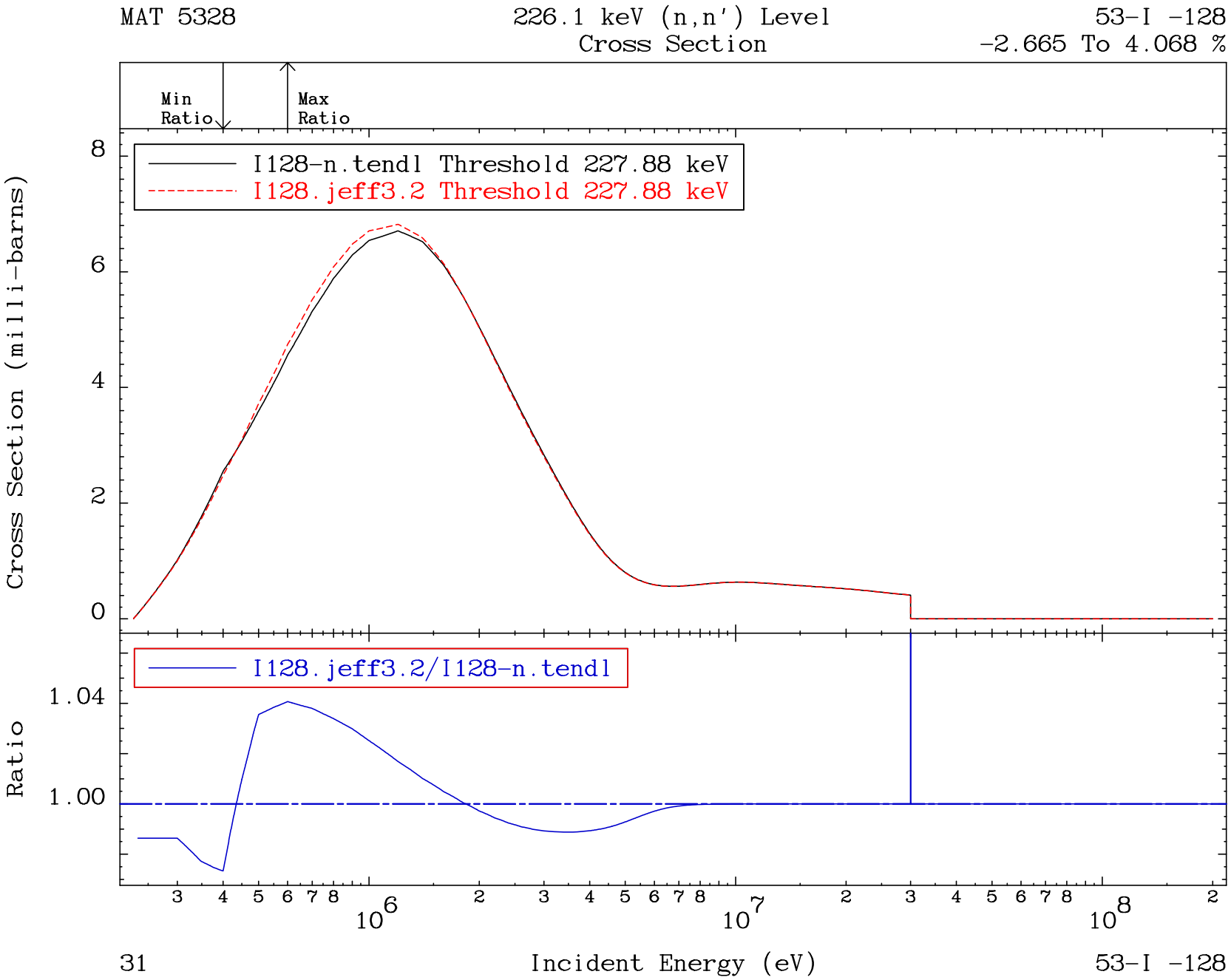

MAT 5328
151.6 keV (n,n') Level
Cross Section
53-I -128
-2.155 To 0.388 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 152.84 keV
I128.jeff3.2 Threshold 152.84 keV
Cross Section (milli-barns)
80
60
40
20
0
I128.jeff3.2/I128-n.tendl
Ratio
1.01
1.00
0.99
0.98
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
26
Incident Energy (eV)
53-I -128

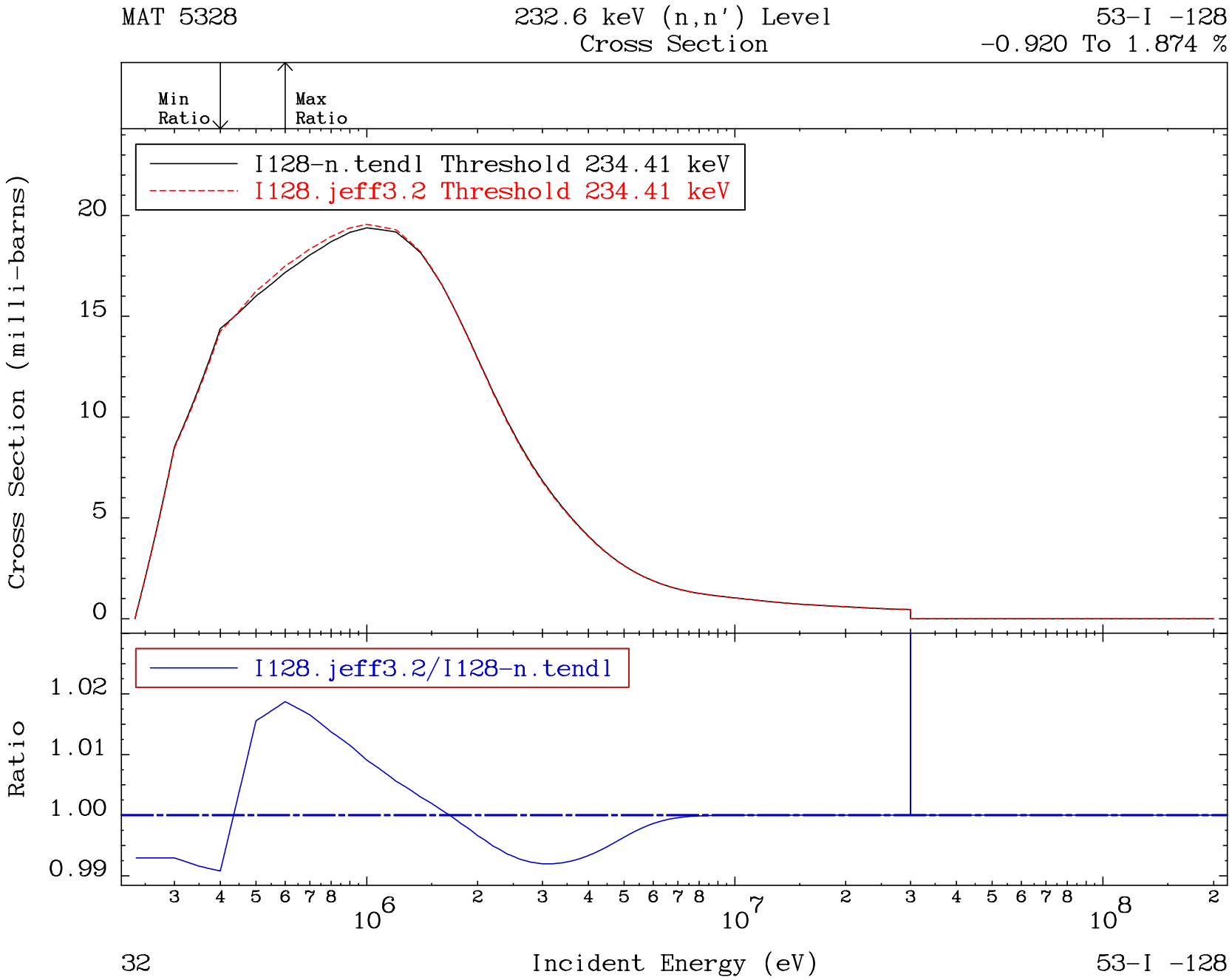

MAT 5328
160.8 keV (n,n') Level
Cross Section
53-I -128
-5.815 To 2.499 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 162.02 keV
I128.jeff3.2 Threshold 162.02 keV
Cross Section (milli-barns)
250
200
150
100
50
0
I128.jeff3.2/I128-n.tendl
Ratio
1.05
1.00
0.95
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
27
Incident Energy (eV)
53-I -128

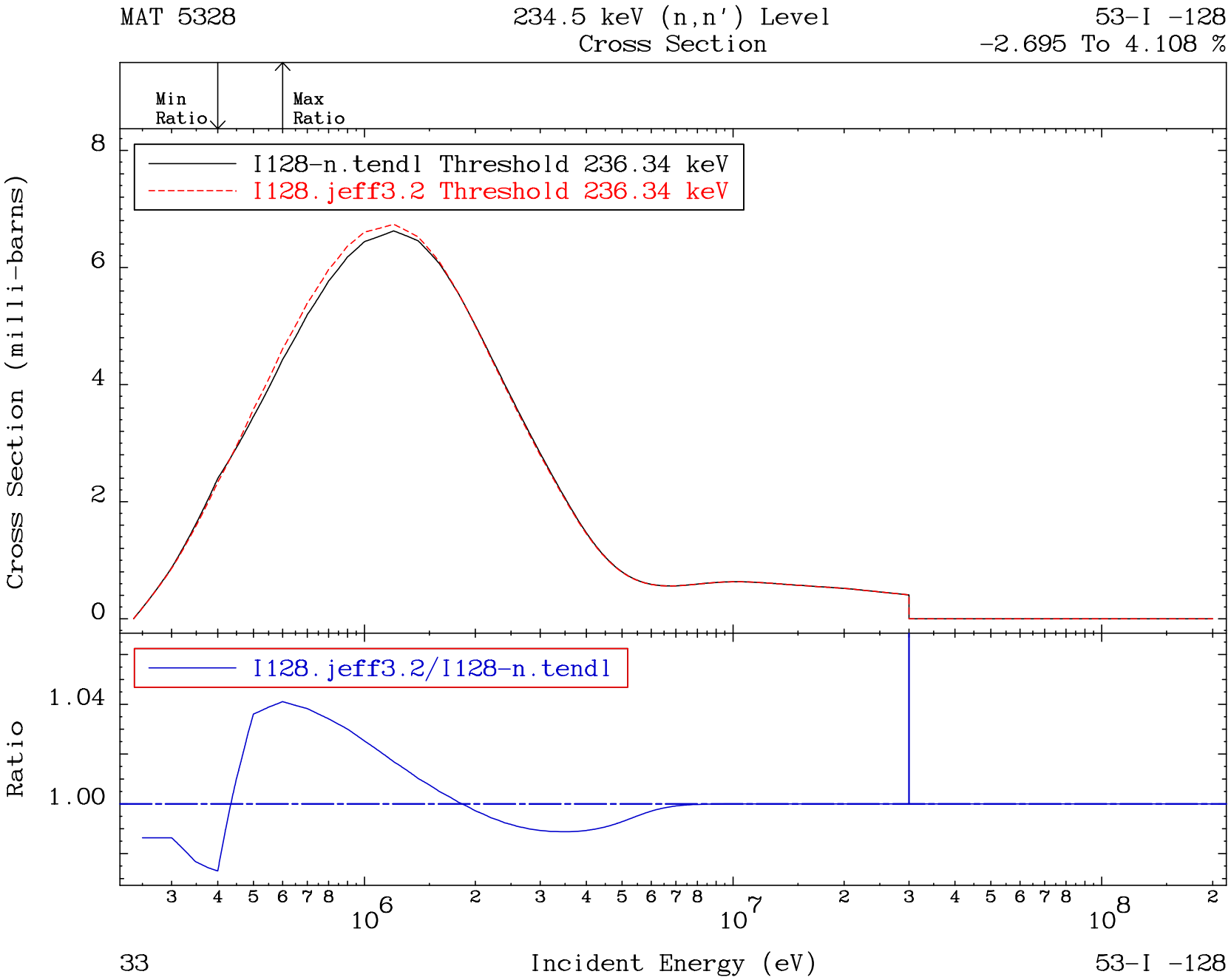

MAT 5328
167.4 keV (n,n') Level
Cross Section
53-I -128
-1.579 To 4.294 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 168.69 keV
I128.jeff3.2 Threshold 168.69 keV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
I128.jeff3.2/I128-n.tendl
Ratio
1.06
1.04
1.02
1.00
0.98
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
28
Incident Energy (eV)
53-I -128

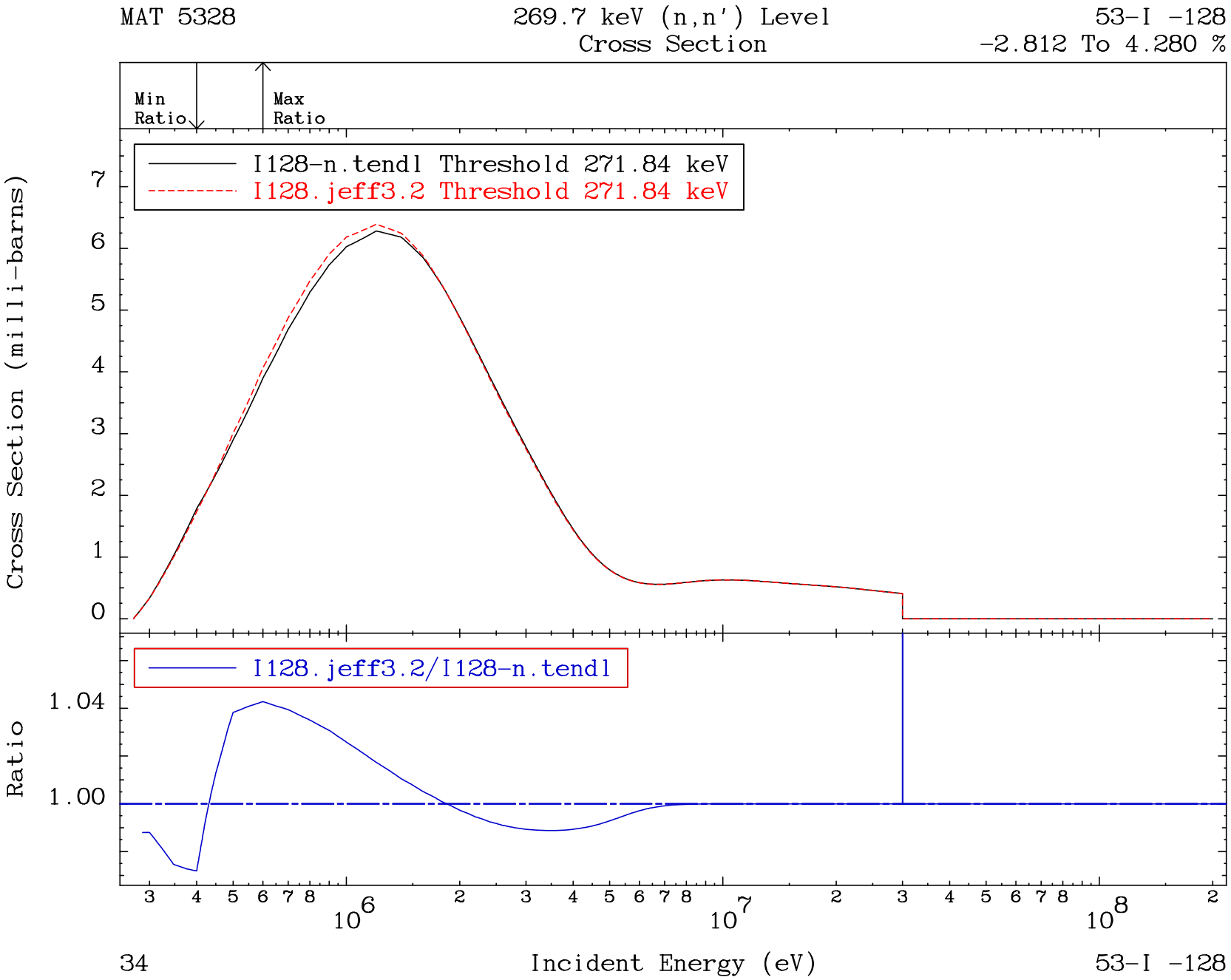

MAT 5328
180.4 keV (n,n') Level
Cross Section
53-I -128
-2.066 To 0.304 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 181.80 keV
I128.jeff3.2 Threshold 181.80 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
1.01
1.00
0.99
0.98
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
29
Incident Energy (eV)
53-I -128

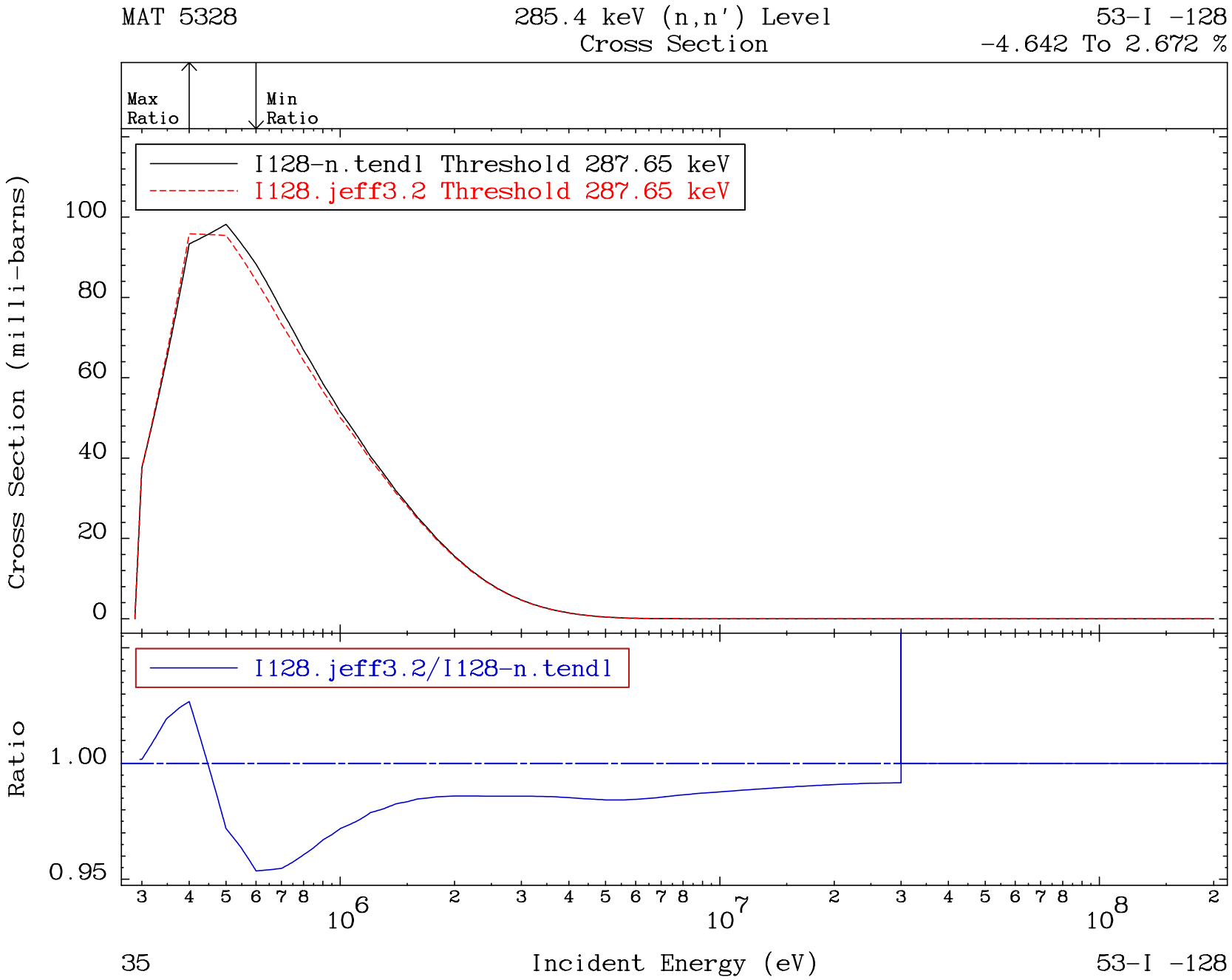

MAT 5328
220.9 keV (n,n') Level
Cross Section
53-I -128
-1.931 To 0.171 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 222.67 keV
I128.jeff3.2 Threshold 222.67 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.99
0.98
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
53-I -128

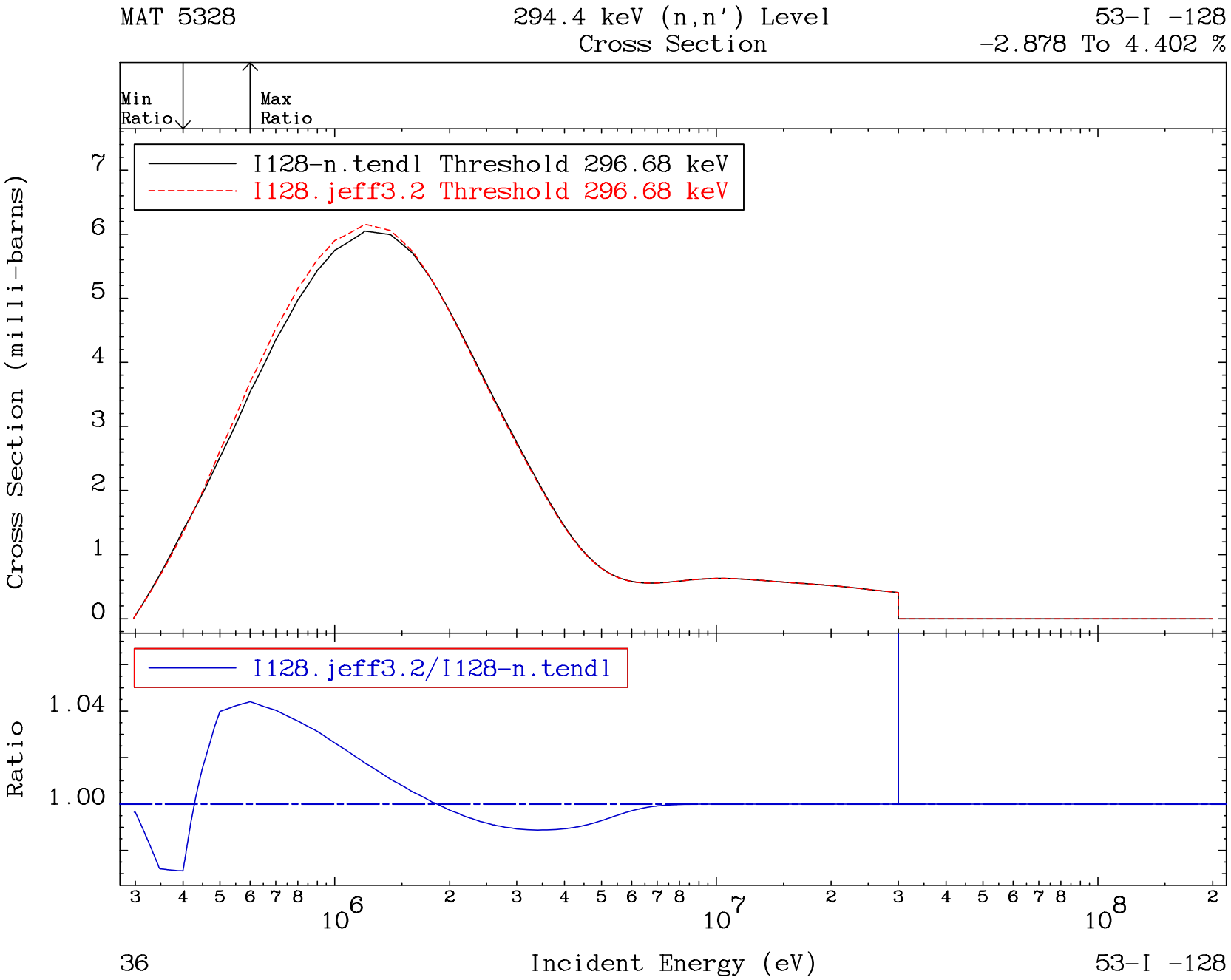

MAT 5328
226.1 keV (n,n') Level
Cross Section
53-I -128
-2.665 To 4.068 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 227.88 keV
I128.jeff3.2 Threshold 227.88 keV
Cross Section (milli-barns)
0
2
4
6
8
I128.jeff3.2/I128-n.tendl
Ratio
1.00
1.04
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
31
53-I -128

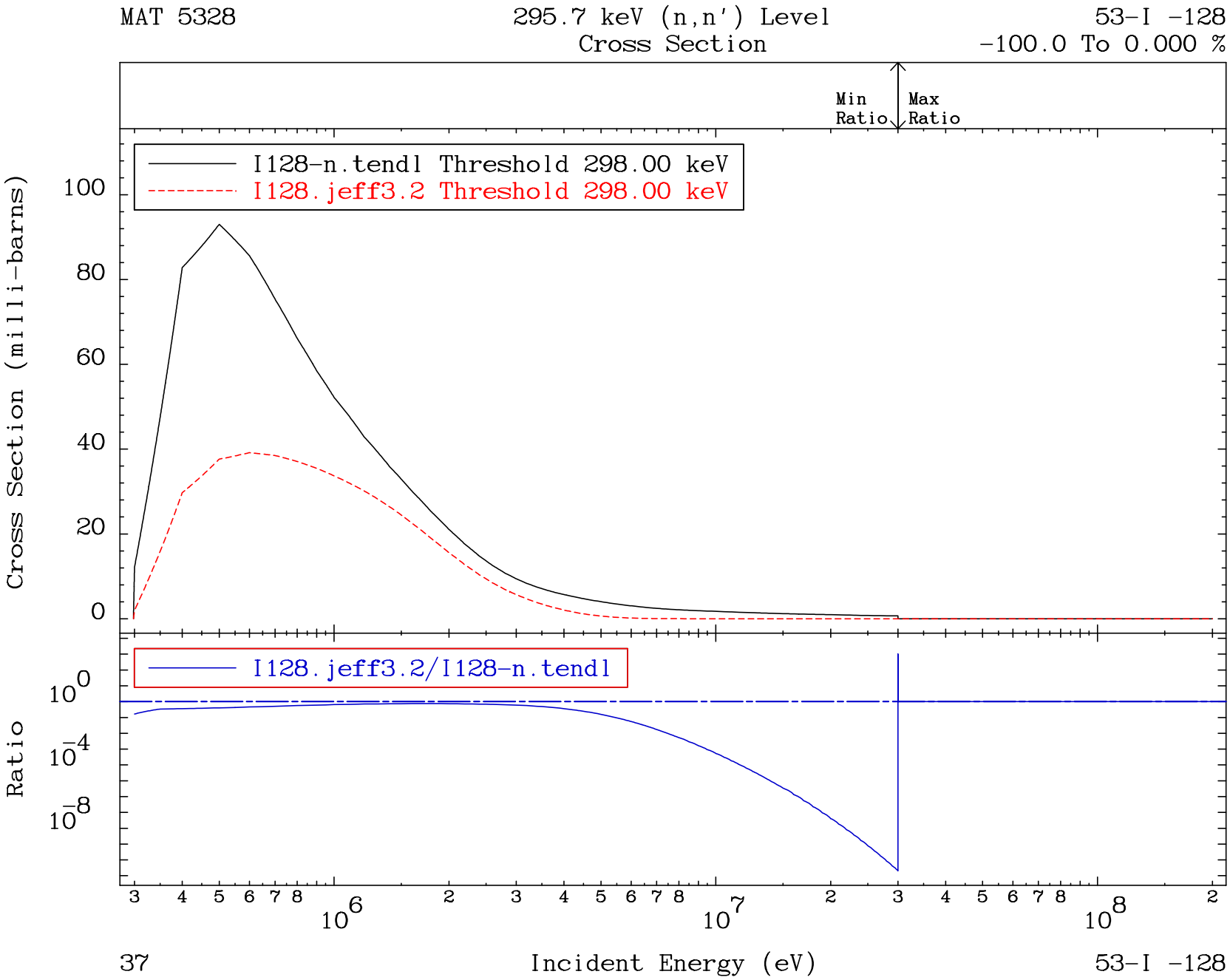

MAT 5328
232.6 keV (n,n') Level
Cross Section
53-I -128
-0.920 To 1.874 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 234.41 keV
I128.jeff3.2 Threshold 234.41 keV
Cross Section (milli-barns)
20
15
10
5
0
I128.jeff3.2/I128-n.tendl
Ratio
1.02
1.01
1.00
0.99
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
53-I -128

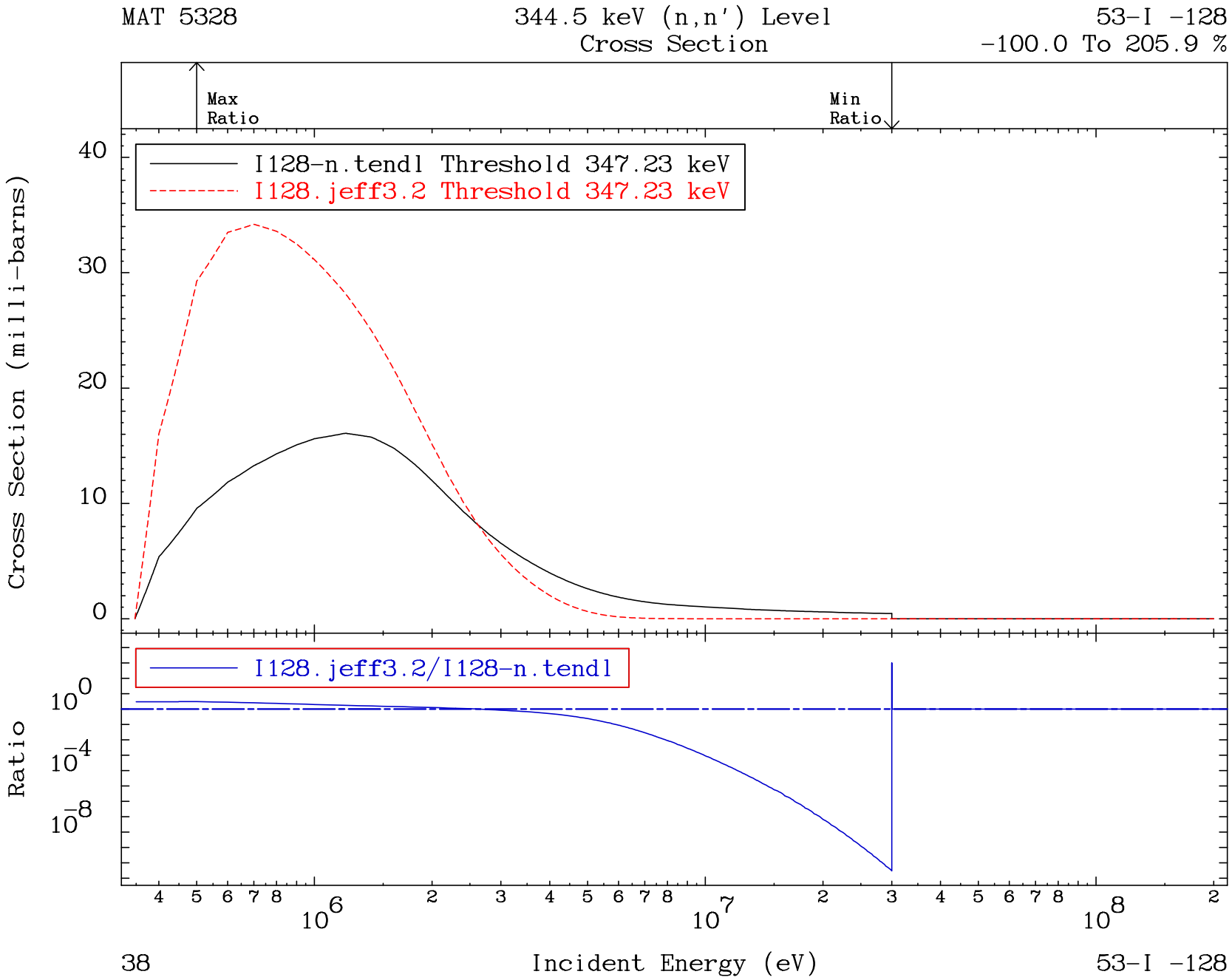

MAT 5328
234.5 keV (n,n') Level
Cross Section
53-I -128
-2.695 To 4.108 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 236.34 keV
I128.jeff3.2 Threshold 236.34 keV
Cross Section (milli-barns)
0
2
4
6
8
I128.jeff3.2/I128-n.tendl
Ratio
1.00
1.04
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
33
53-I -128

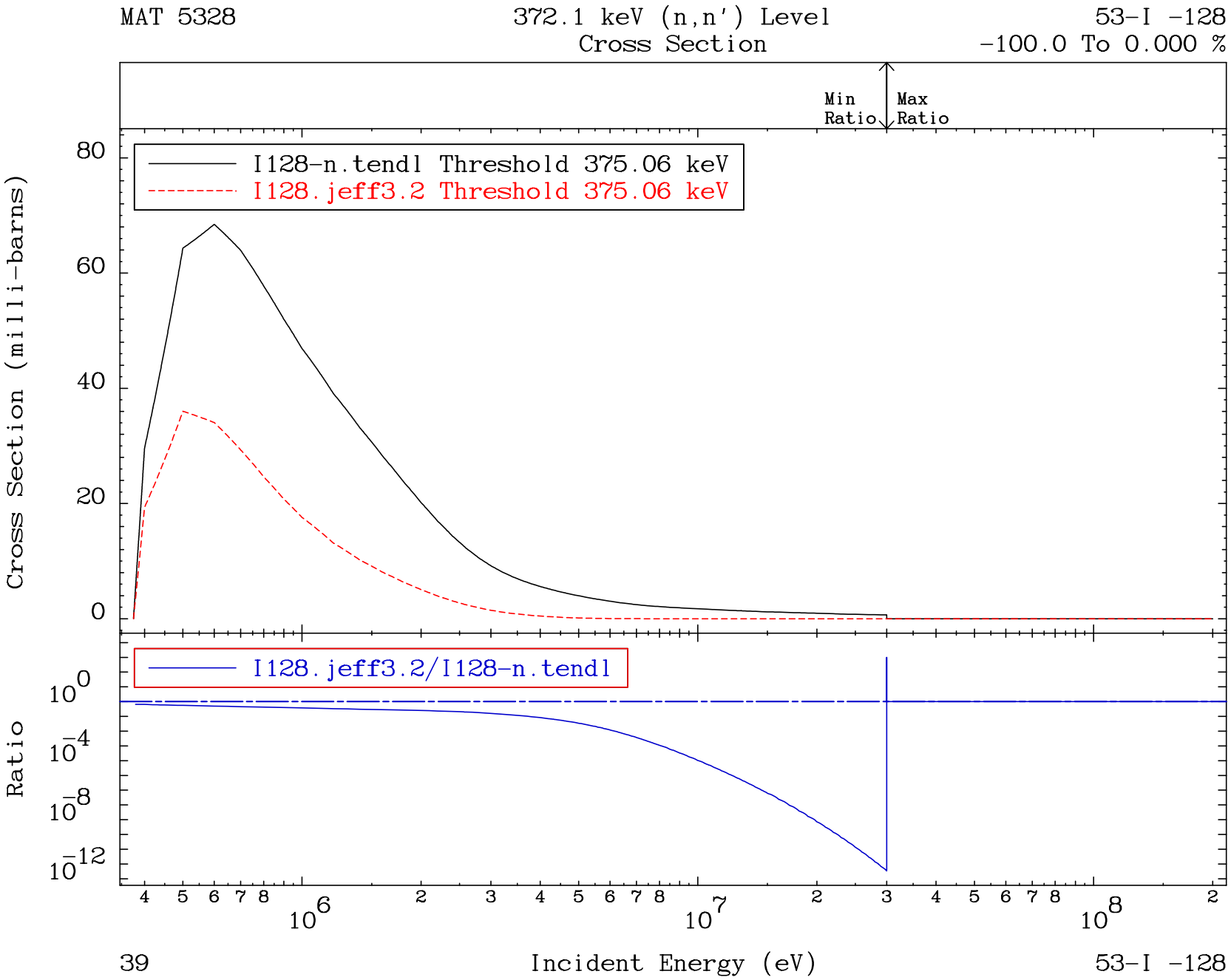

MAT 5328
269.7 keV (n,n') Level
Cross Section
53-I -128
-2.812 To 4.280 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 271.84 keV
I128.jeff3.2 Threshold 271.84 keV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
I128.jeff3.2/I128-n.tendl
Ratio
1.04
1.00
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
53-I -128

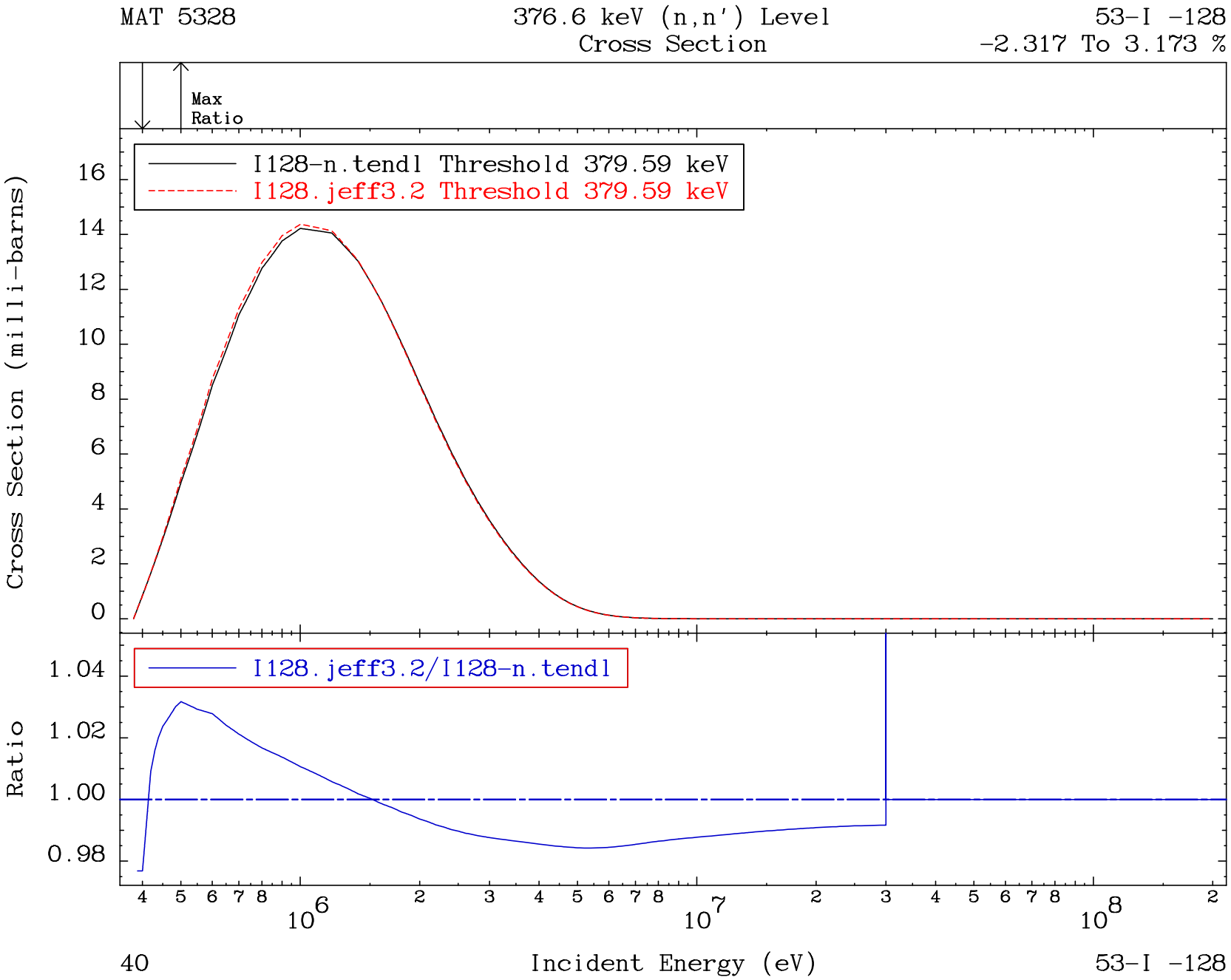

MAT 5328
285.4 keV (n,n') Level
Cross Section
53-I -128
-4.642 To 2.672 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 287.65 keV
I128.jeff3.2 Threshold 287.65 keV
Cross Section (milli-barns)
100
80
60
40
20
0
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.95
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
35
Incident Energy (eV)
53-I -128

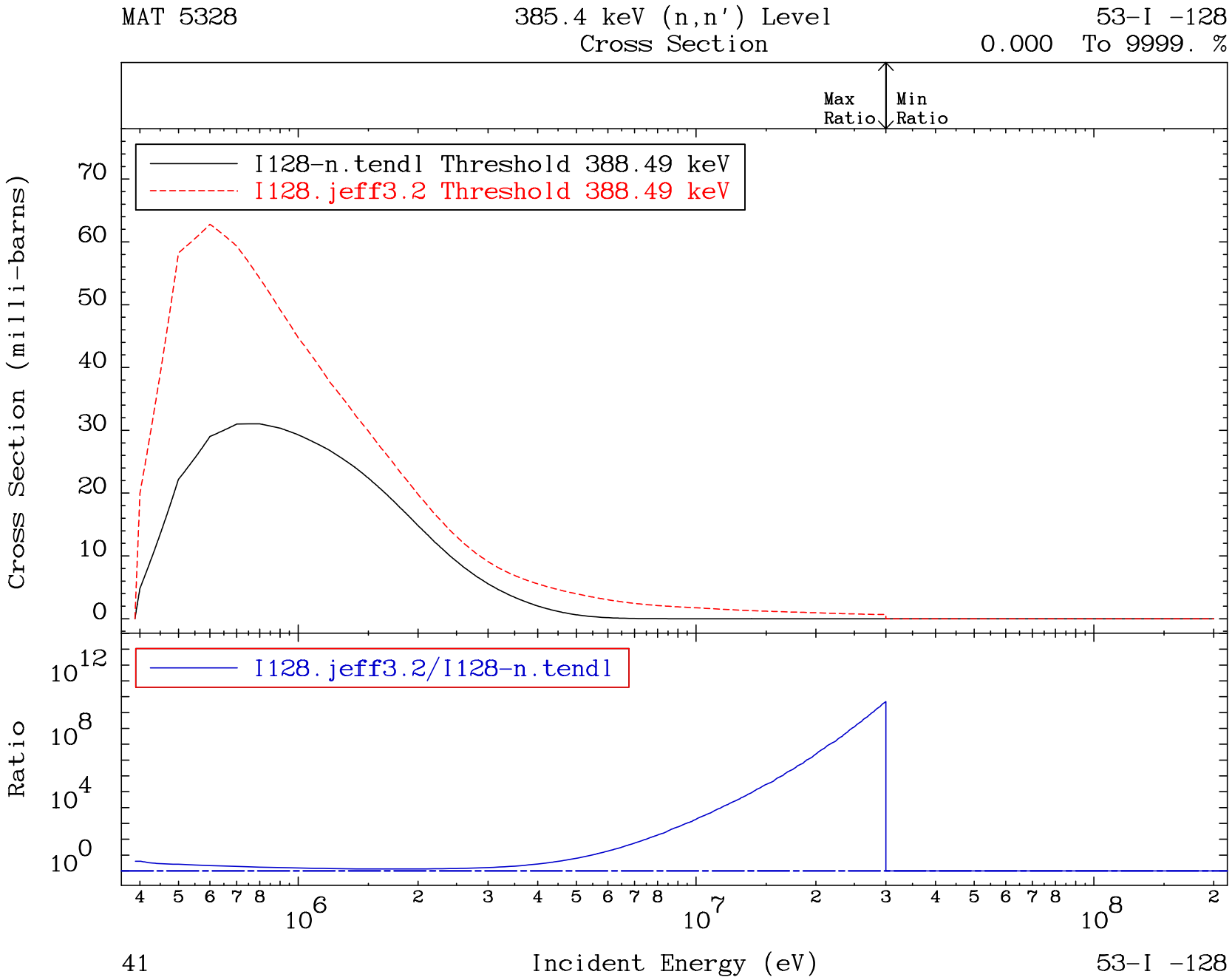

MAT 5328
294.4 keV (n,n') Level
Cross Section
53-I -128
-2.878 To 4.402 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 296.68 keV
I128.jeff3.2 Threshold 296.68 keV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
I128.jeff3.2/I128-n.tendl
Ratio
1.04
1.00
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
36
Incident Energy (eV)
53-I -128

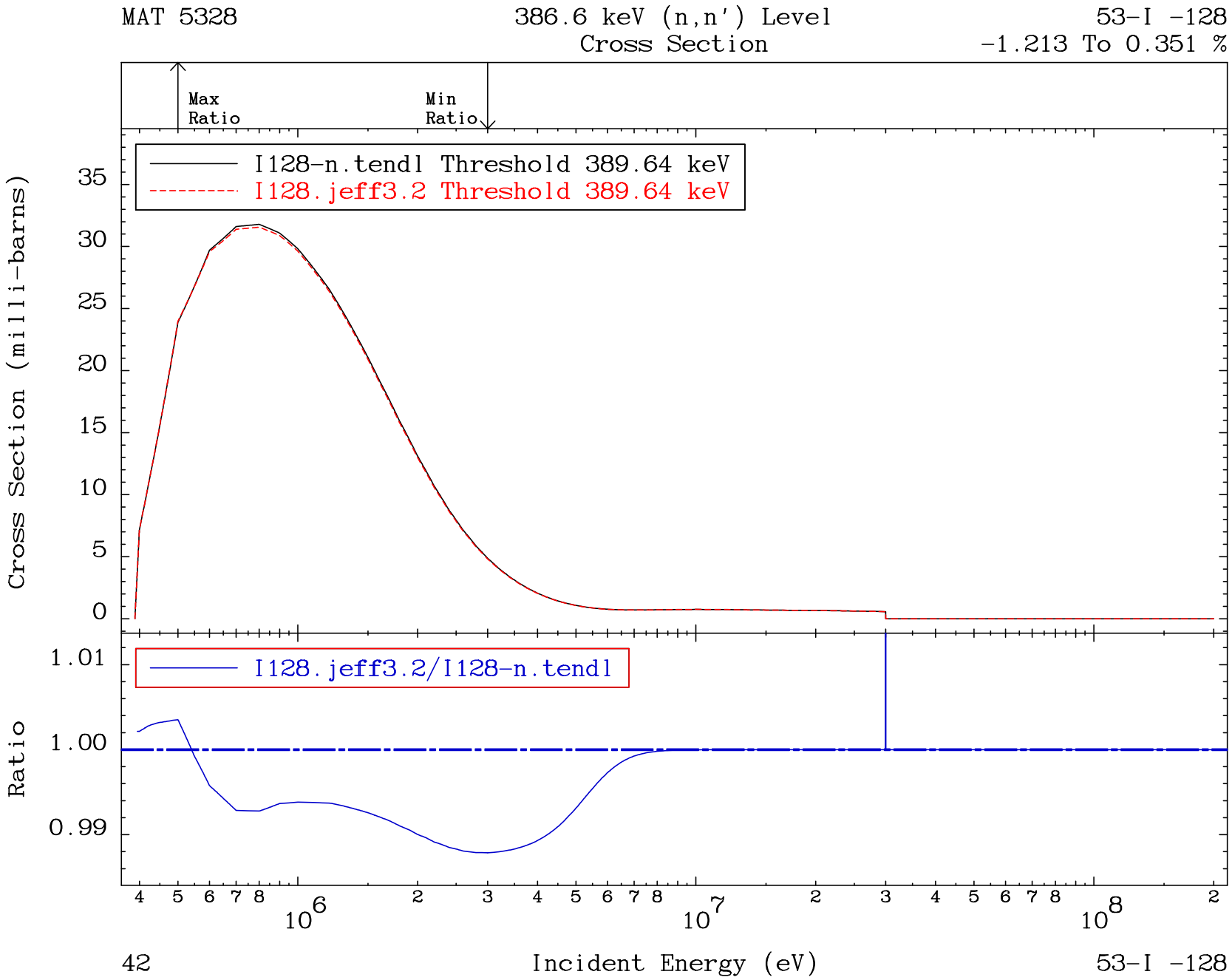

MAT 5328
295.7 keV (n,n') Level
Cross Section
53-I -128
-100.0 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 298.00 keV
I128.jeff3.2 Threshold 298.00 keV
Cross Section (milli-barns)
100
80
60
40
20
0
I128.jeff3.2/I128-n.tendl
Ratio
10^0
10^-4
10^-8
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
37
Incident Energy (eV)
53-I -128

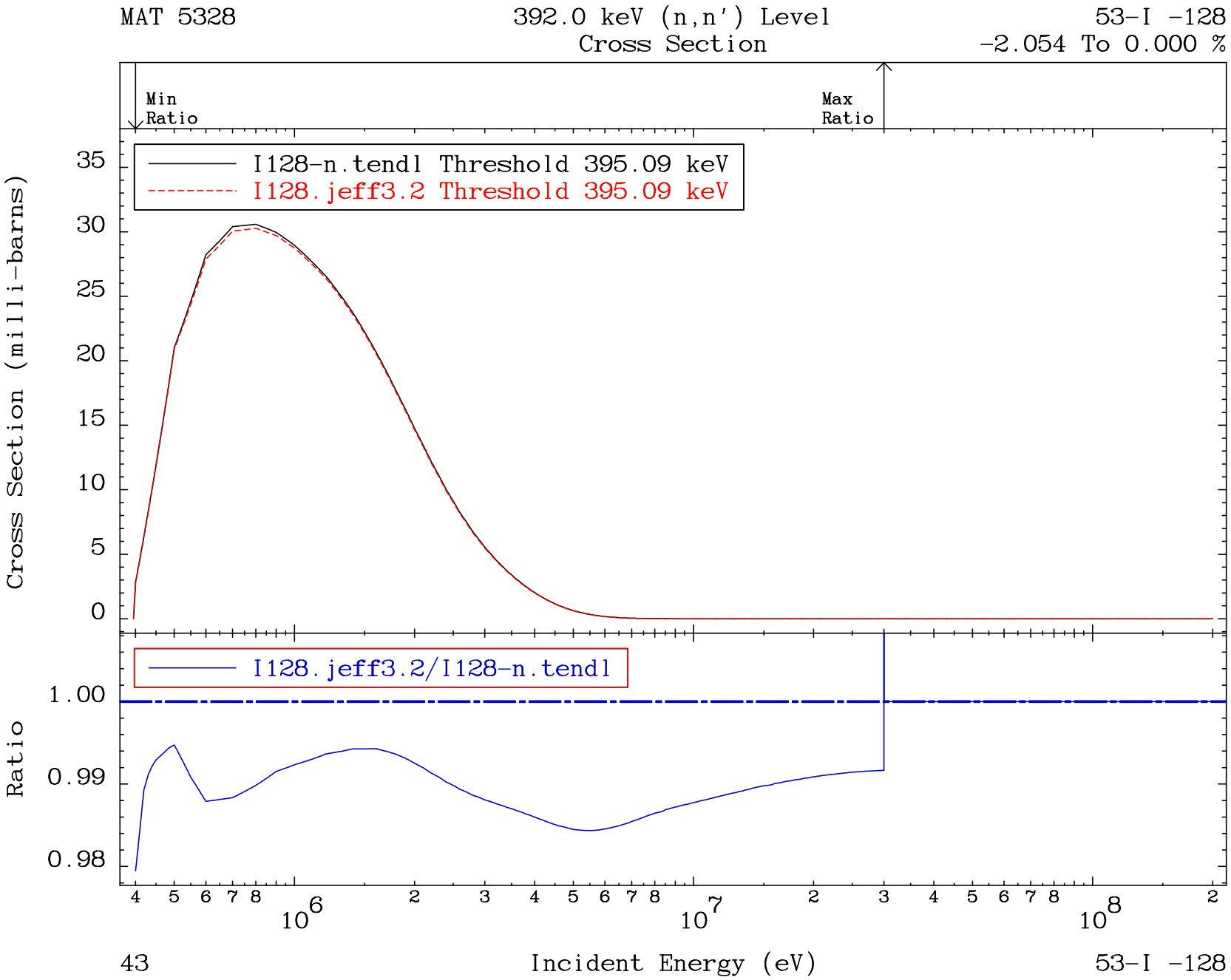

MAT 5328
344.5 keV (n,n') Level
Cross Section
53-I -128
-100.0 To 205.9 %
Max
Ratio
Min
Ratio
I128-n.tendl Threshold 347.23 keV
I128.jeff3.2 Threshold 347.23 keV
Cross Section (milli-barns)
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
10^0
10^-4
10^-8
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
53-I -128

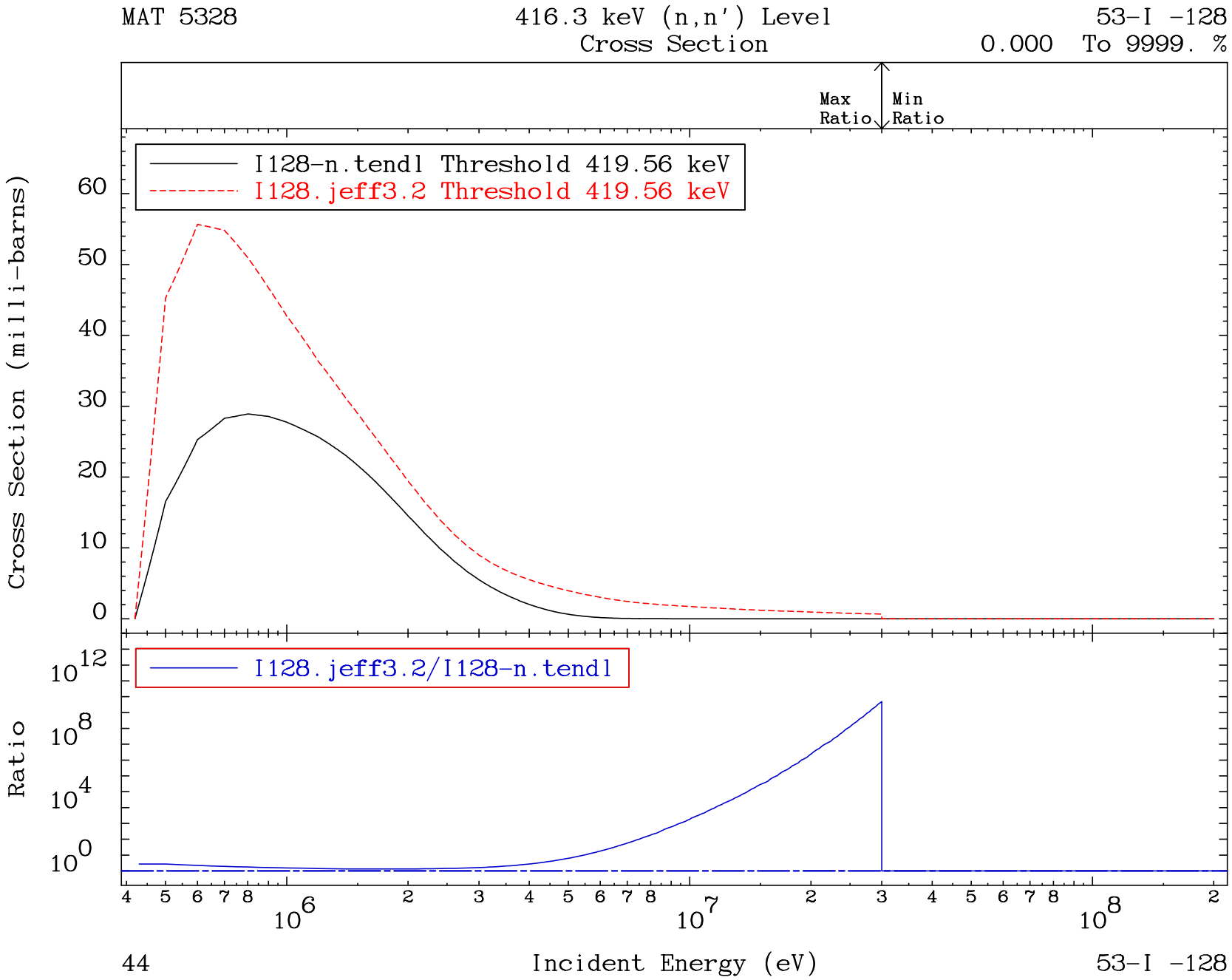

MAT 5328
372.1 keV (n,n') Level
Cross Section
53-I -128
-100.0 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 375.06 keV
I128.jeff3.2 Threshold 375.06 keV
Cross Section (milli-barns)
80
60
40
20
0
I128.jeff3.2/I128-n.tendl
Ratio
10^0
10^-4
10^-8
10^-12
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
39
Incident Energy (eV)
53-I -128

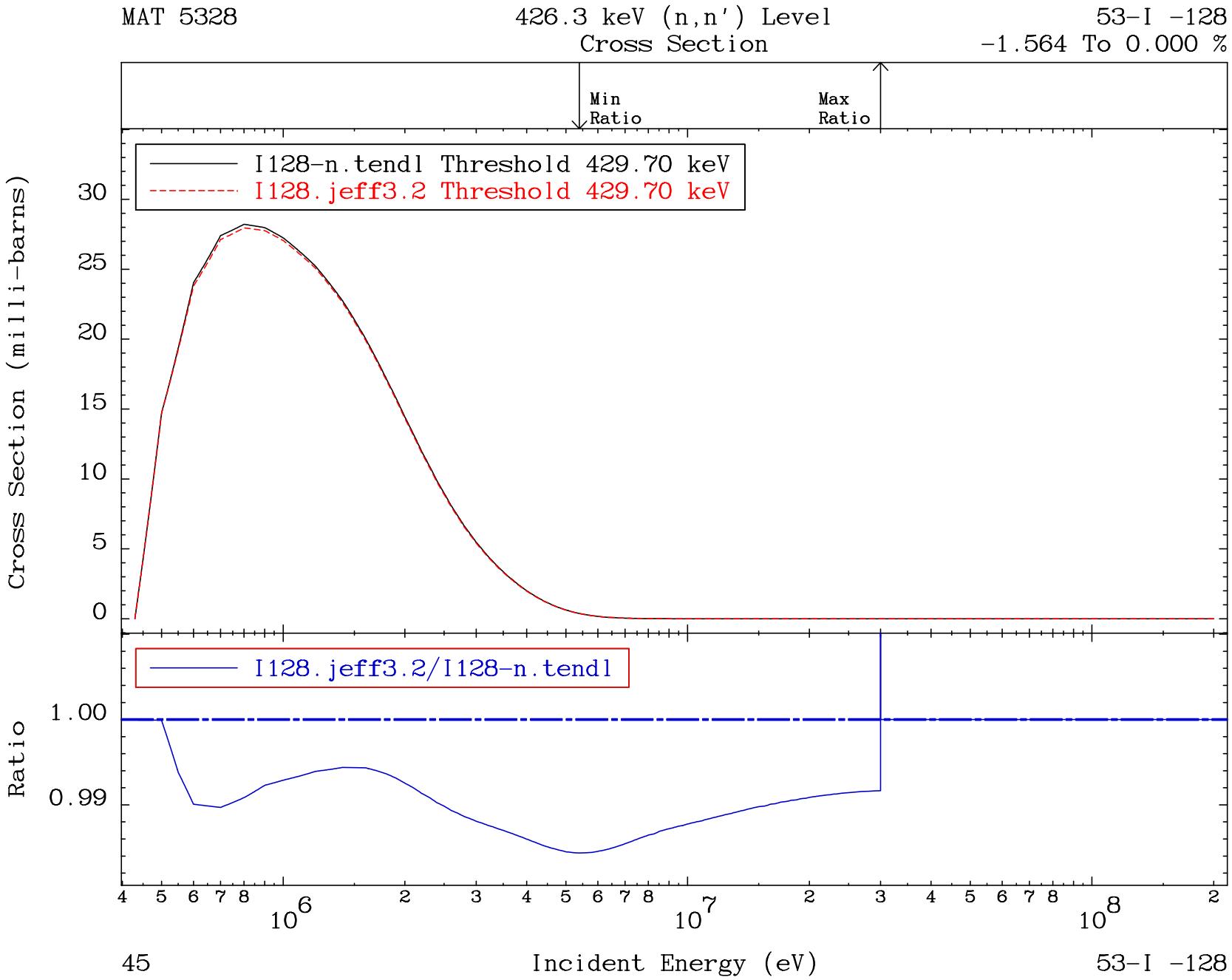

MAT 5328
376.6 keV (n,n') Level
Cross Section
53-I -128
-2.317 To 3.173 %
Max
Ratio
I128-n.tendl Threshold 379.59 keV
I128.jeff3.2 Threshold 379.59 keV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
I128.jeff3.2/I128-n.tendl
Ratio
1.04
1.02
1.00
0.98
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
40
Incident Energy (eV)
53-I -128

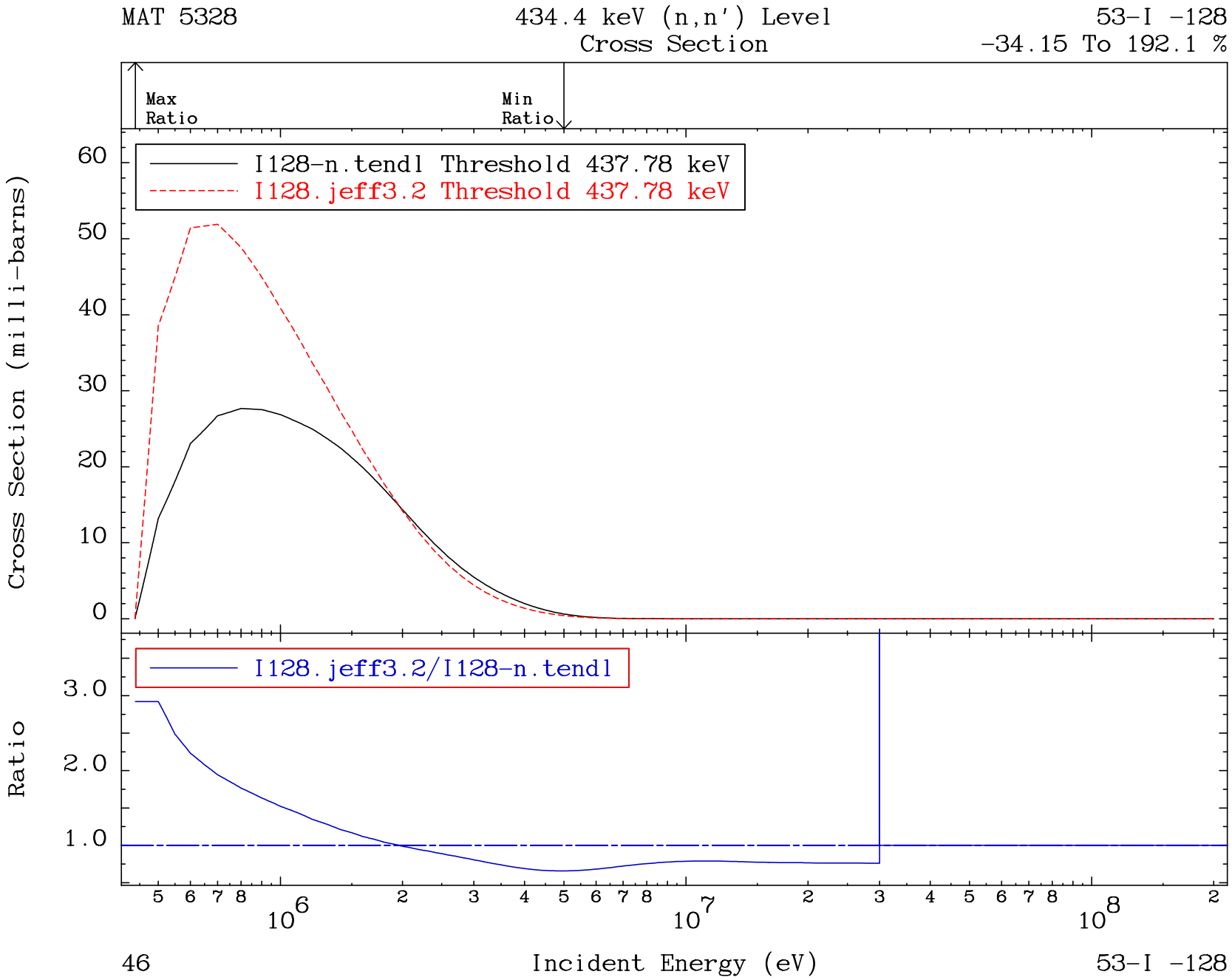

MAT 5328
385.4 keV (n,n') Level
Cross Section
53-I -128
0.000 To 9999. %
Max Ratio
Min Ratio
I128-n.tendl Threshold 388.49 keV
I128.jeff3.2 Threshold 388.49 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
10^12
10^8
10^4
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
53-I -128

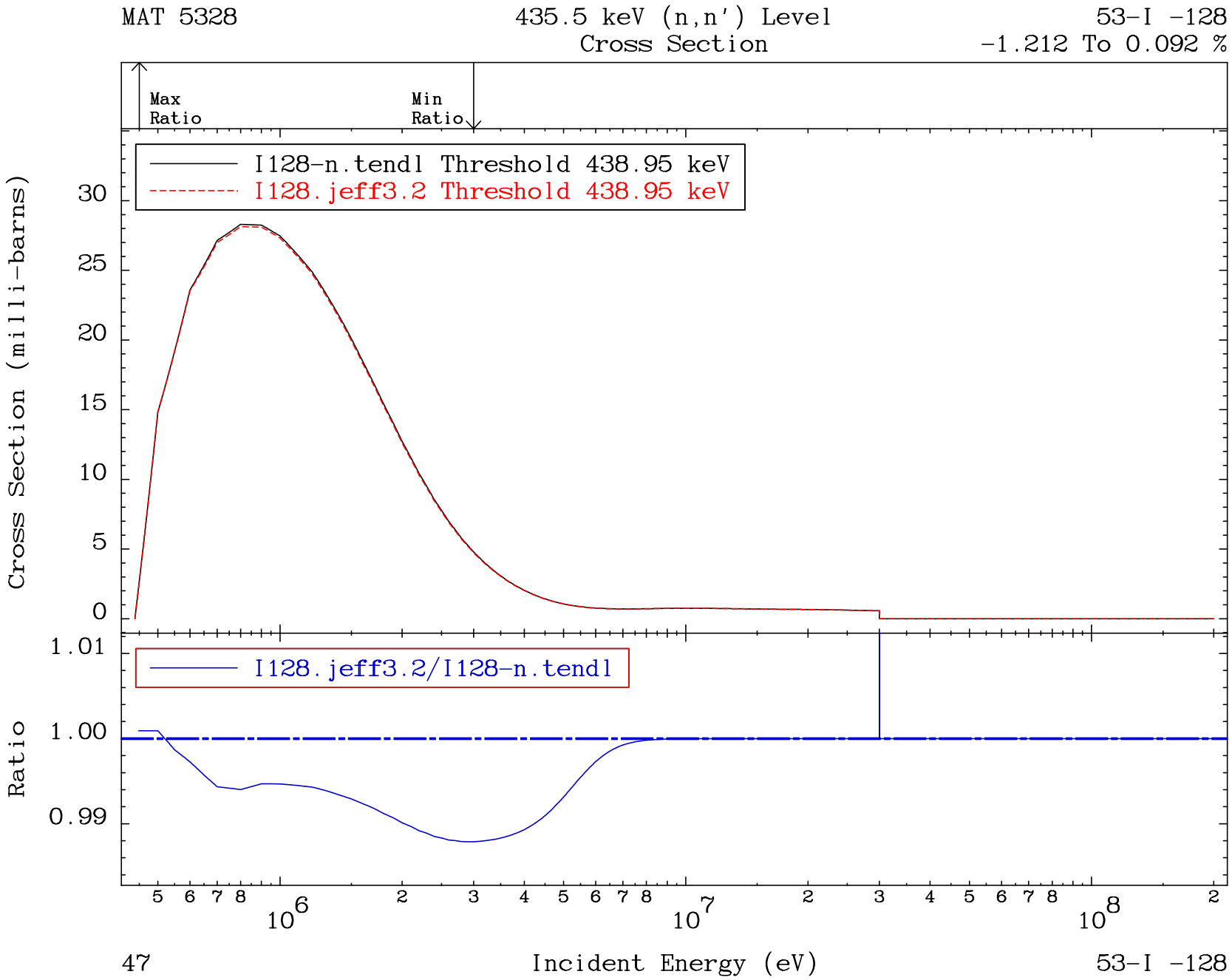

MAT 5328
386.6 keV (n,n') Level
Cross Section
53-I -128
-1.213 To 0.351 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 389.64 keV
I128.jeff3.2 Threshold 389.64 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
I128.jeff3.2/I128-n.tendl
Ratio
1.01
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
42
Incident Energy (eV)
53-I -128

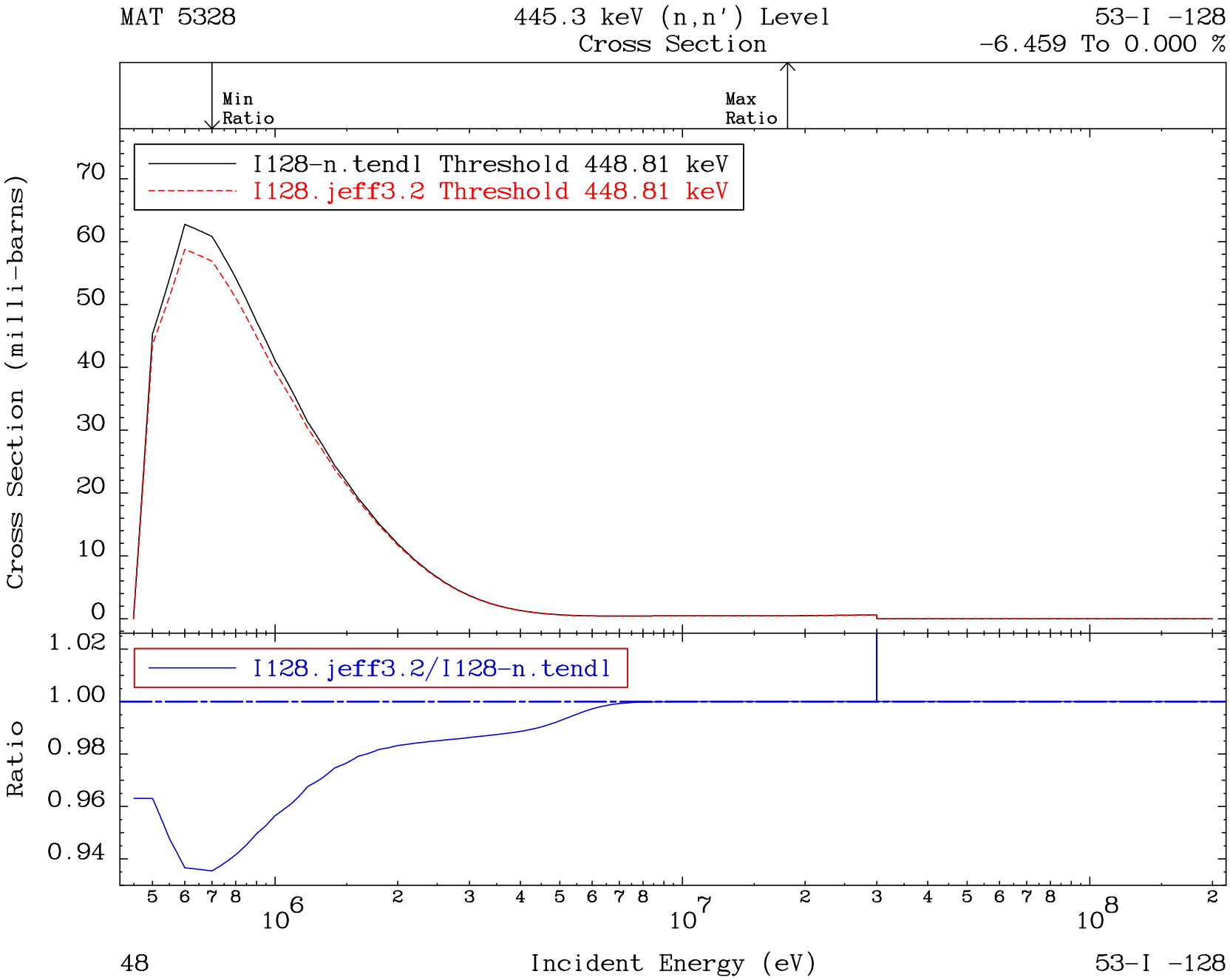

MAT 5328
392.0 keV (n,n') Level
Cross Section
53-I -128
-2.054 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 395.09 keV
I128.jeff3.2 Threshold 395.09 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.99
0.98
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
43
Incident Energy (eV)
53-I -128

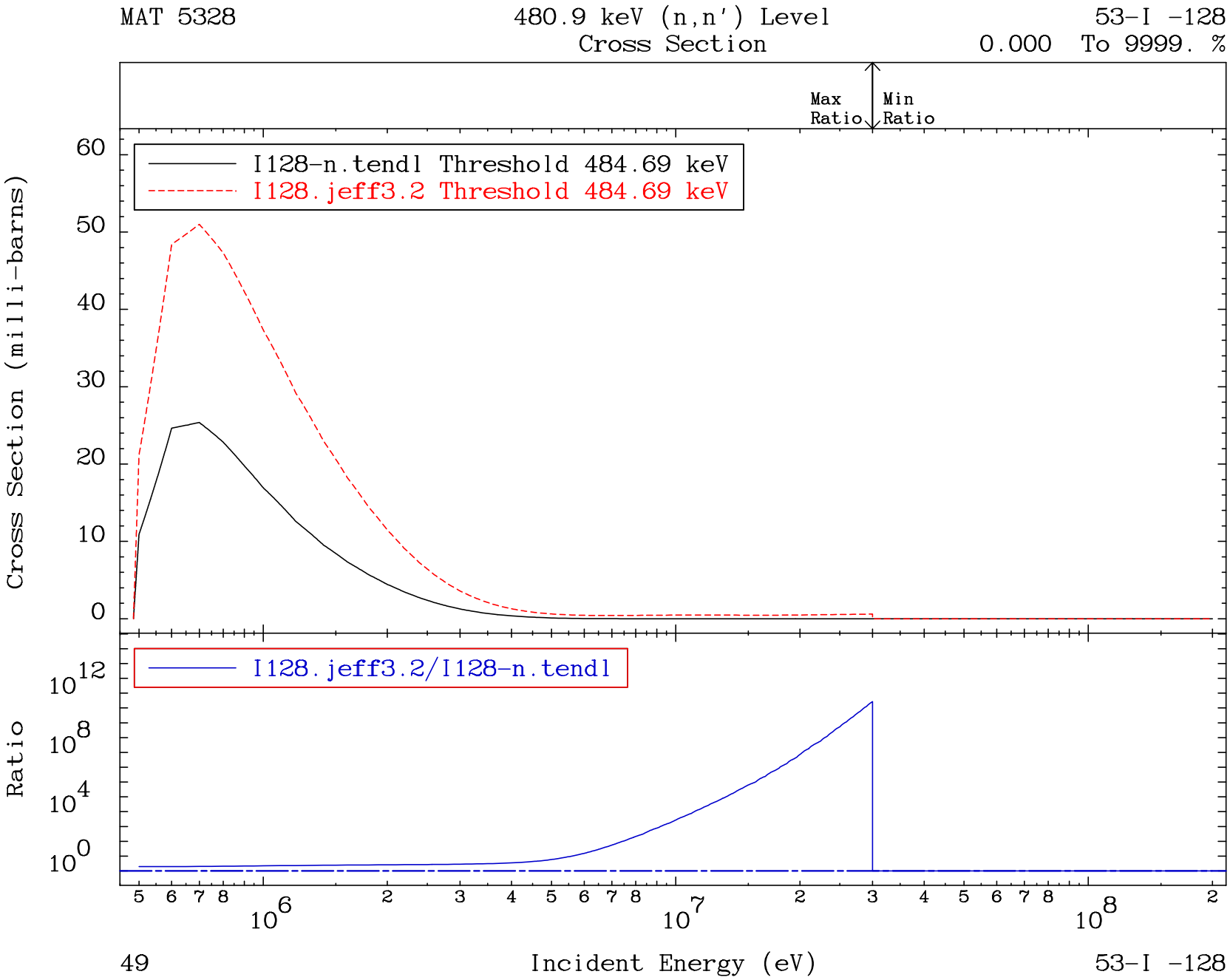

MAT 5328
416.3 keV (n,n') Level
Cross Section
53-I -128
0.000 To 9999. %
Max Ratio
Min Ratio
I128-n.tendl Threshold 419.56 keV
I128.jeff3.2 Threshold 419.56 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
10^12
10^8
10^4
10^0
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
44
Incident Energy (eV)
53-I -128

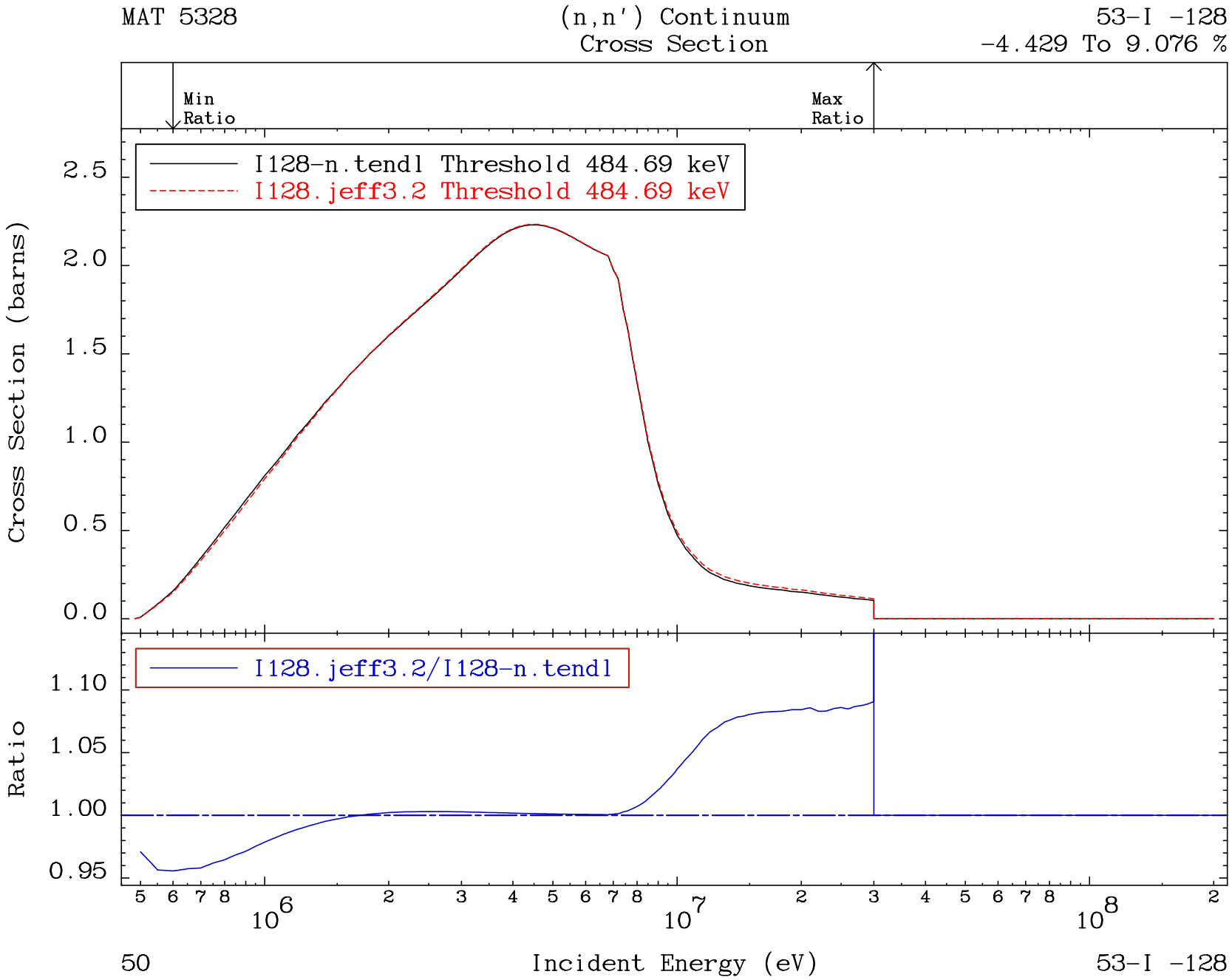

MAT 5328
426.3 keV (n,n') Level
Cross Section
53-I -128
-1.564 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 429.70 keV
I128.jeff3.2 Threshold 429.70 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.99
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
53-I -128

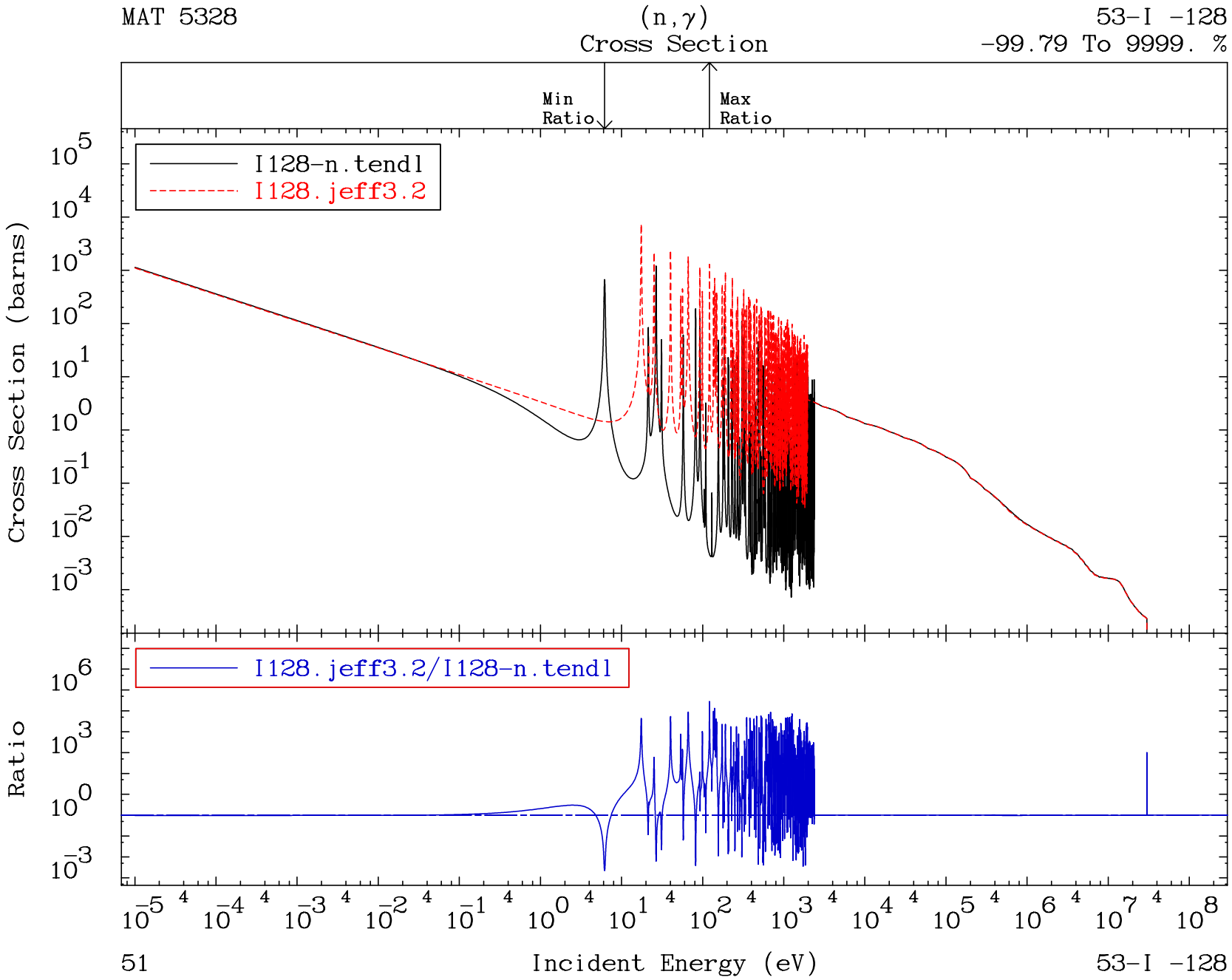

MAT 5328
434.4 keV (n,n') Level
Cross Section
53-I -128
-34.15 To 192.1 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 437.78 keV
I128.jeff3.2 Threshold 437.78 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
3.0
2.0
1.0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
53-I -128

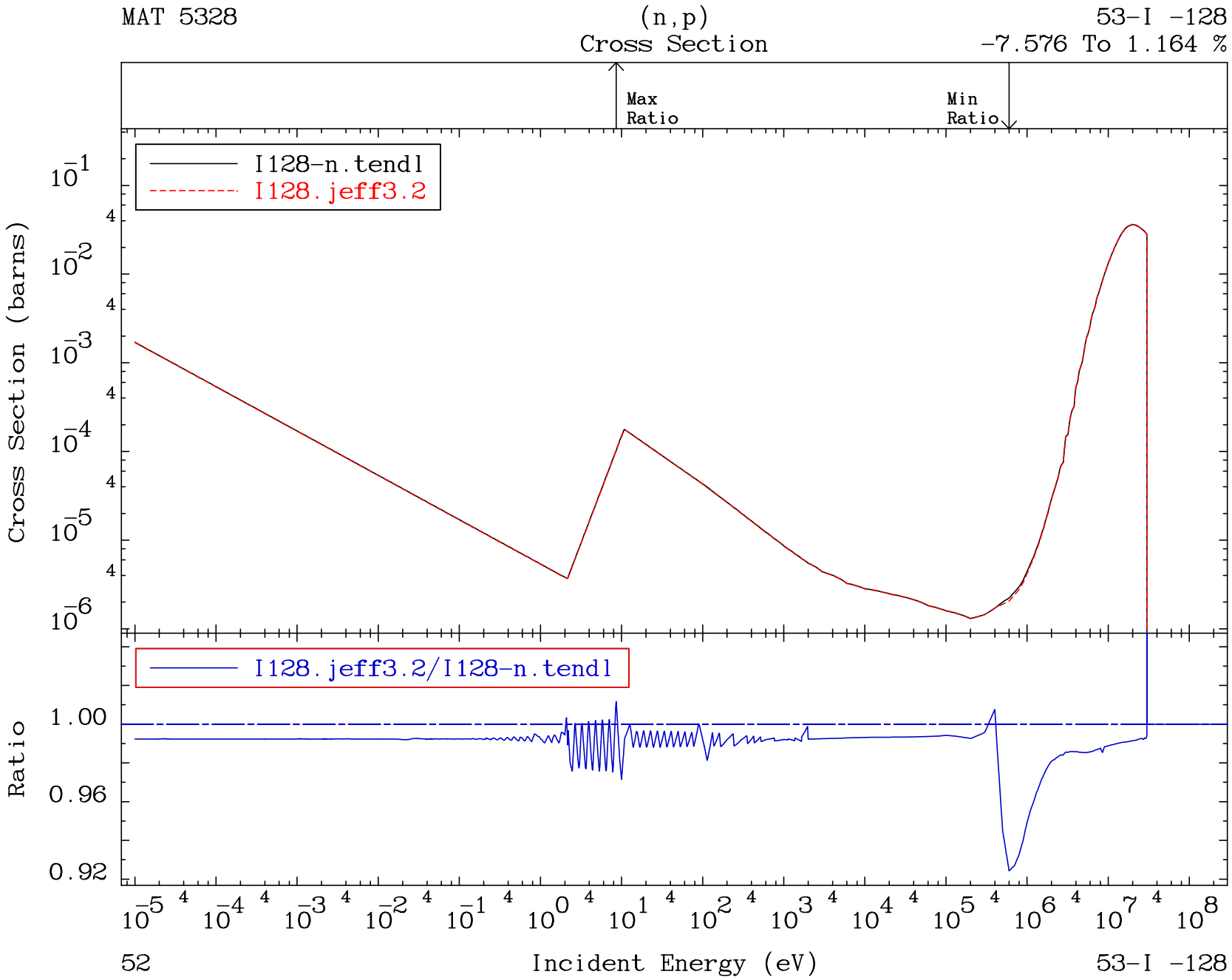

MAT 5328
435.5 keV (n,n') Level
Cross Section
53-I -128
-1.212 To 0.092 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 438.95 keV
I128.jeff3.2 Threshold 438.95 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
I128.jeff3.2/I128-n.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
47
Incident Energy (eV)
53-I -128

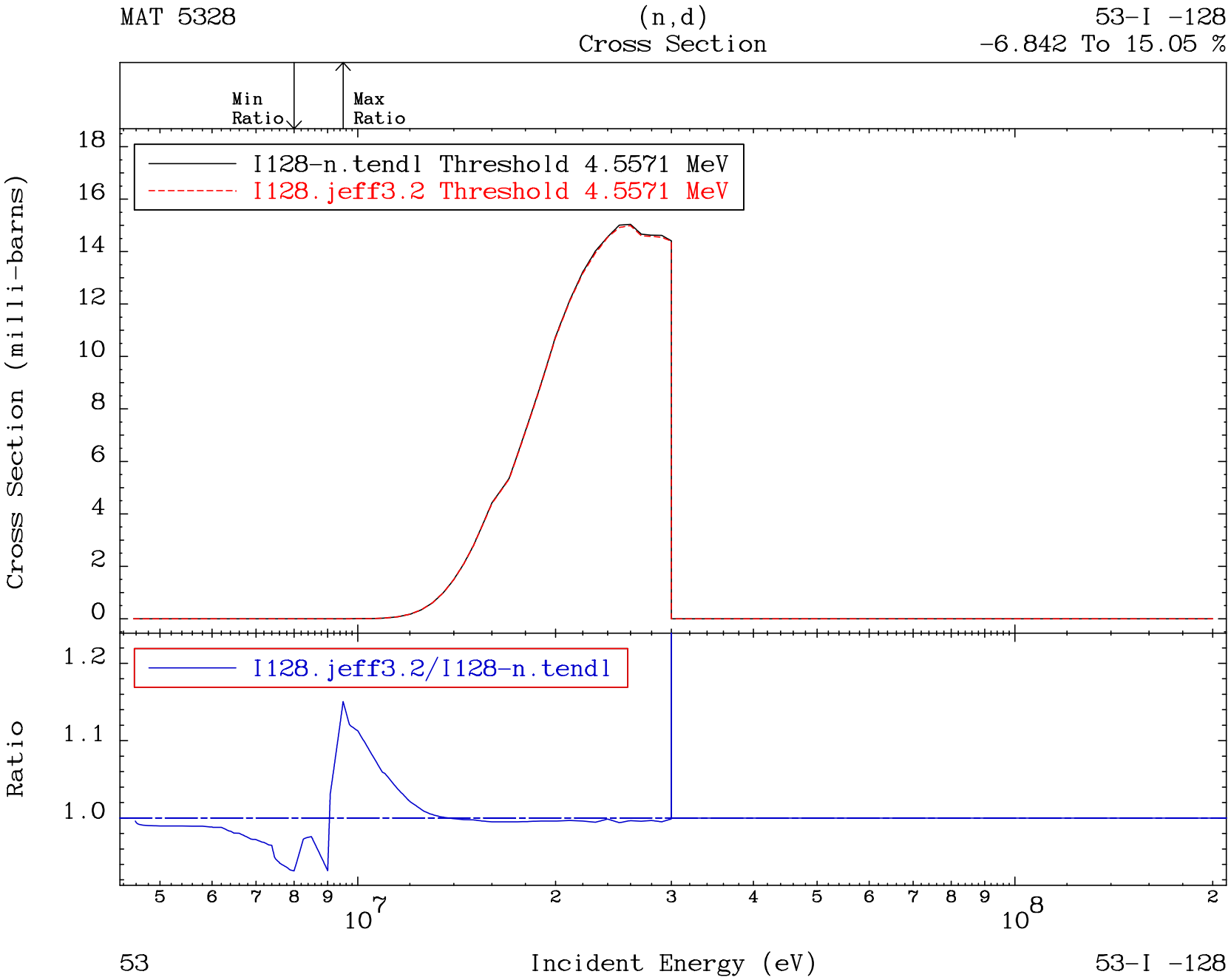

MAT 5328
445.3 keV (n,n') Level
Cross Section
53-I -128
-6.459 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 448.81 keV
I128.jeff3.2 Threshold 448.81 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
1.02
1.00
0.98
0.96
0.94
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
48
Incident Energy (eV)
53-I -128

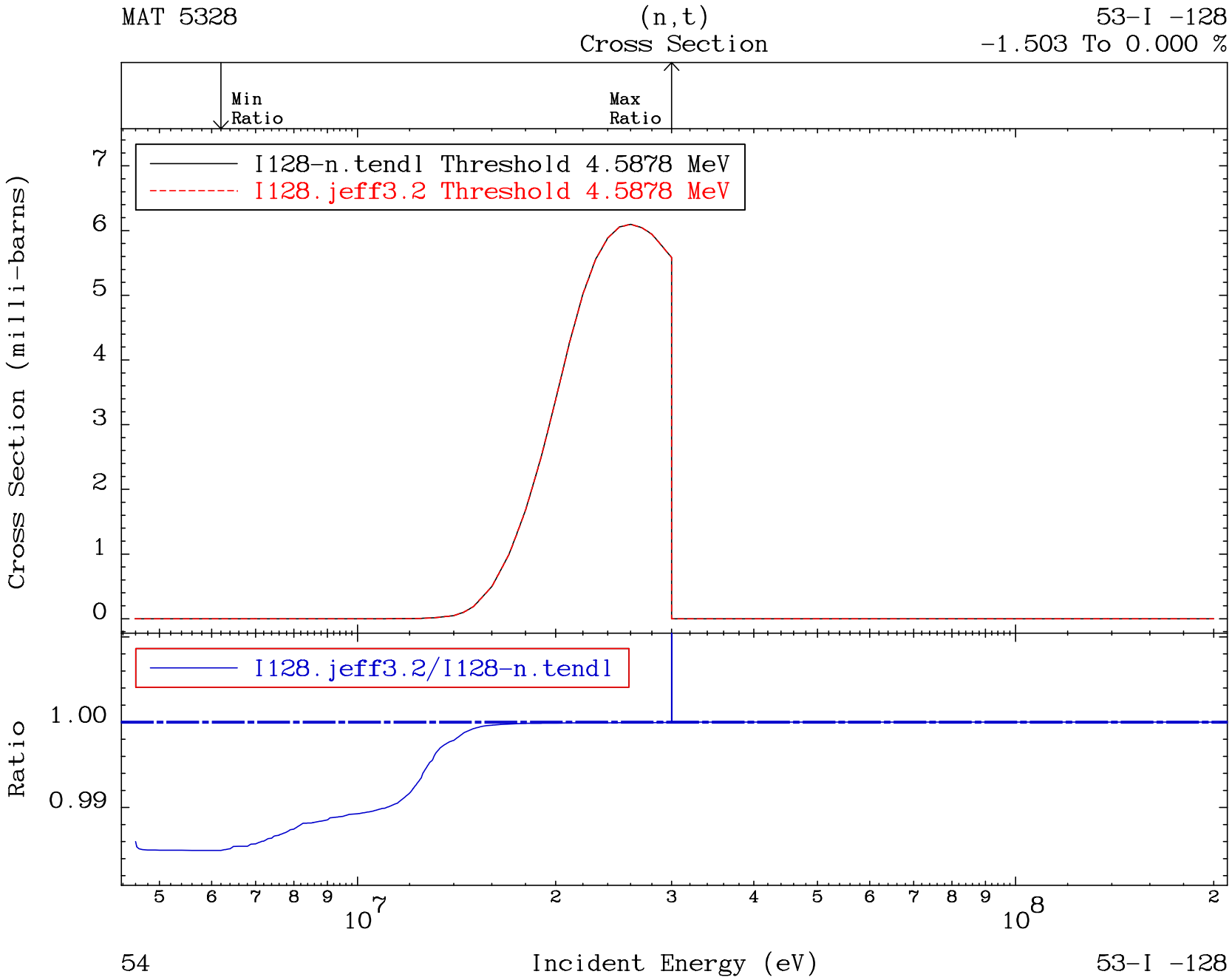

MAT 5328
480.9 keV (n,n') Level
Cross Section
53-I -128
0.000 To 9999. %
Max Ratio
Min Ratio
I128-n.tendl Threshold 484.69 keV
I128.jeff3.2 Threshold 484.69 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
10^12
10^8
10^4
10^0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
49
Incident Energy (eV)
53-I -128

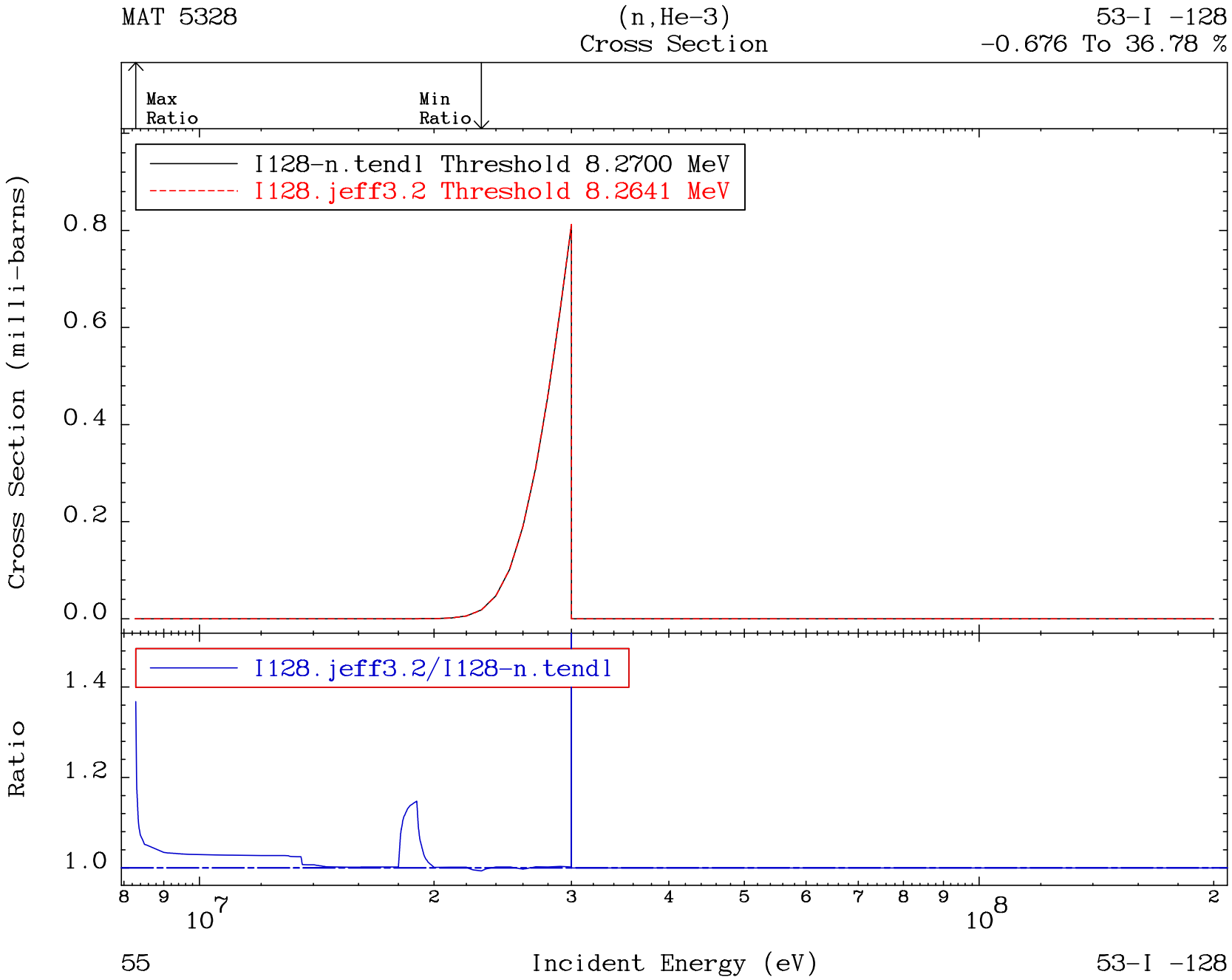

MAT 5328
(n,n') Continuum
Cross Section
53-I -128
-4.429 To 9.076 %
Min
Ratio
Max
Ratio
I128-n.tendl Threshold 484.69 keV
I128.jeff3.2 Threshold 484.69 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
I128.jeff3.2/I128-n.tendl
Ratio
1.10
1.05
1.00
0.95
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
50
Incident Energy (eV)
53-I -128

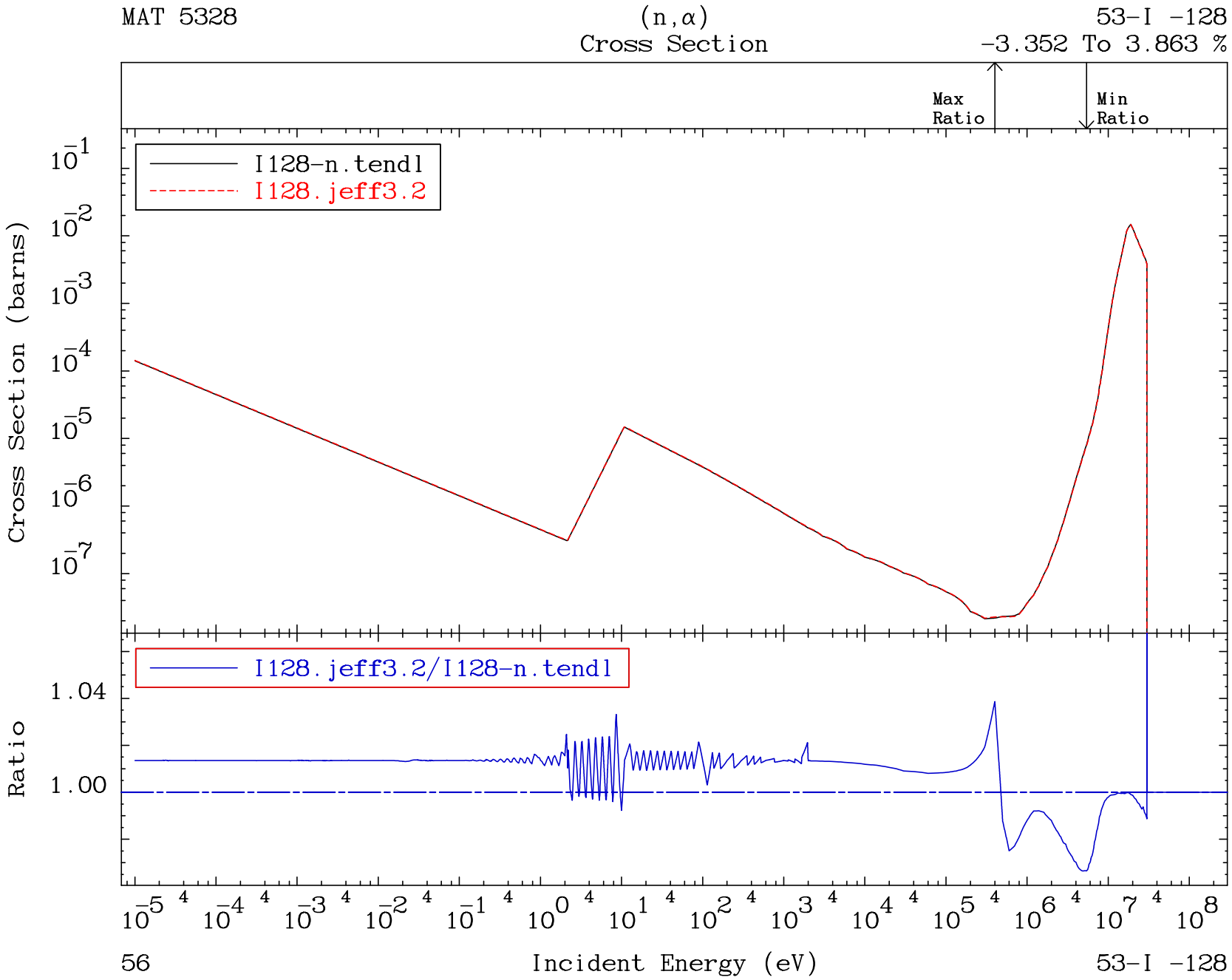

MAT 5328
(n,γ)
Cross Section
53-I -128
-99.79 To 9999. %
Min Ratio
Max Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
51
53-I -128

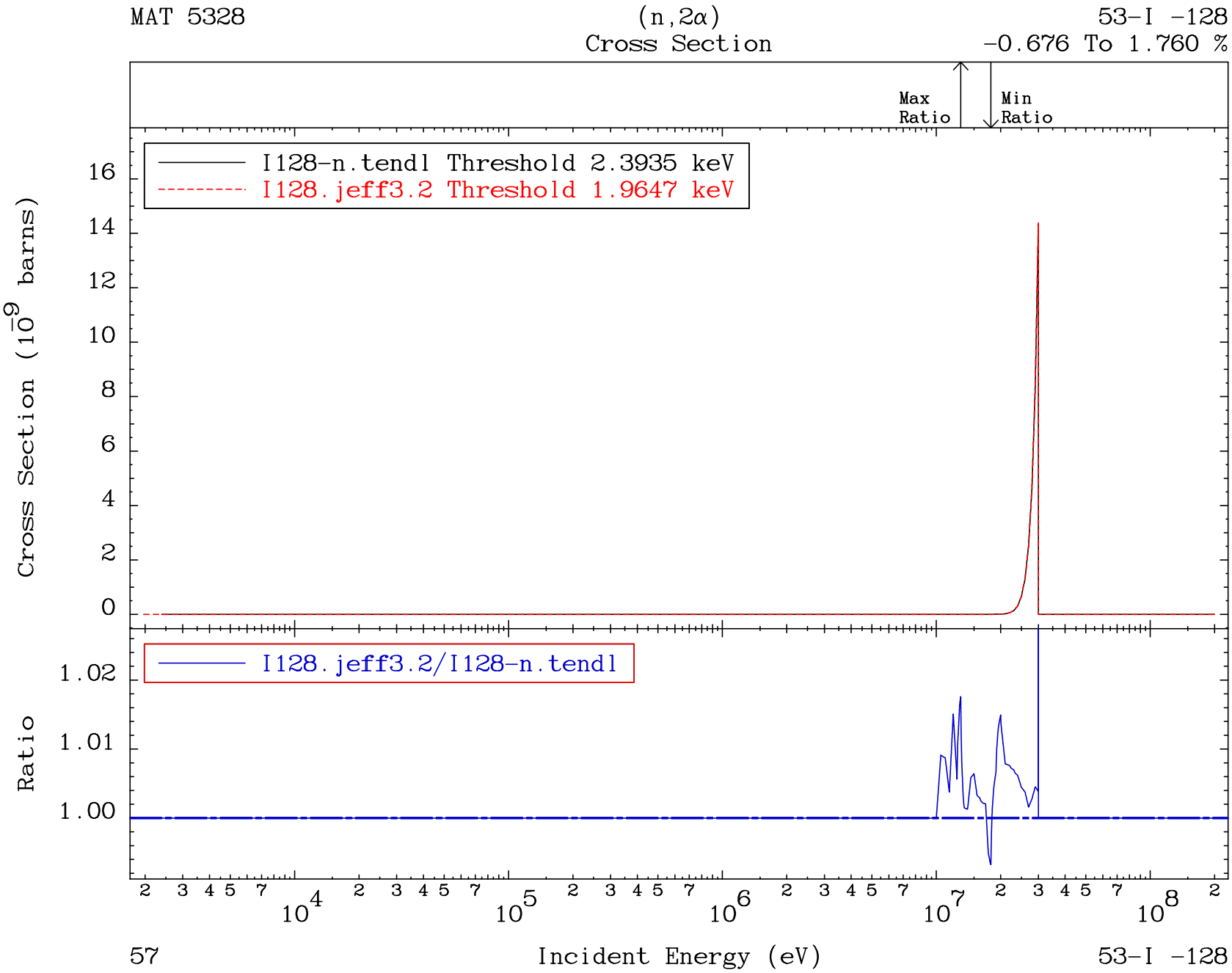

MAT 5328
(n,p)
Cross Section
53-I -128
-7.576 To 1.164 %
Max Ratio
Min Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.96
0.92
Incident Energy (eV)
52
53-I -128

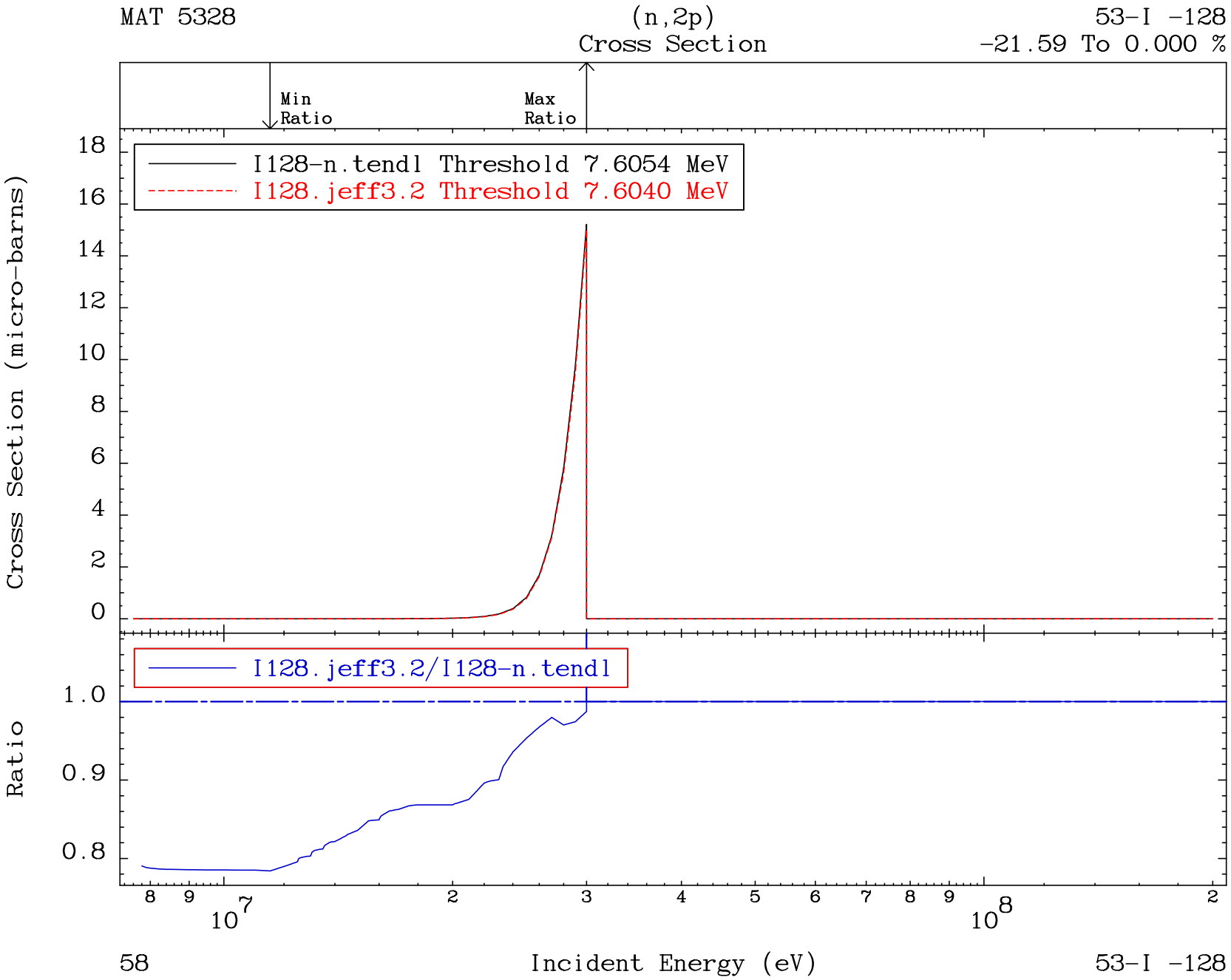

MAT 5328
(n,d)
Cross Section
53-I -128
-6.842 To 15.05 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 4.5571 MeV
I128.jeff3.2 Threshold 4.5571 MeV
Cross Section (milli-barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
53
53-I -128

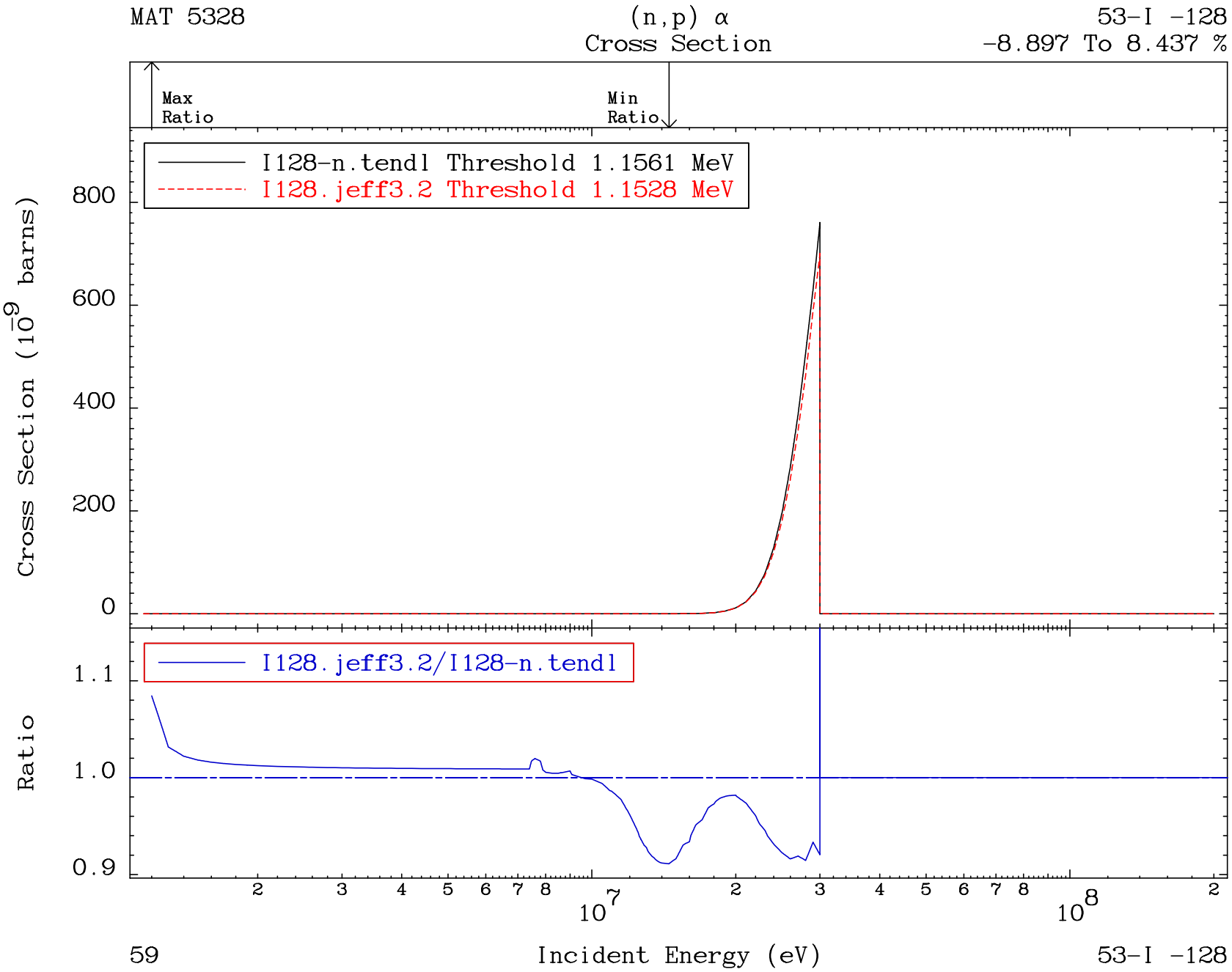

MAT 5328
(n,t)
Cross Section
53-I -128
-1.503 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 4.5878 MeV
I128.jeff3.2 Threshold 4.5878 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
54
Incident Energy (eV)
53-I -128

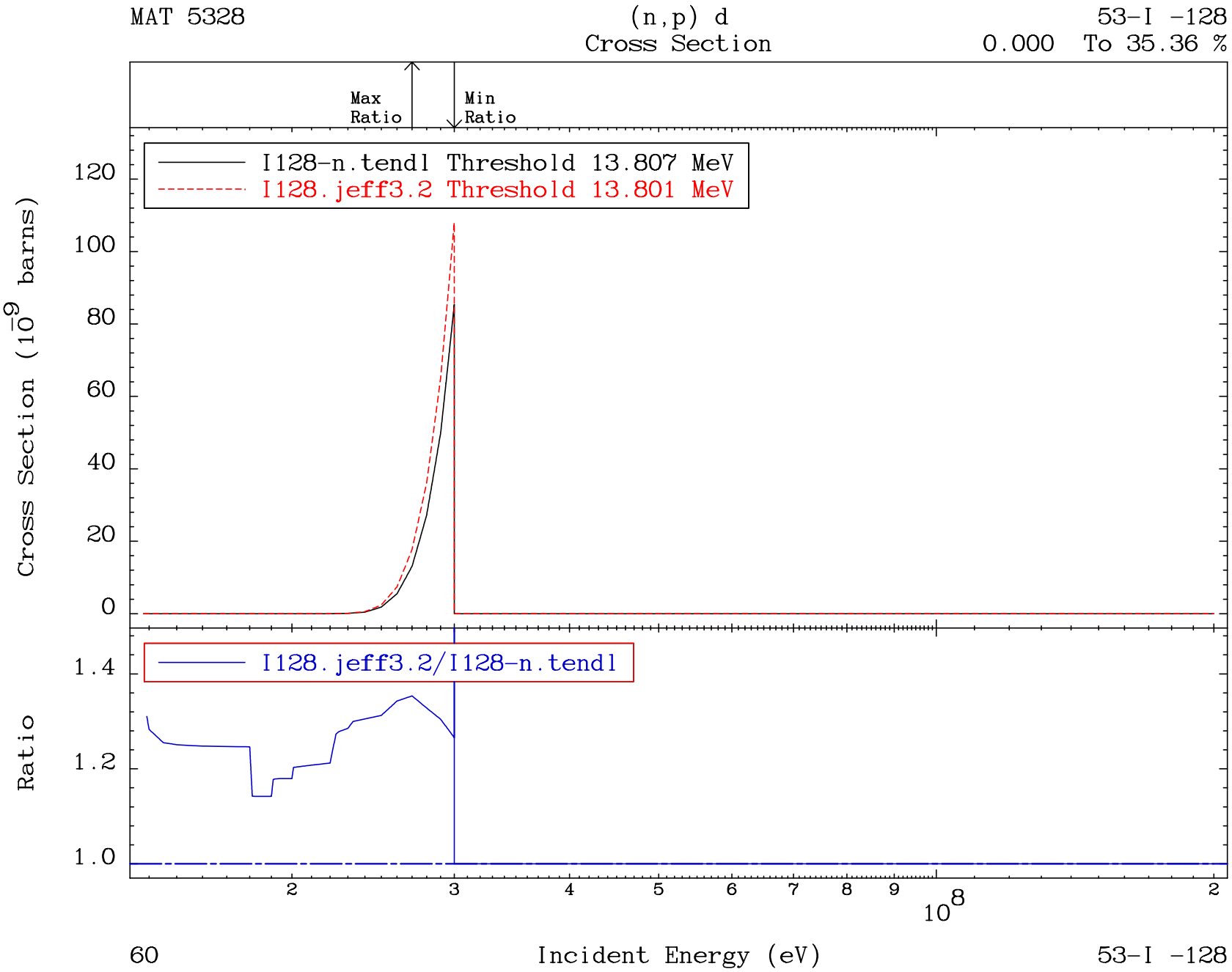

MAT 5328
(n,He-3)
Cross Section
53-I -128
-0.676 To 36.78 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 8.2700 MeV
I128.jeff3.2 Threshold 8.2641 MeV
Cross Section (milli-barns)
0.0
0.2
0.4
0.6
0.8
I128.jeff3.2/I128-n.tendl
Ratio
1.0
1.2
1.4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
55
Incident Energy (eV)
53-I -128

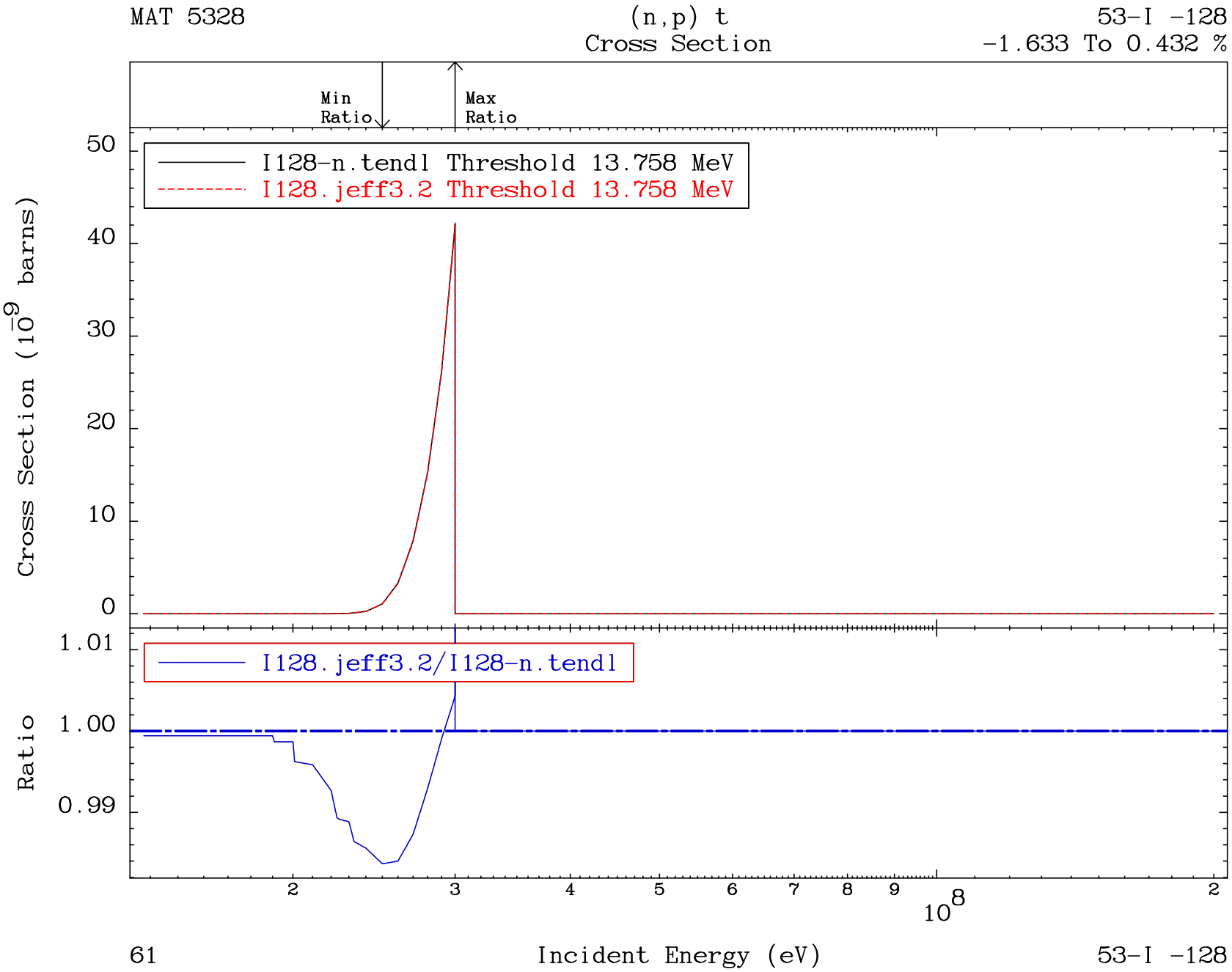

MAT 5328
(n,α)
Cross Section
53-I -128
-3.352 To 3.863 %
Max Ratio
Min Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
56
53-I -128

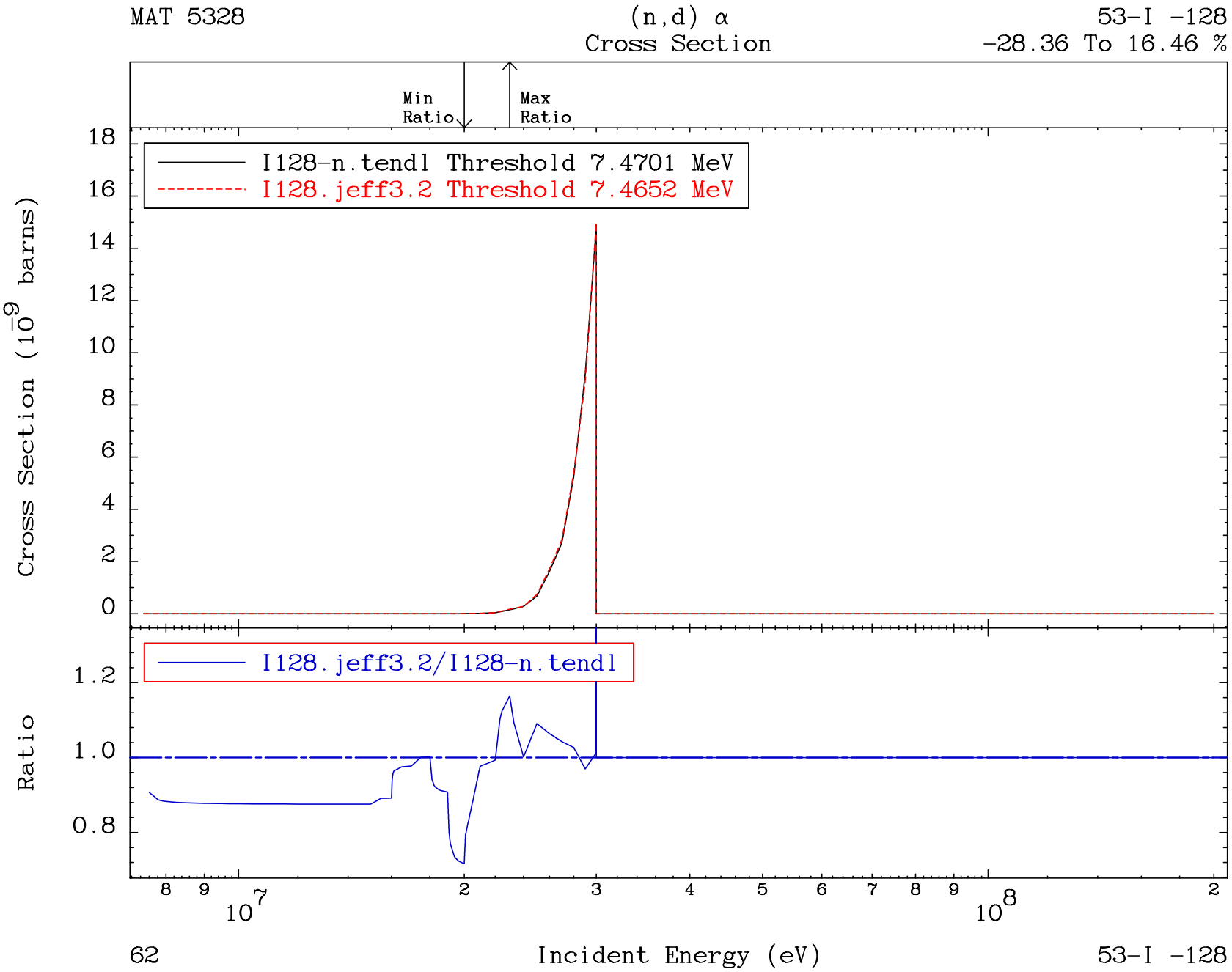

MAT 5328
(n,2α)
Cross Section
53-I -128
-0.676 To 1.760 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 2.3935 keV
I128.jeff3.2 Threshold 1.9647 keV
Cross Section (10^-9 barns)
16
14
12
10
8
6
4
2
0
I128.jeff3.2/I128-n.tendl
Ratio
1.02
1.01
1.00
2 3 4 5 7 10^4 2 3 4 5 7 10^5 2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
57
Incident Energy (eV)
53-I -128

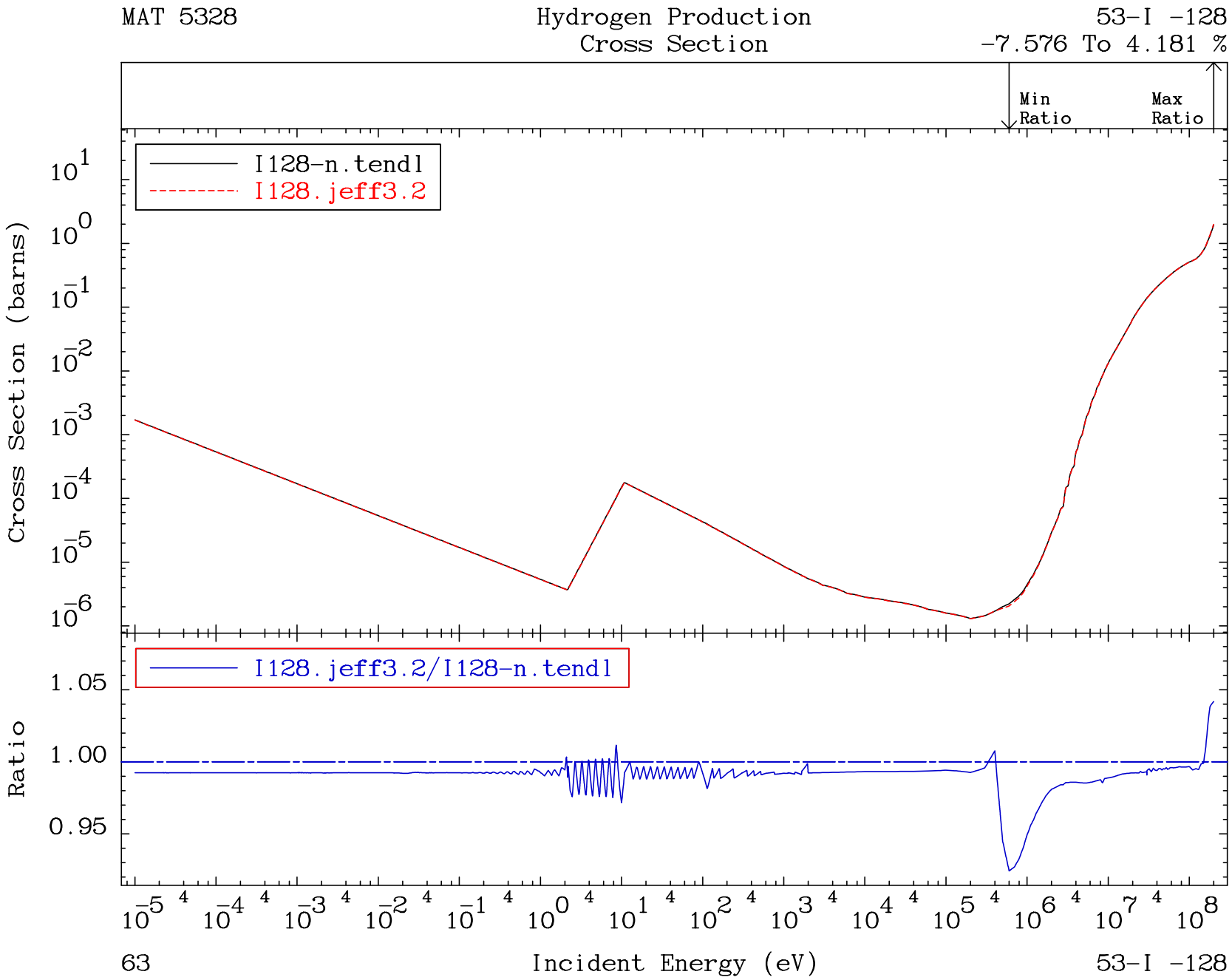

MAT 5328
(n,2p)
Cross Section
53-I -128
-21.59 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 7.6054 MeV
I128.jeff3.2 Threshold 7.6040 MeV
Cross Section (micro-barns)
0
2
4
6
8
10
12
14
16
18
I128.jeff3.2/I128-n.tendl
Ratio
0.8
0.9
1.0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
58
Incident Energy (eV)
53-I -128

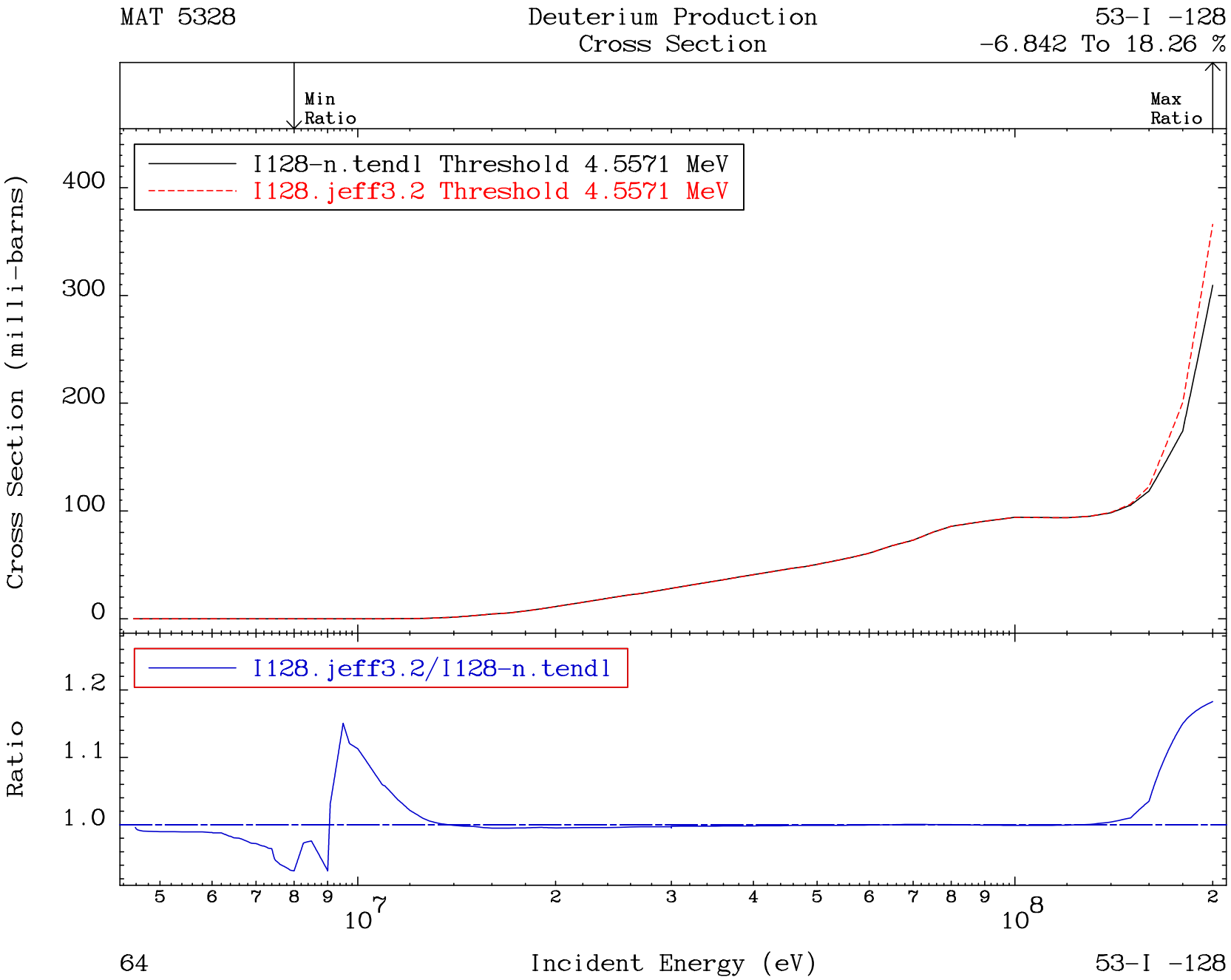

MAT 5328
(n,p) α
Cross Section
53-I -128
-8.897 To 8.437 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 1.1561 MeV
I128.jeff3.2 Threshold 1.1528 MeV
Cross Section (10^{-9} barns)
800
600
400
200
0
I128.jeff3.2/I128-n.tendl
Ratio
1.1
1.0
0.9
2 3 4 5 6 7 8 10^{7} 2 3 4 5 6 7 8 10^{8} 2
59
Incident Energy (eV)
53-I -128

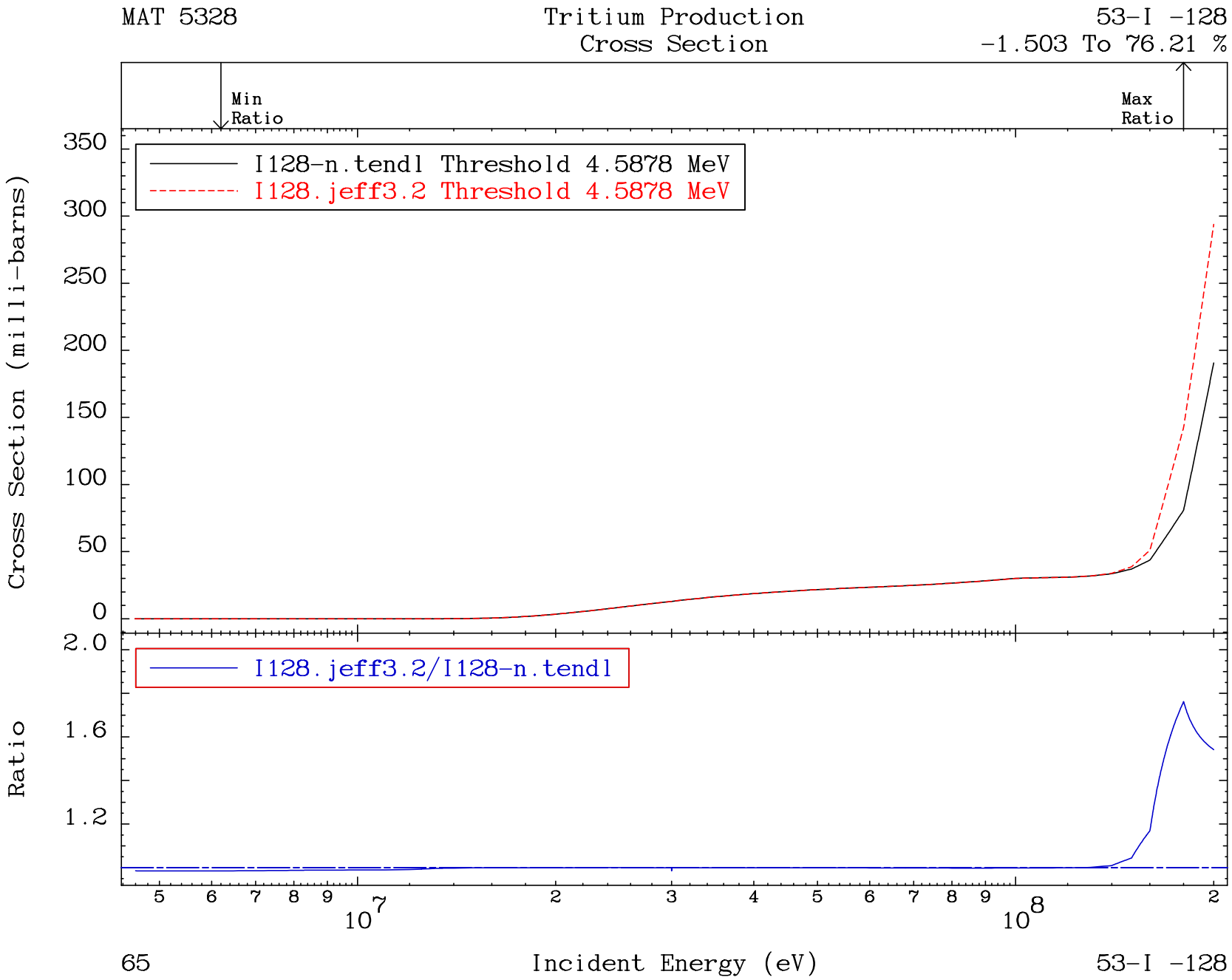

MAT 5328
(n,p) d
Cross Section
53-I -128
0.000 To 35.36 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 13.807 MeV
I128.jeff3.2 Threshold 13.801 MeV
Cross Section (10^{-9} barns)
120
100
80
60
40
20
0
I128.jeff3.2/I128-n.tendl
Ratio
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
53-I -128

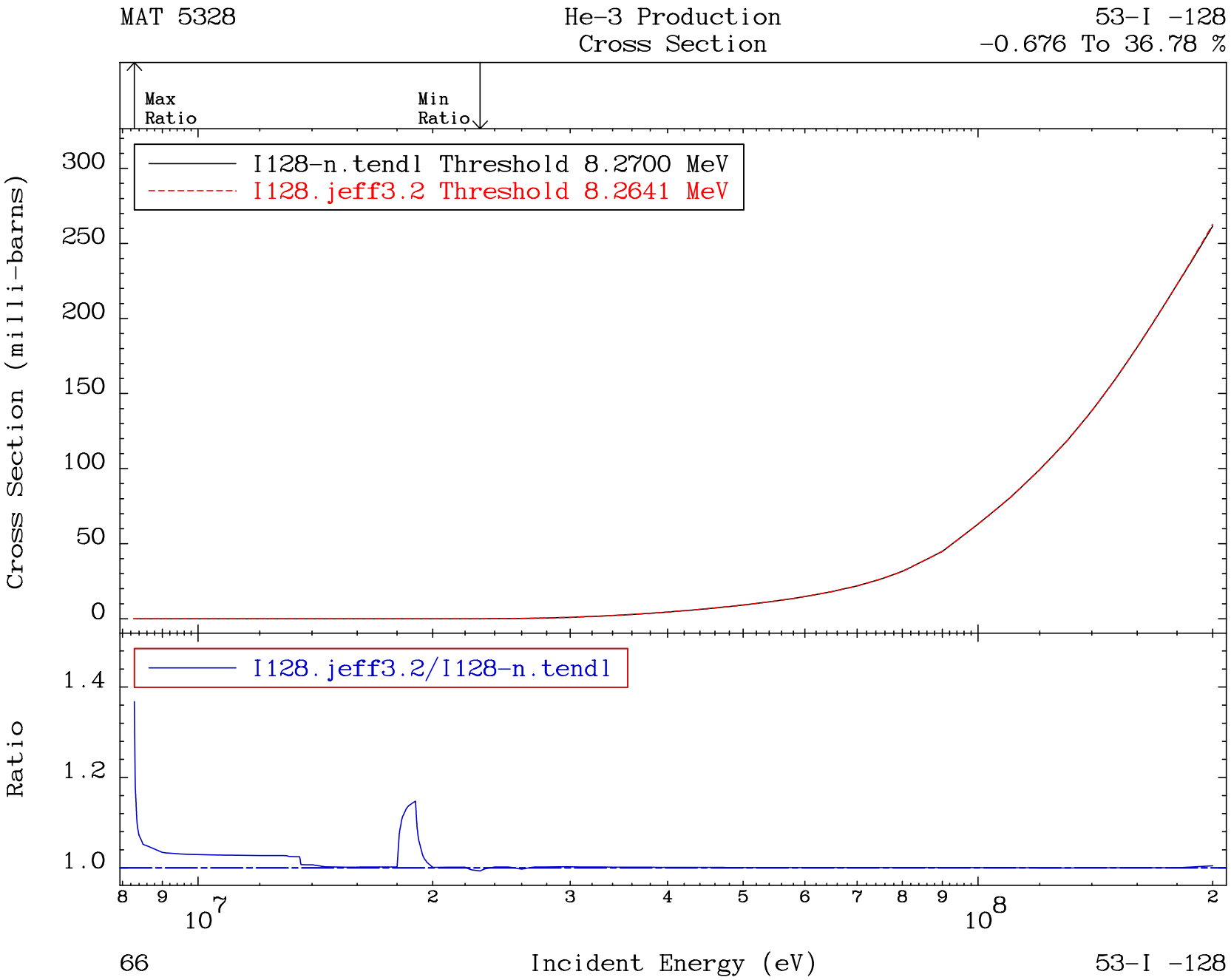

MAT 5328
(n,p) t
Cross Section
53-I -128
-1.633 To 0.432 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 13.758 MeV
I128.jeff3.2 Threshold 13.758 MeV
Cross Section (10^{-9} barns)
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
53-I -128

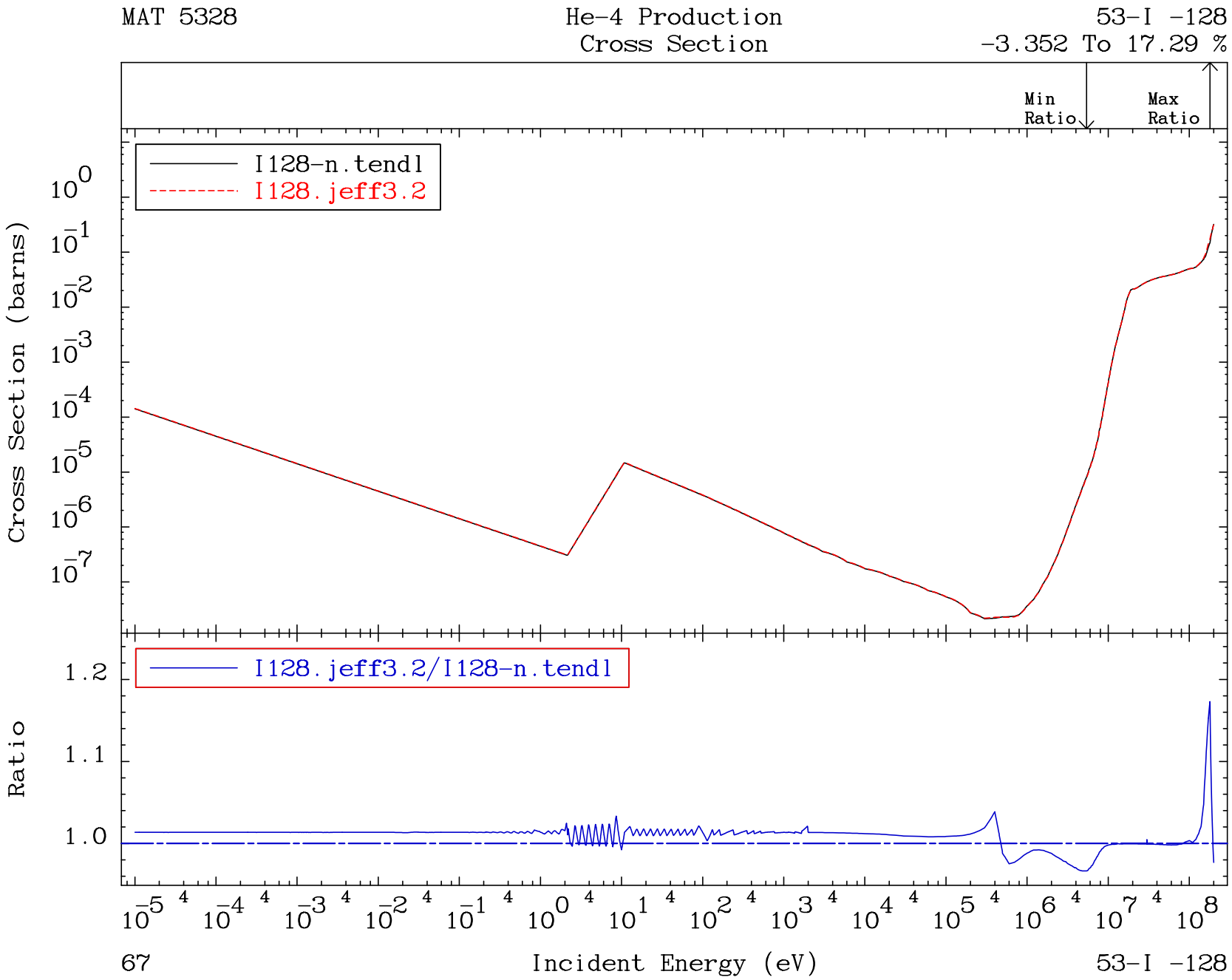

MAT 5328
(n,d) α
Cross Section
53-I -128
-28.36 To 16.46 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 7.4701 MeV
I128.jeff3.2 Threshold 7.4652 MeV
Cross Section (10^{-9} barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
62
53-I -128

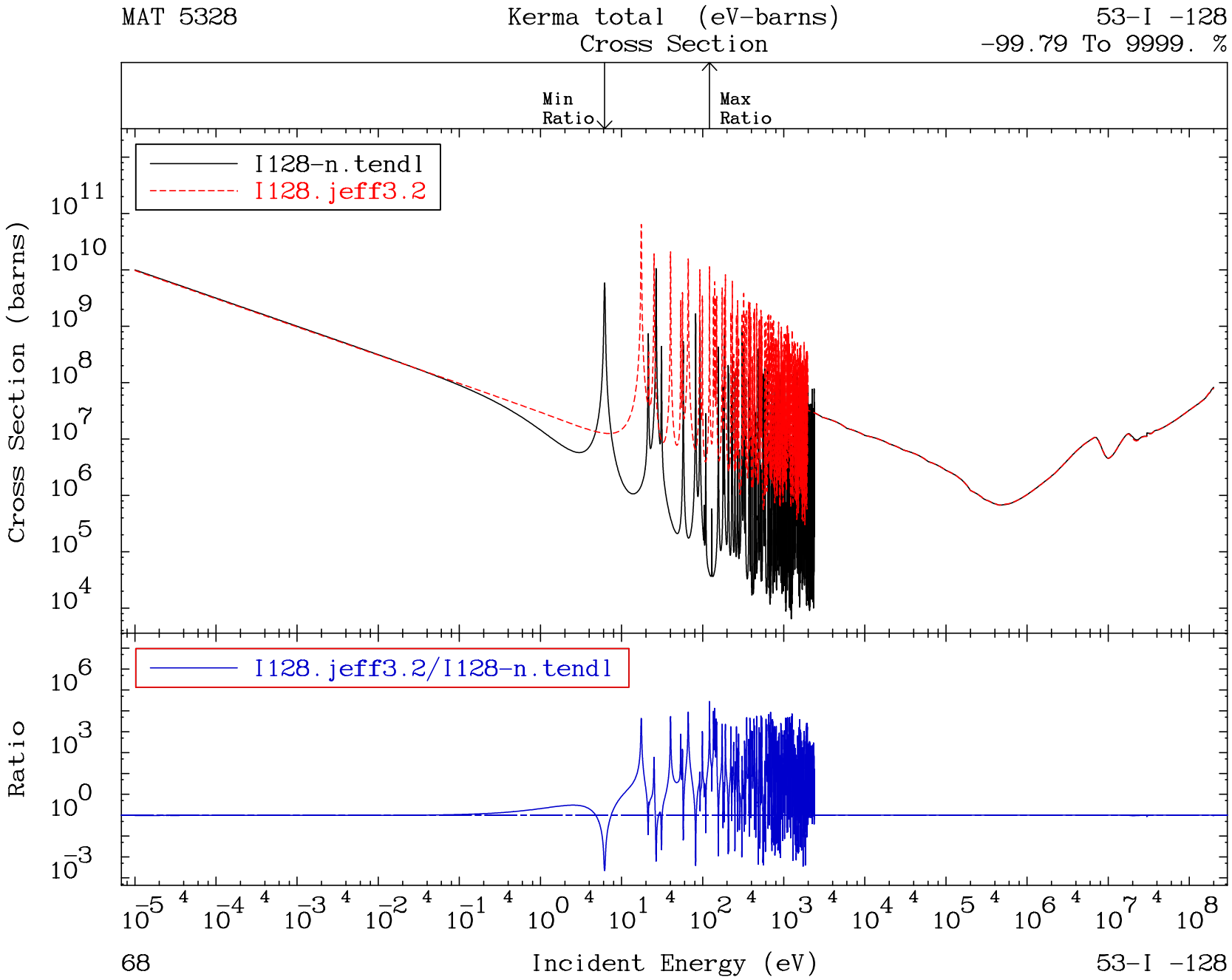

MAT 5328
Hydrogen Production
Cross Section
53-I -128
-7.576 To 4.181 %
Min Ratio
Max Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
63
53-I -128

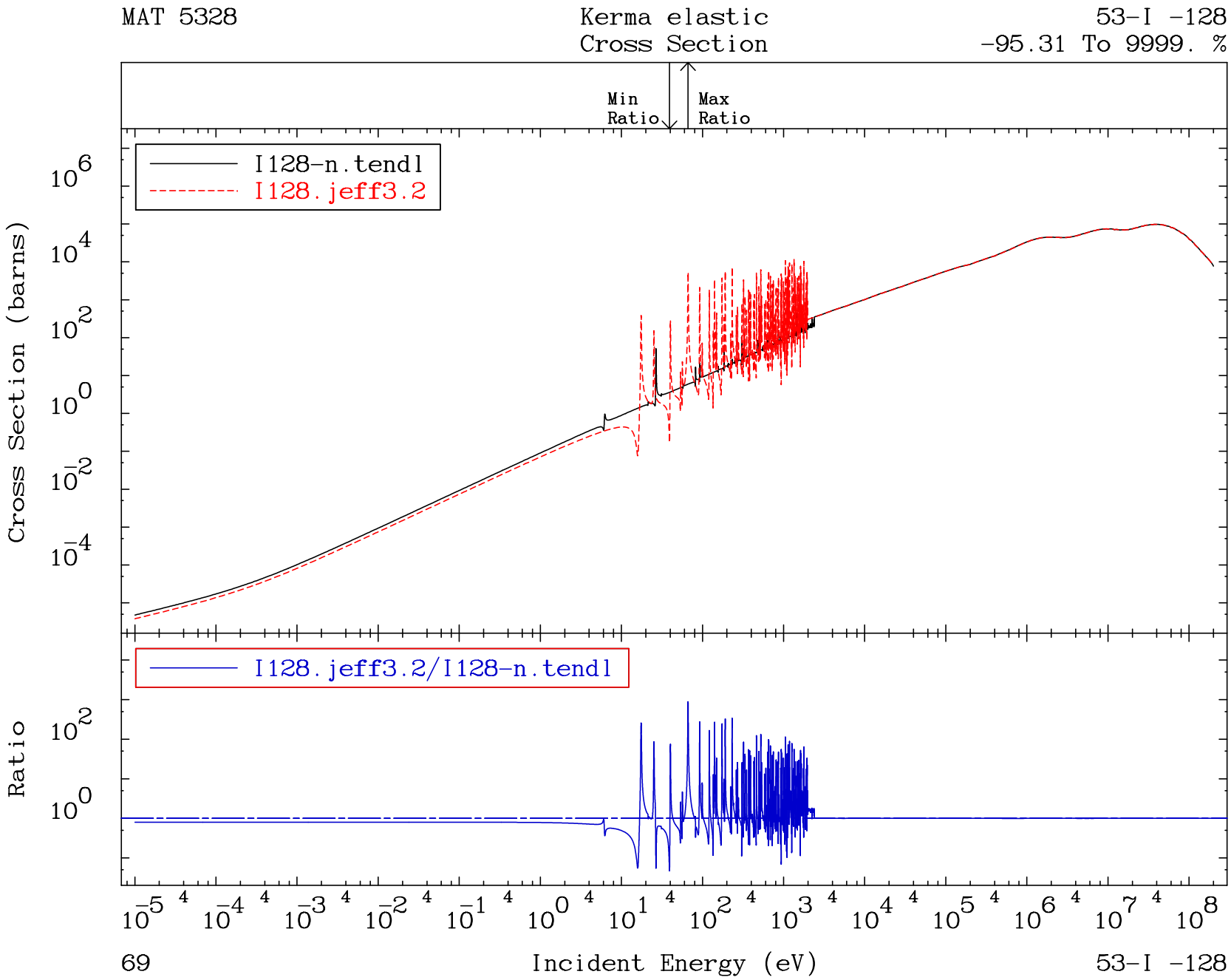

MAT 5328
Deuterium Production
Cross Section
53-I -128
-6.842 To 18.26 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 4.5571 MeV
I128.jeff3.2 Threshold 4.5571 MeV
Cross Section (milli-barns)
400
300
200
100
0
I128.jeff3.2/I128-n.tendl
Ratio
1.2
1.1
1.0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
64
Incident Energy (eV)
53-I -128

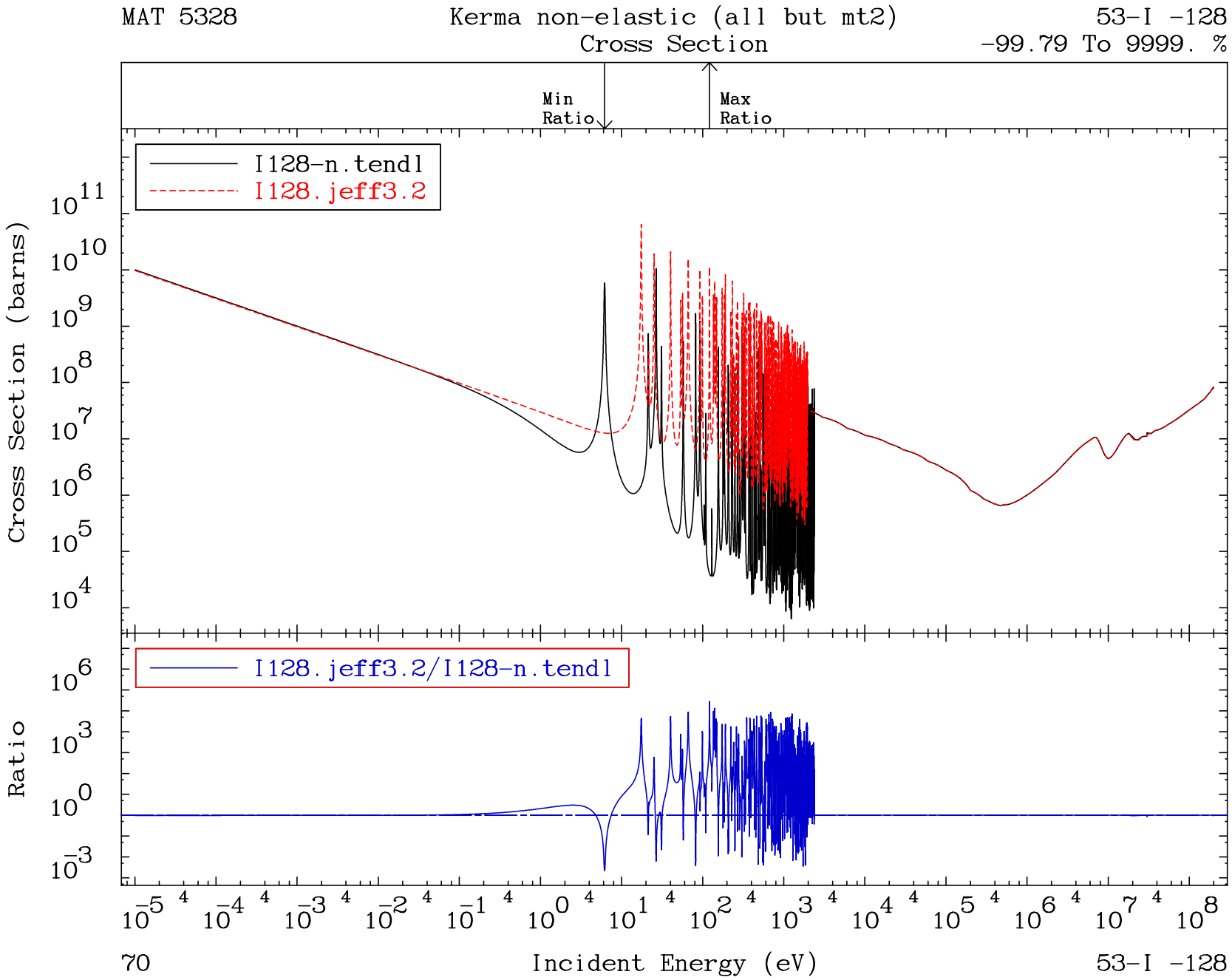

MAT 5328
Tritium Production
Cross Section
53-I -128
-1.503 To 76.21 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 4.5878 MeV
I128.jeff3.2 Threshold 4.5878 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
I128.jeff3.2/I128-n.tendl
Ratio
2.0
1.6
1.2
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
65
Incident Energy (eV)
53-I -128

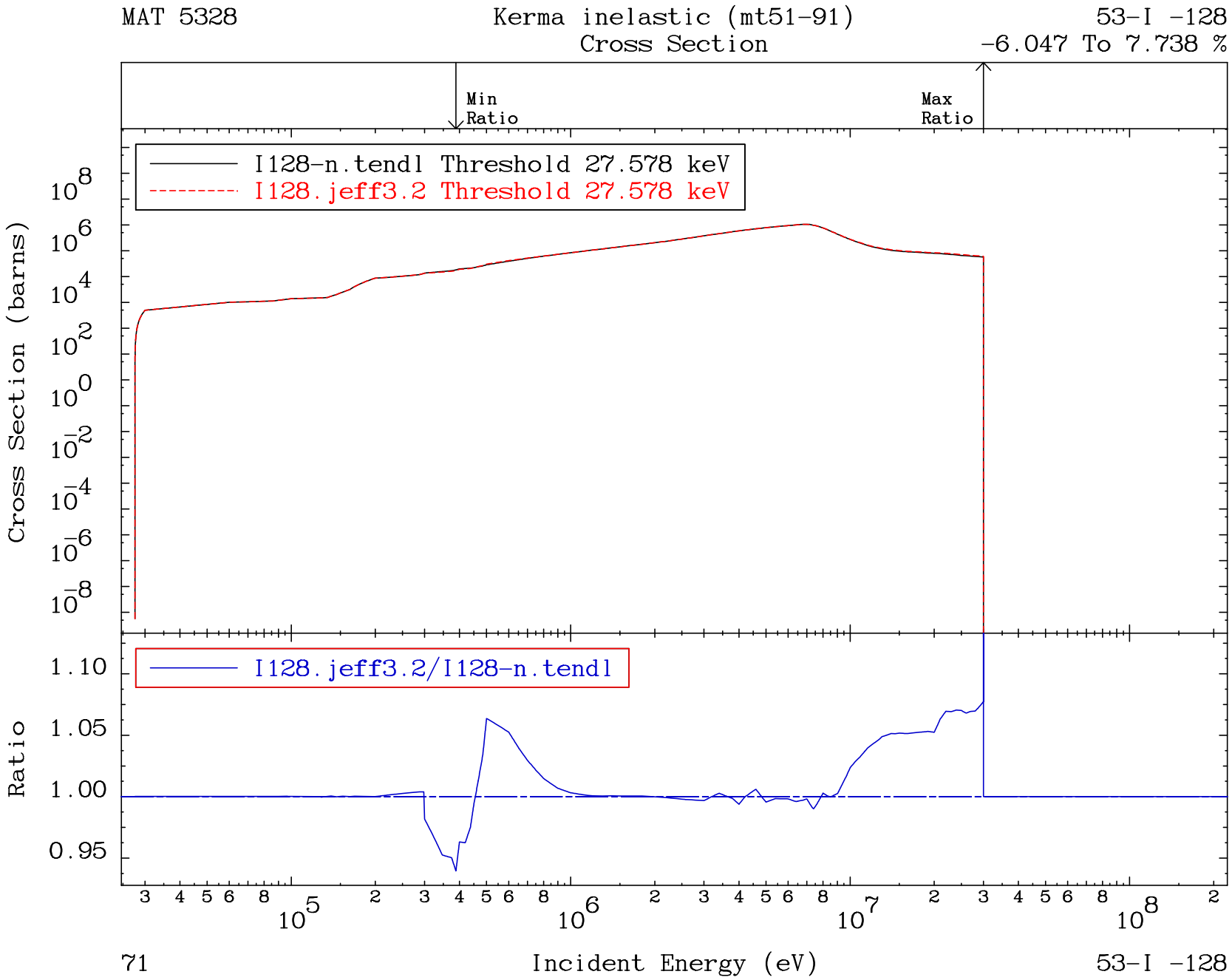

MAT 5328
He-3 Production
Cross Section
53-I -128
-0.676 To 36.78 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 8.2700 MeV
I128.jeff3.2 Threshold 8.2641 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
I128.jeff3.2/I128-n.tendl
Ratio
1.4
1.2
1.0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
66
Incident Energy (eV)
53-I -128

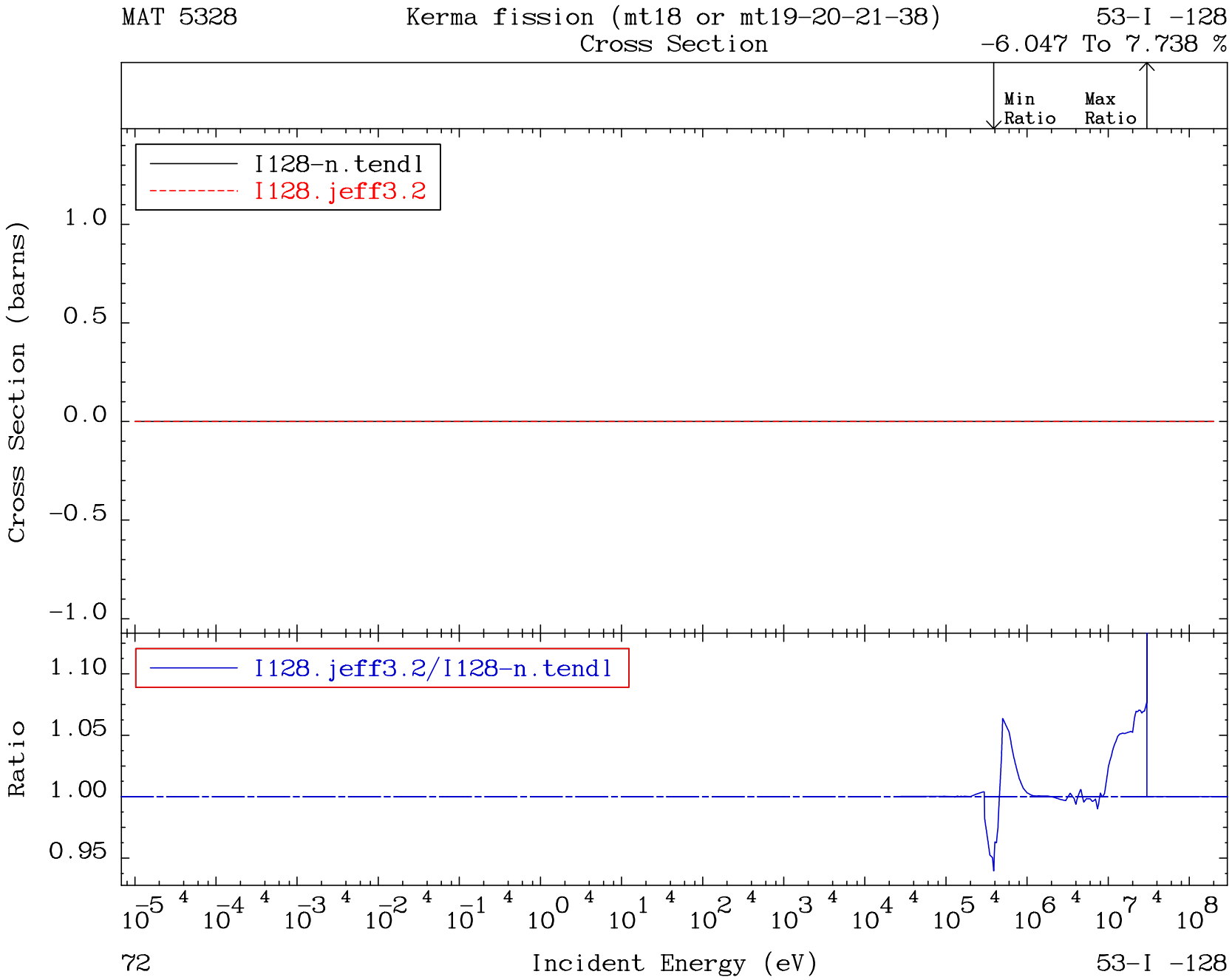

MAT 5328
He-4 Production
Cross Section
53-I -128
-3.352 To 17.29 %
Min Ratio
Max Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
67
53-I -128

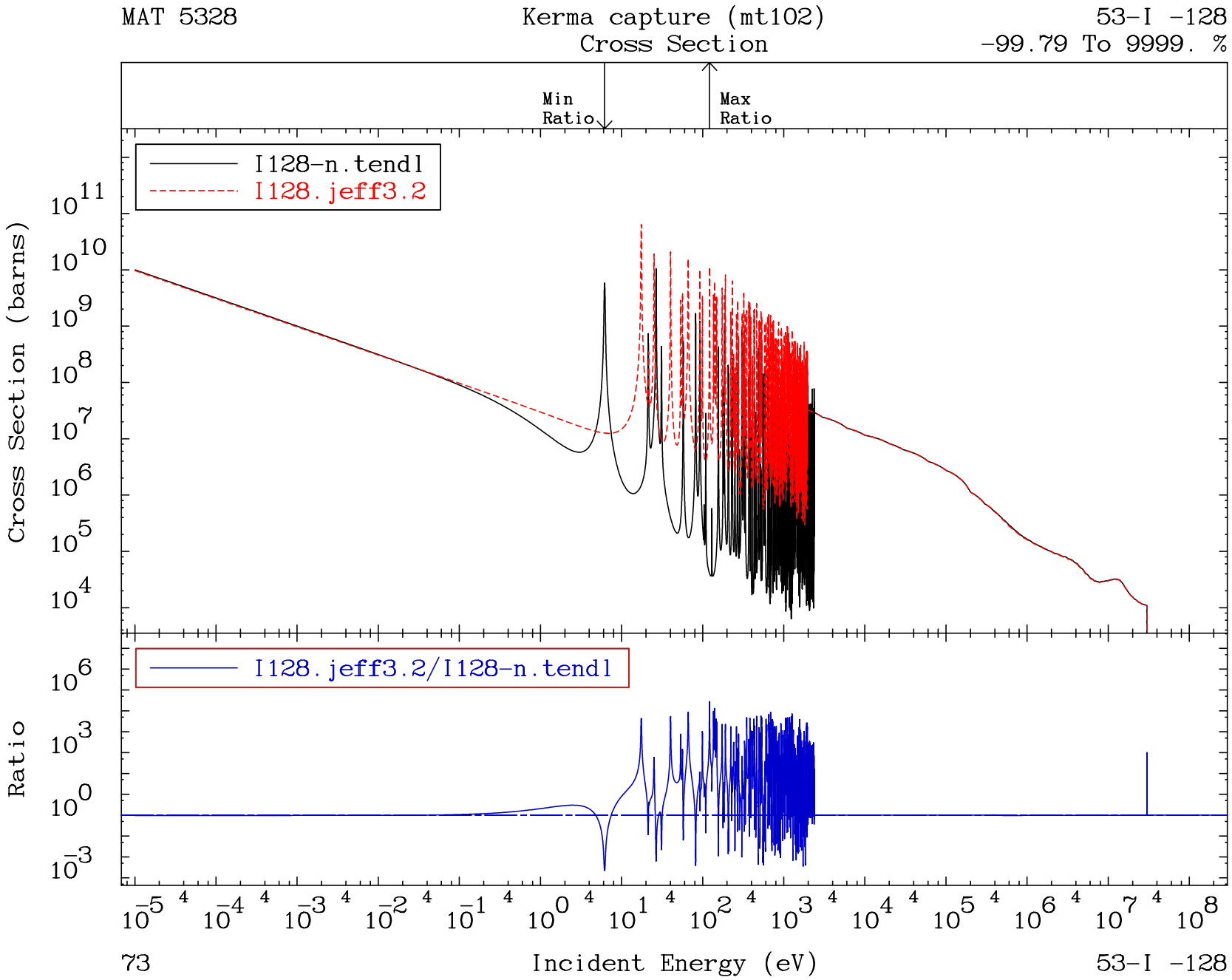

MAT 5328
Kerma total (eV-barns)
Cross Section
53-I -128
-99.79 To 9999. %
Min Ratio
Max Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
68
53-I -128

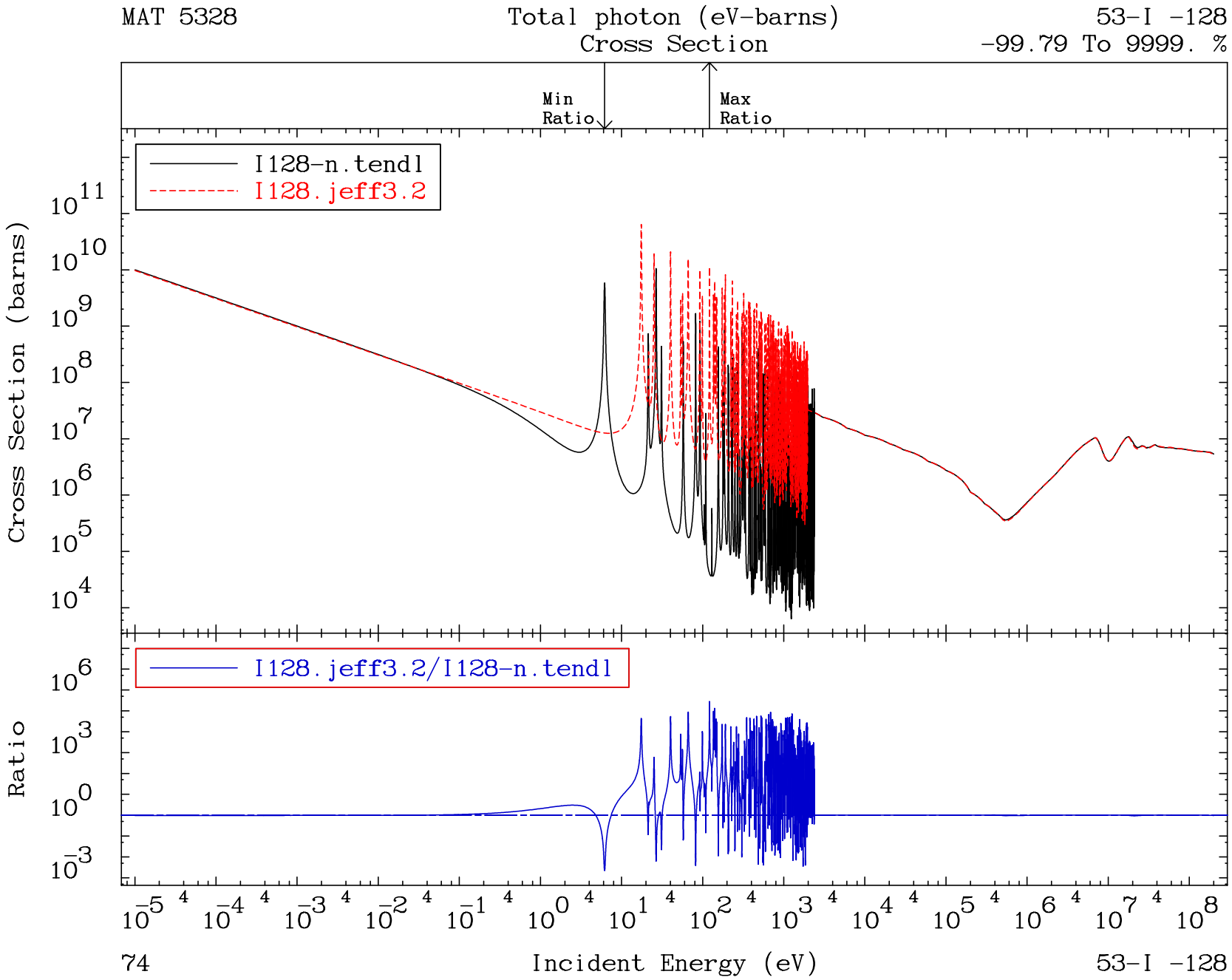

MAT 5328
Kerma elastic
Cross Section
53-I -128
-95.31 To 9999. %
Min
Ratio
Max
Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
69
53-I -128

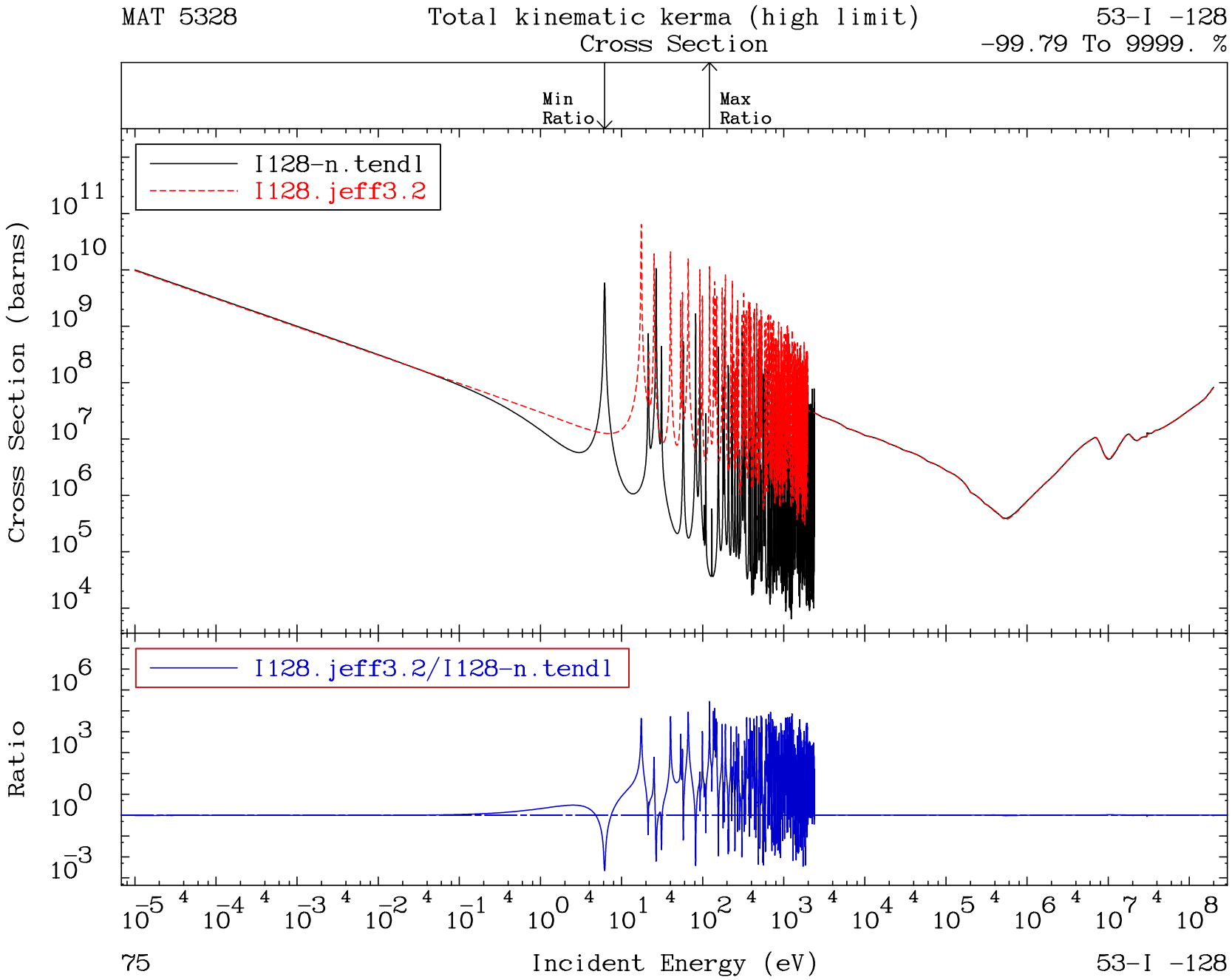

MAT 5328
Kerma non-elastic (all but mt2)
Cross Section
53-I -128
-99.79 To 9999. %
Min Ratio
Max Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
70
53-I -128

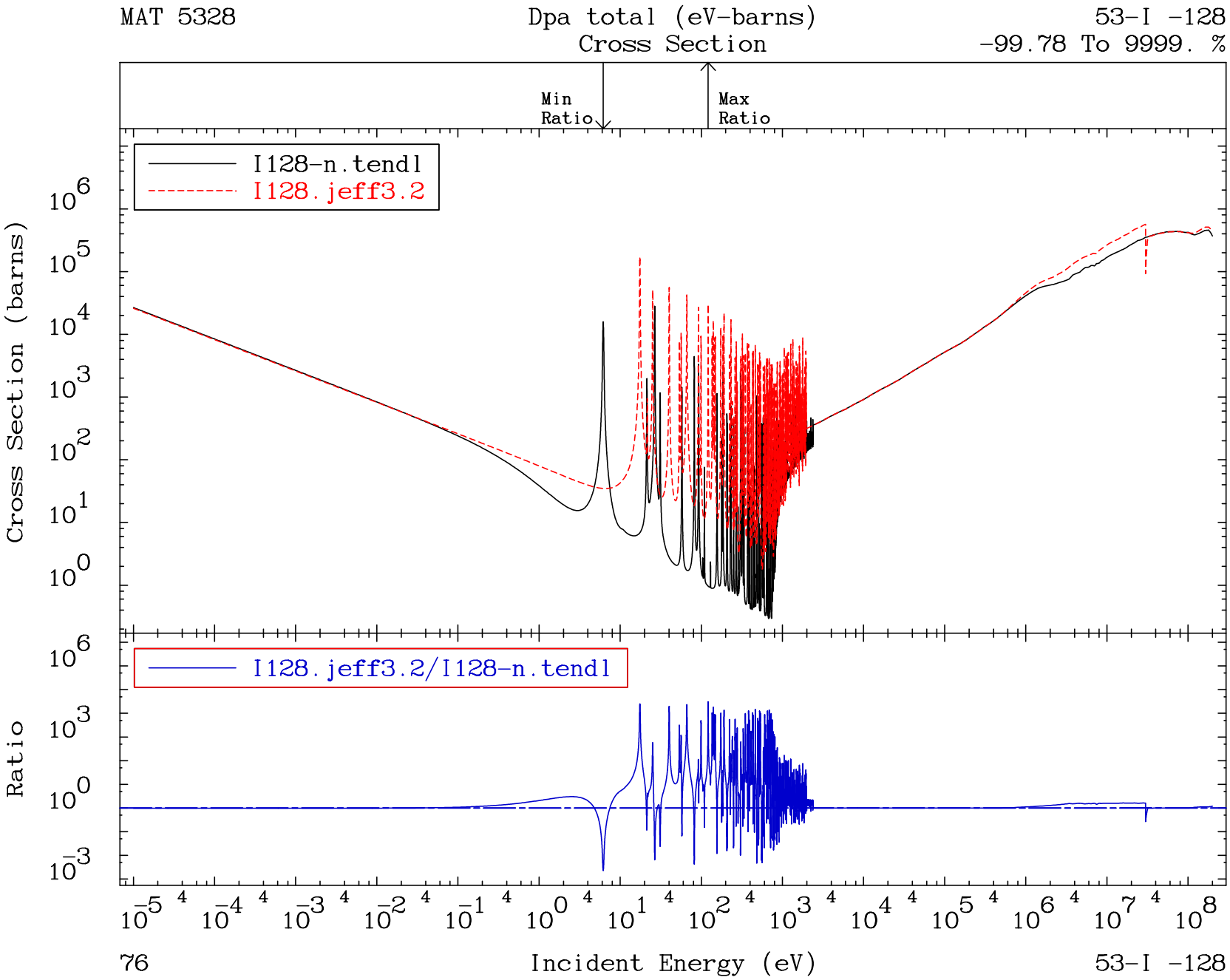

MAT 5328
Kerma inelastic (mt51-91)
Cross Section
53-I -128
-6.047 To 7.738 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 27.578 keV
I128.jeff3.2 Threshold 27.578 keV
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
71
53-I -128

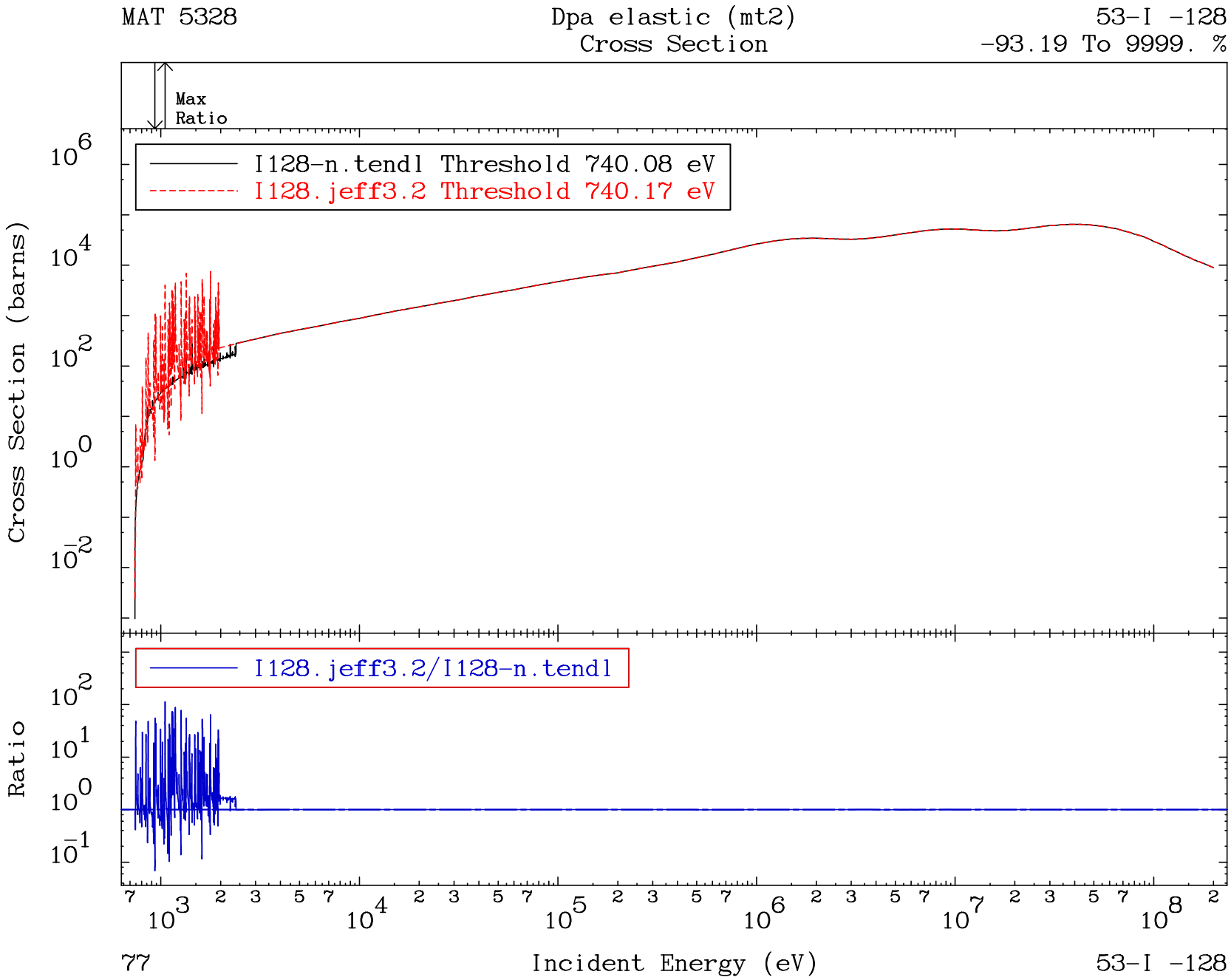

MAT 5328
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
53-I -128
-6.047 To 7.738 %
Min Ratio
Max Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
I128.jeff3.2/I128-n.tendl
Ratio
1.10
1.05
1.00
0.95
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
72
Incident Energy (eV)
53-I -128

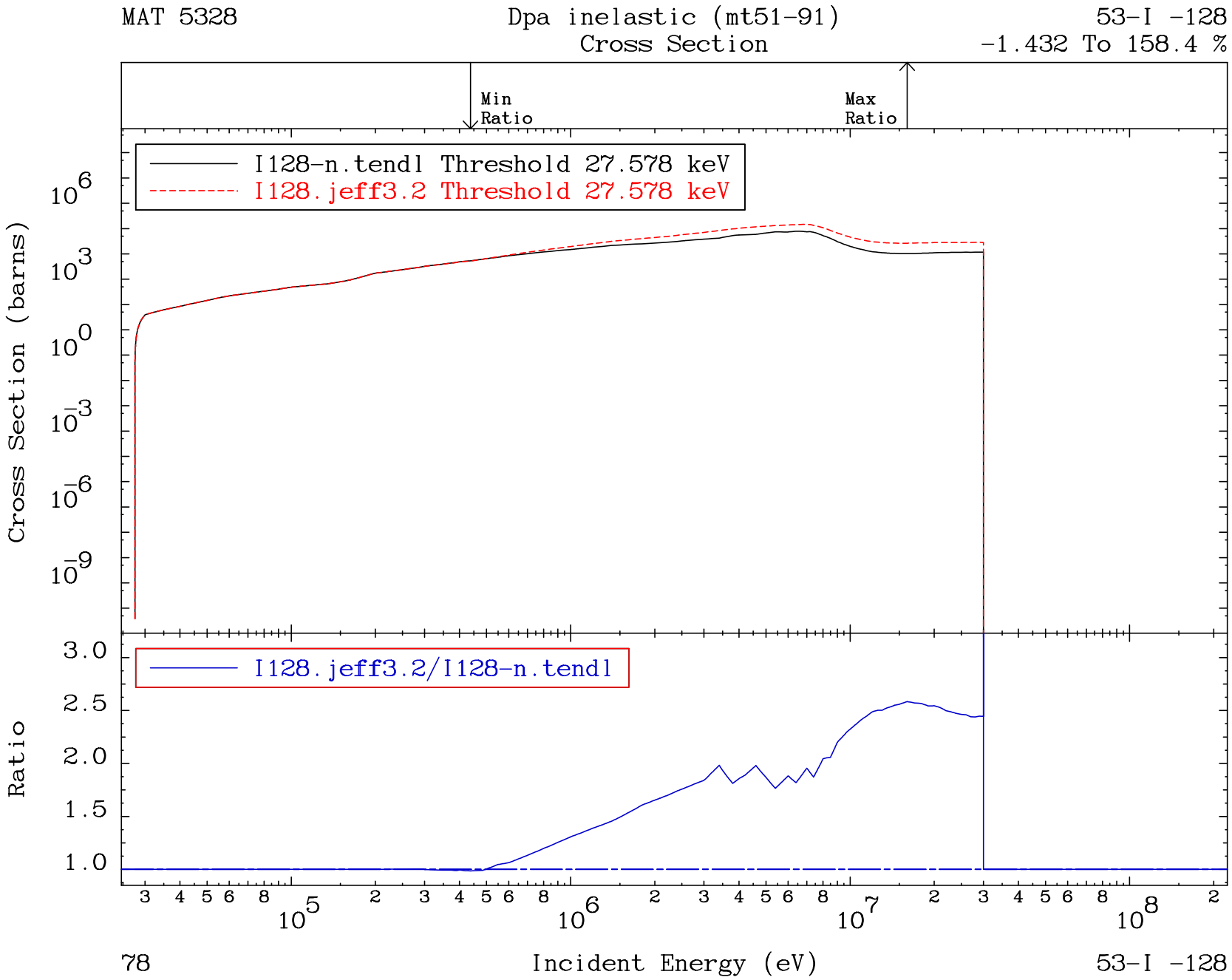

MAT 5328
Kerma capture (mt102)
Cross Section
53-I -128
-99.79 To 9999. %
Min Ratio
Max Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
73
53-I -128

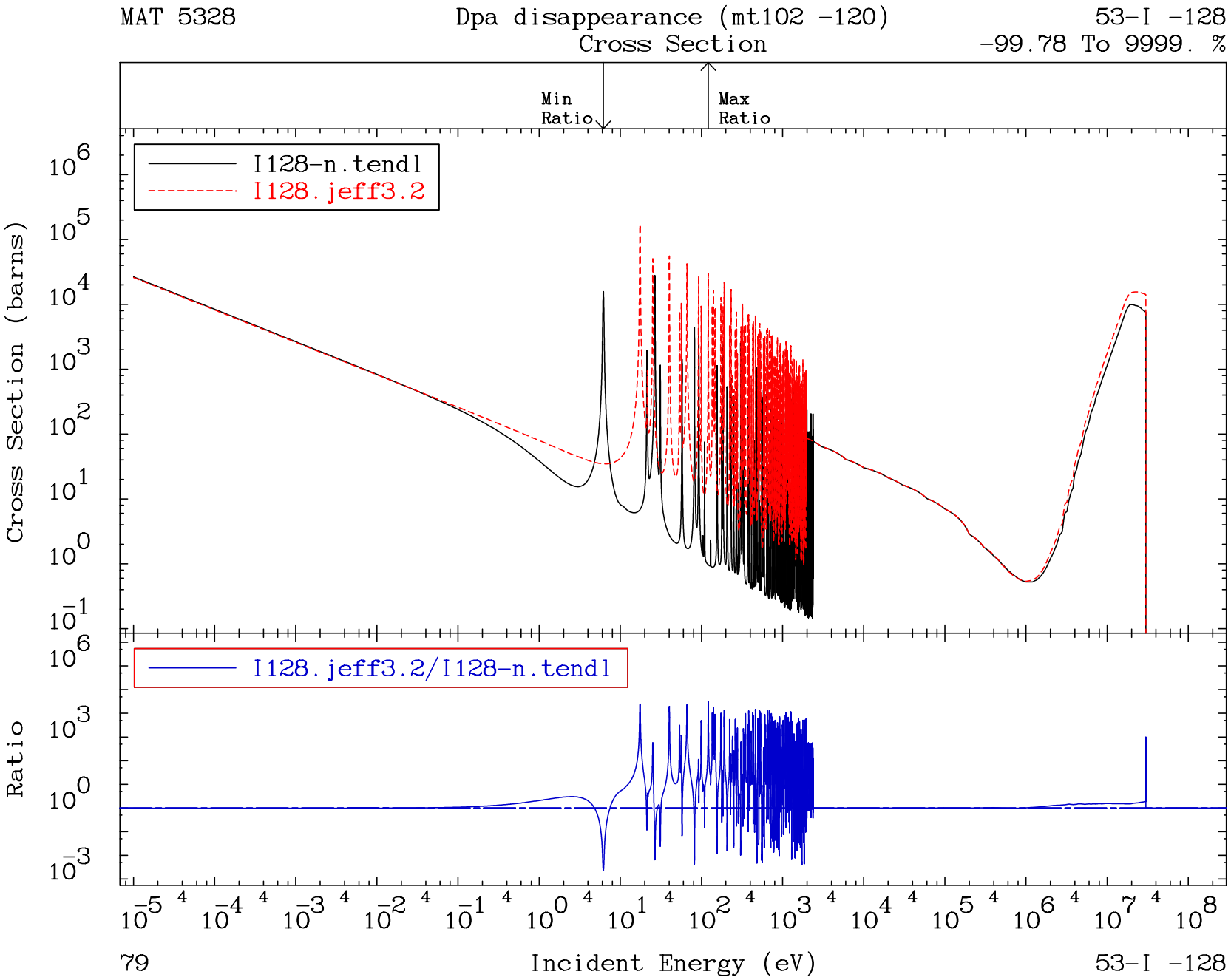

MAT 5328
Total photon (eV-barns)
Cross Section
53-I -128
-99.79 To 9999. %
Min
Ratio
Max
Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
74
53-I -128

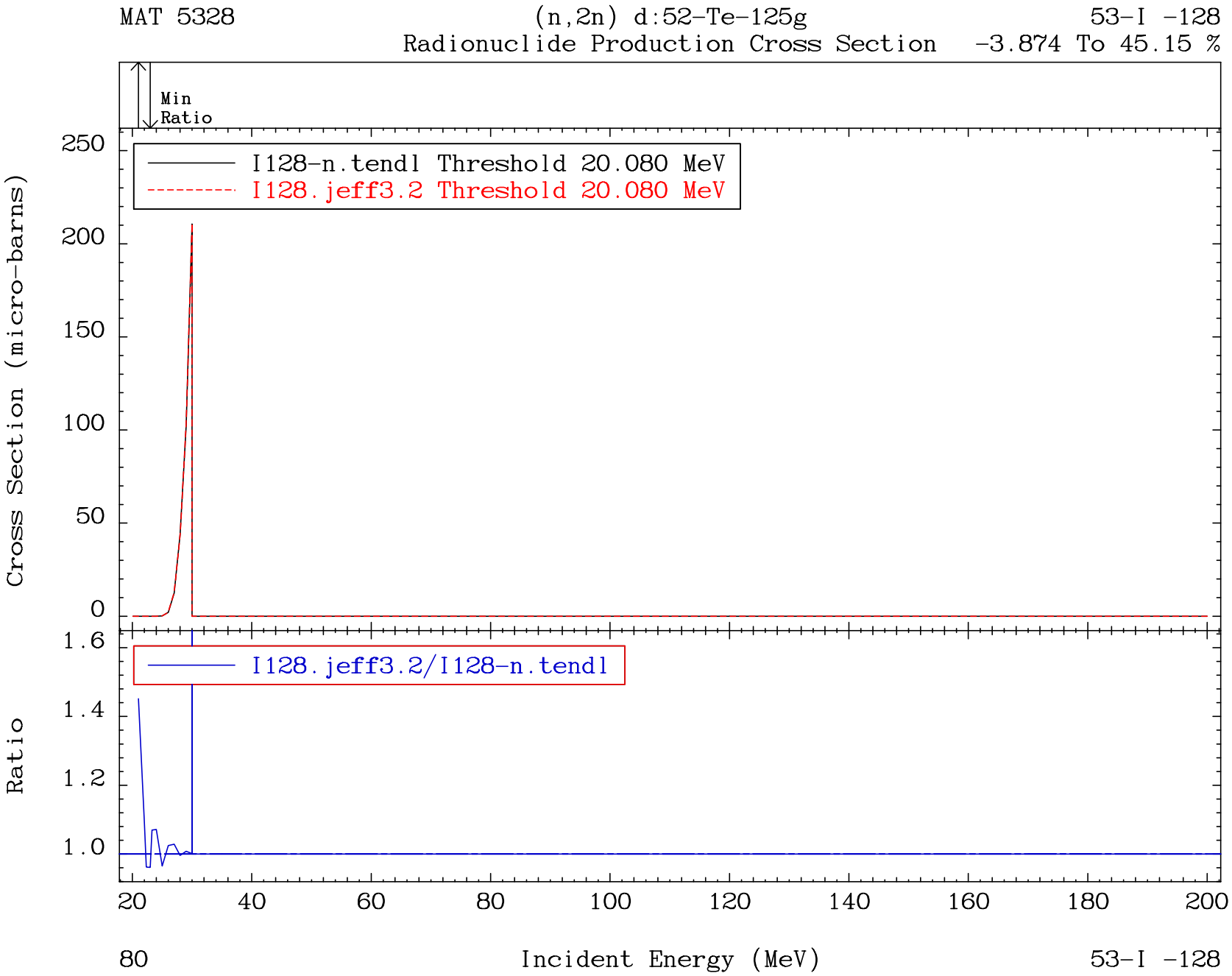

MAT 5328
Total kinematic kerma (high limit)
Cross Section
53-I -128
-99.79 To 9999. %
Min Ratio
Max Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
75
53-I -128

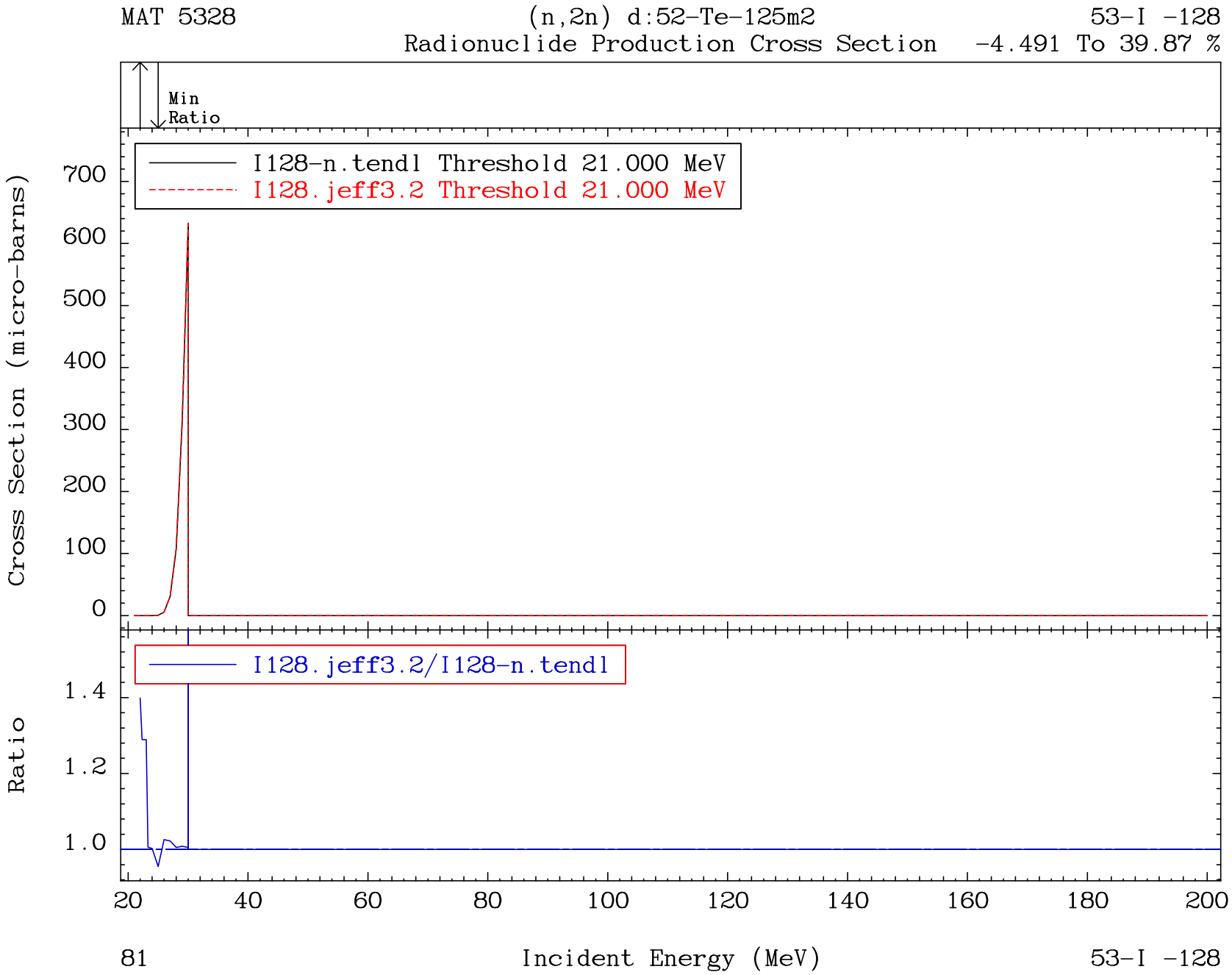

MAT 5328
Dpa total (eV-barns)
Cross Section
53-I -128
-99.78 To 9999. %
Min Ratio
Max Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
76
53-I -128

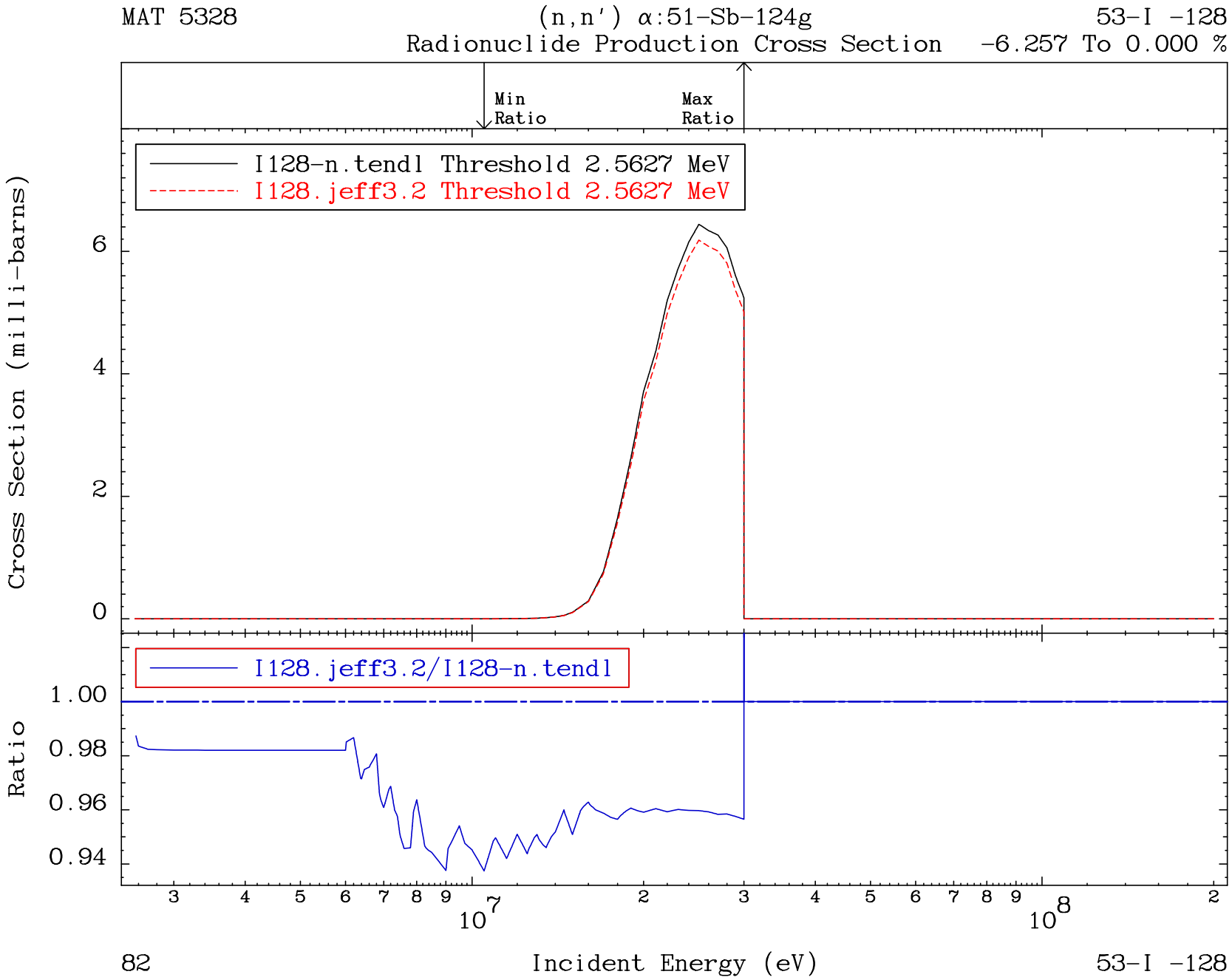

MAT 5328
Dpa elastic (mt2)
Cross Section
53-I -128
-93.19 To 9999. %
Max
Ratio
I128-n.tendl Threshold 740.08 eV
I128.jeff3.2 Threshold 740.17 eV
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
77
53-I -128

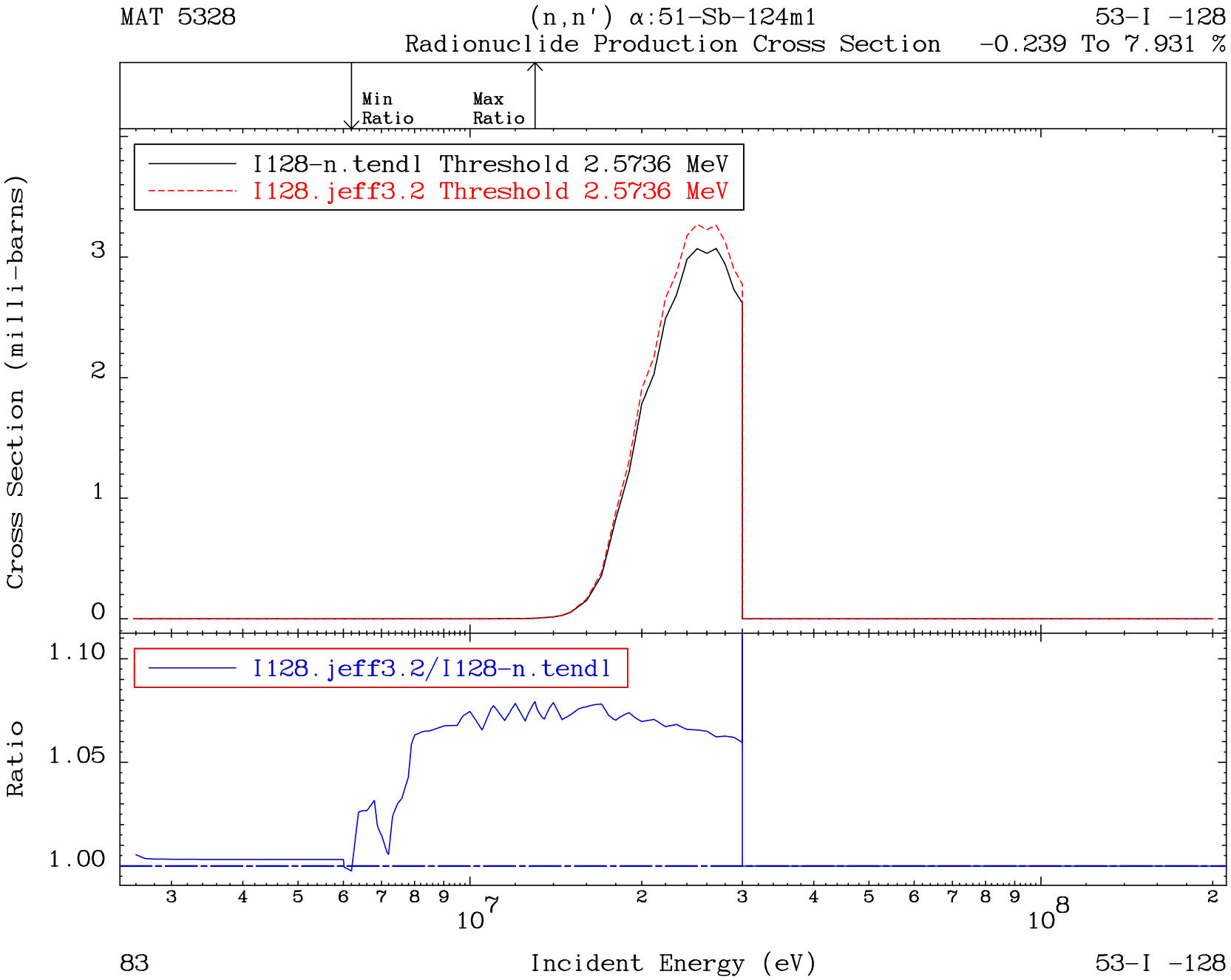

MAT 5328
Dpa inelastic (mt51-91)
Cross Section
53-I -128
-1.432 To 158.4 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 27.578 keV
I128.jeff3.2 Threshold 27.578 keV
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
78
53-I -128

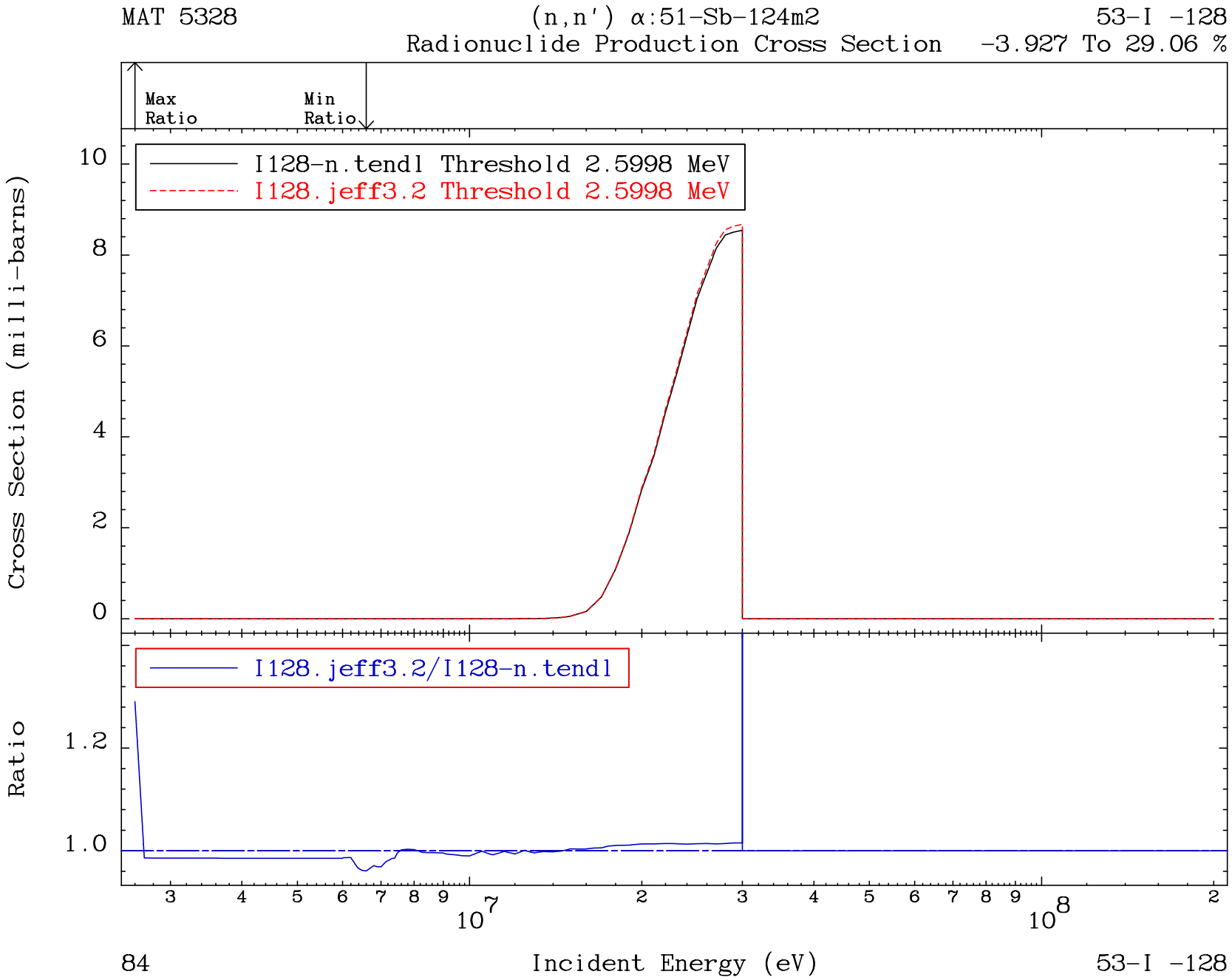

MAT 5328
Dpa disappearance (mt102 -120)
Cross Section
53-I -128
-99.78 To 9999. %
Min Ratio
Max Ratio
I128-n.tendl
I128.jeff3.2
Cross Section (barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
79
53-I -128

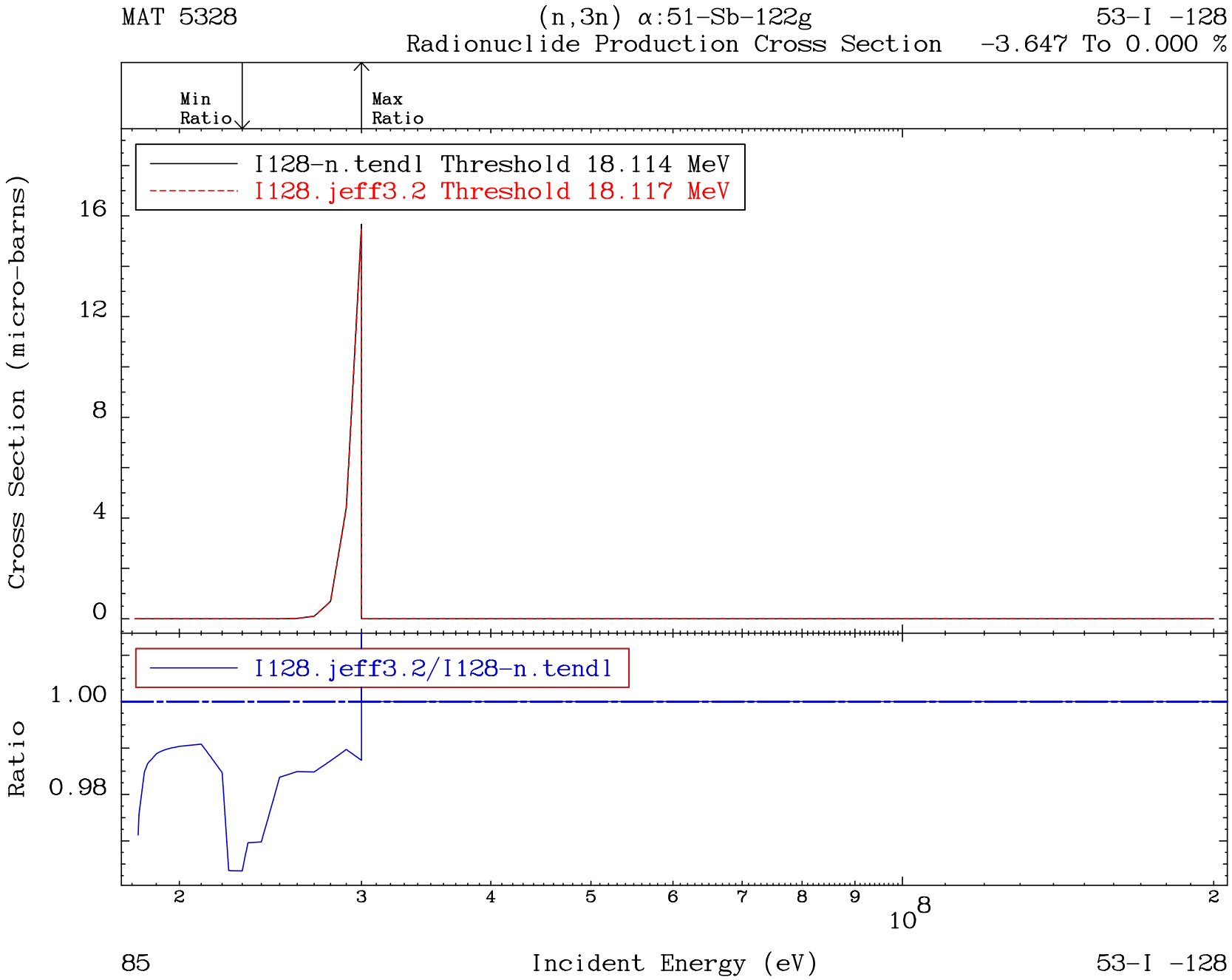

MAT 5328
(n,2n) d:52-Te-125g
53-I -128
Radionuclide Production Cross Section -3.874 To 45.15 %
Min Ratio
I128-n.tendl Threshold 20.080 MeV
I128.jeff3.2 Threshold 20.080 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
I128.jeff3.2/I128-n.tendl
Ratio
1.6
1.4
1.2
1.0
20
40
60
80
100
120
140
160
180
200
80
Incident Energy (MeV)
53-I -128

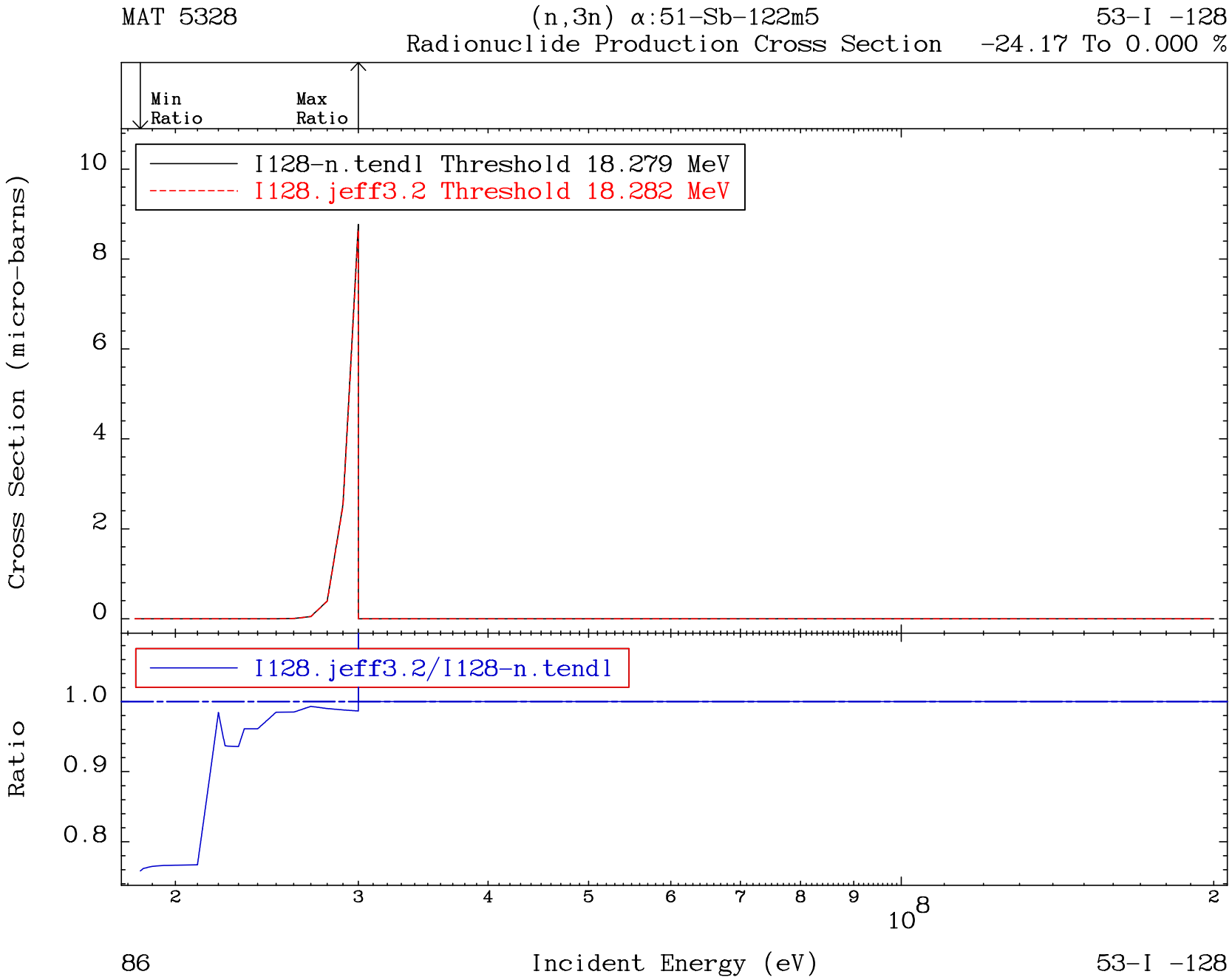

MAT 5328
(n,2n) d:52-Te-125m2
53-I -128
Radionuclide Production Cross Section -4.491 To 39.87 %
Min
Ratio
I128-n.tendl Threshold 21.000 MeV
I128.jeff3.2 Threshold 21.000 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
I128.jeff3.2/I128-n.tendl
Ratio
1.4
1.2
1.0
20
40
60
80
100
120
140
160
180
200
81
Incident Energy (MeV)
53-I -128

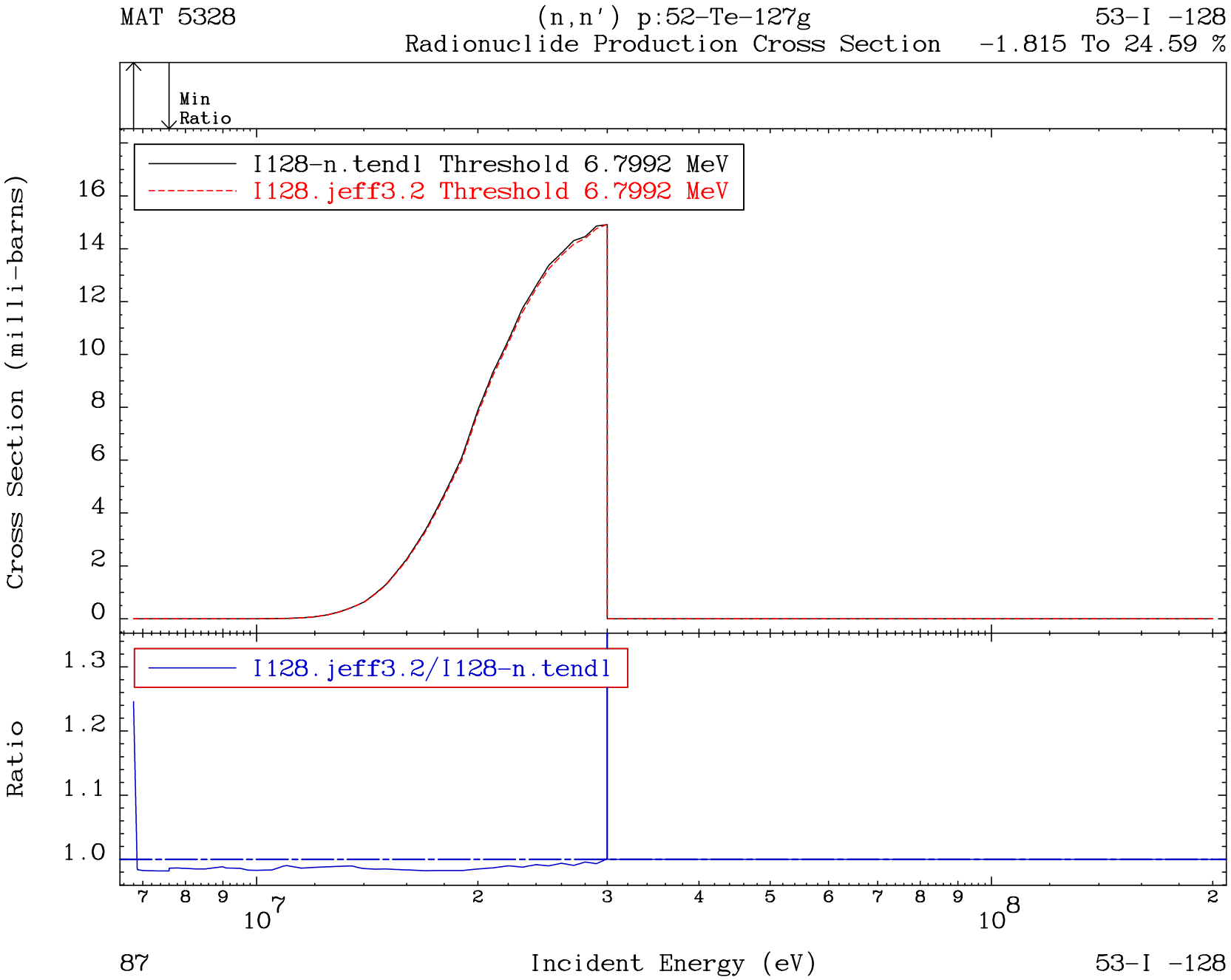

MAT 5328
(n,n') α:51-Sb-124g
53-I -128
Radionuclide Production Cross Section
-6.257 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 2.5627 MeV
I128.jeff3.2 Threshold 2.5627 MeV
Cross Section (milli-barns)
0
2
4
6
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.98
0.96
0.94
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
82
Incident Energy (eV)
53-I -128

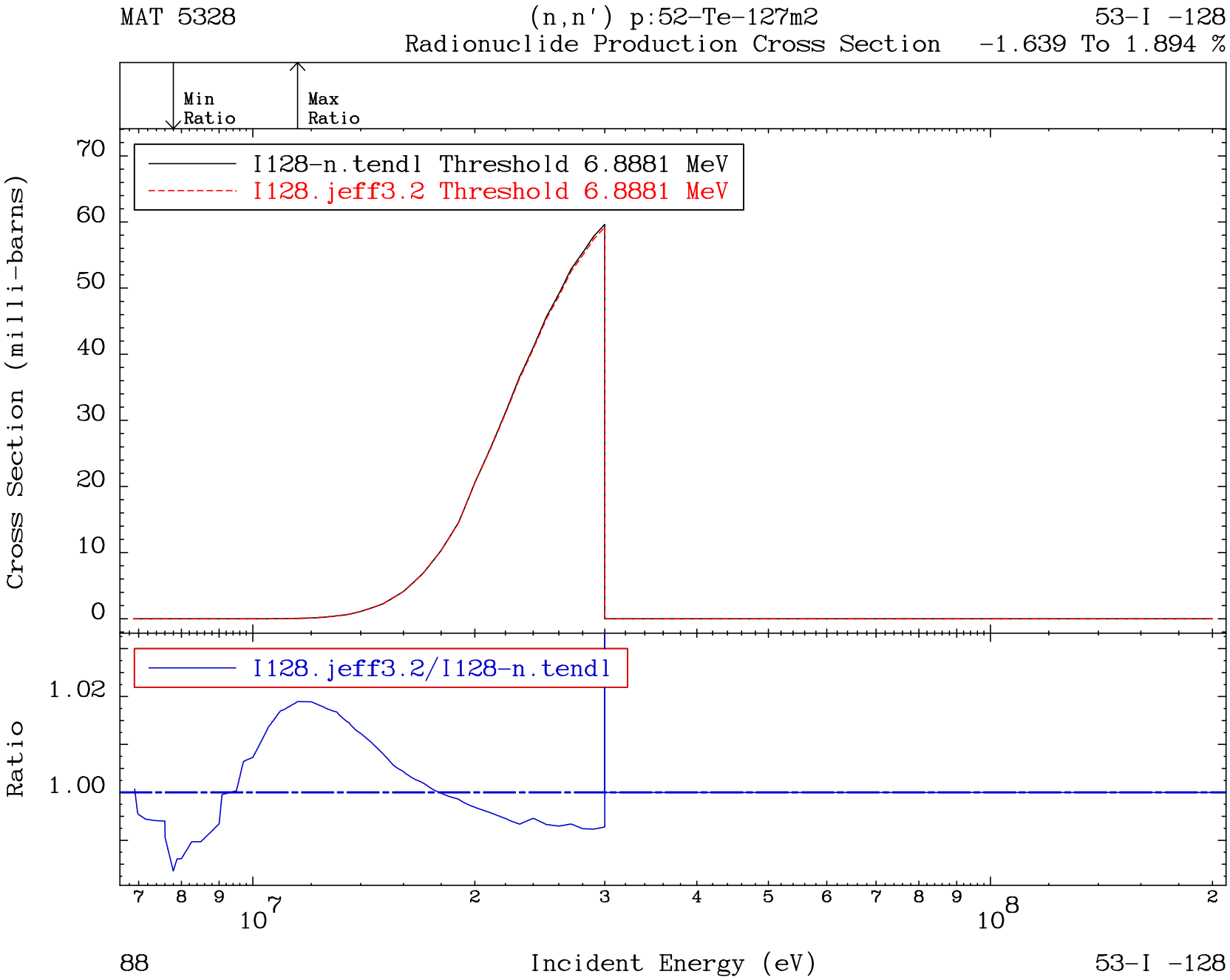

MAT 5328
(n,n') α:51-Sb-124m1
53-I -128
Radionuclide Production Cross Section -0.239 To 7.931 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 2.5736 MeV
I128.jeff3.2 Threshold 2.5736 MeV
Cross Section (milli-barns)
0
1
2
3
I128.jeff3.2/I128-n.tendl
Ratio
1.00
1.05
1.10
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
83
Incident Energy (eV)
53-I -128

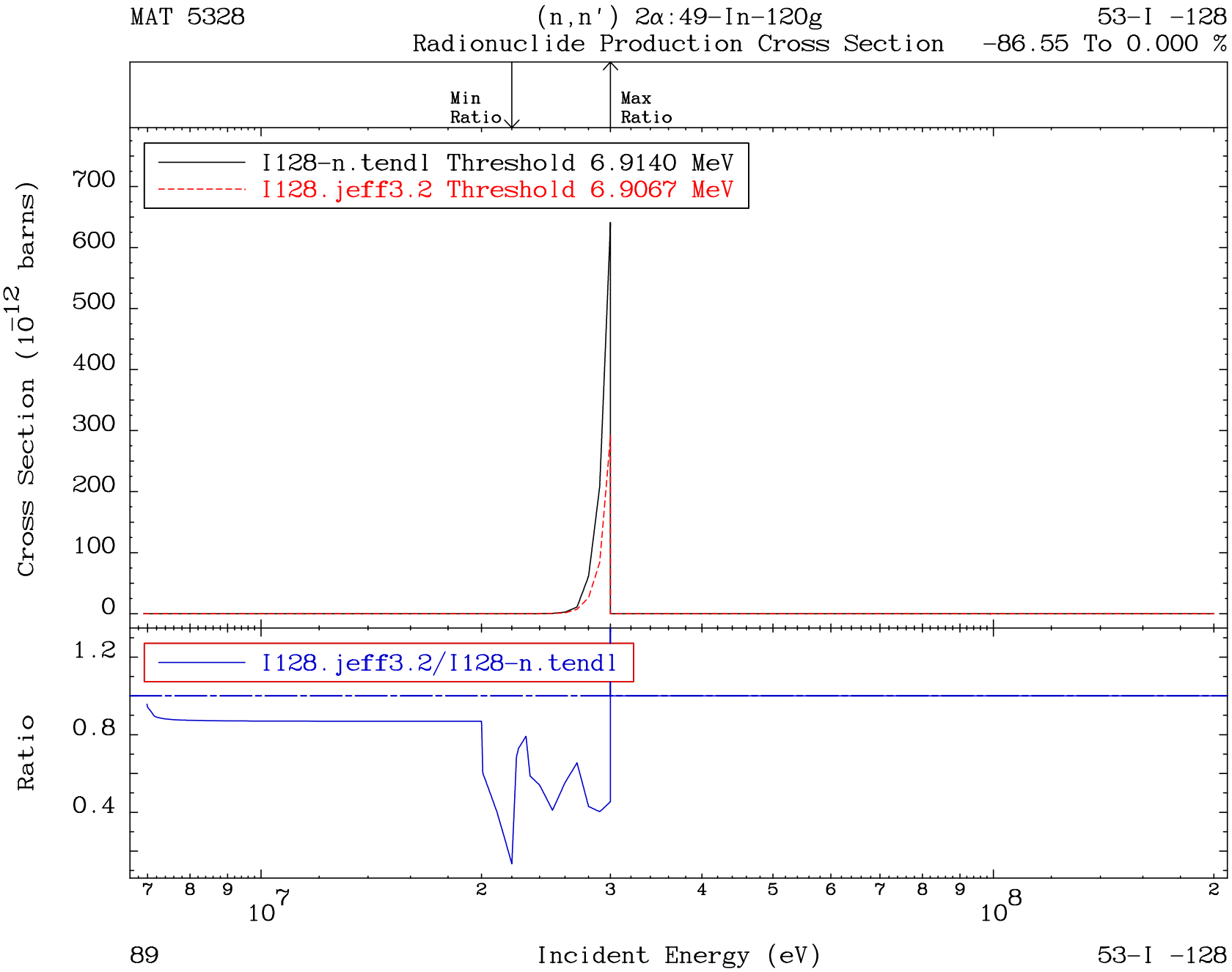

MAT 5328
(n,n') α:51-Sb-124m2
53-I -128
Radionuclide Production Cross Section -3.927 To 29.06 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 2.5998 MeV
I128.jeff3.2 Threshold 2.5998 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
I128.jeff3.2/I128-n.tendl
Ratio
1.2
1.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
84
Incident Energy (eV)
53-I -128

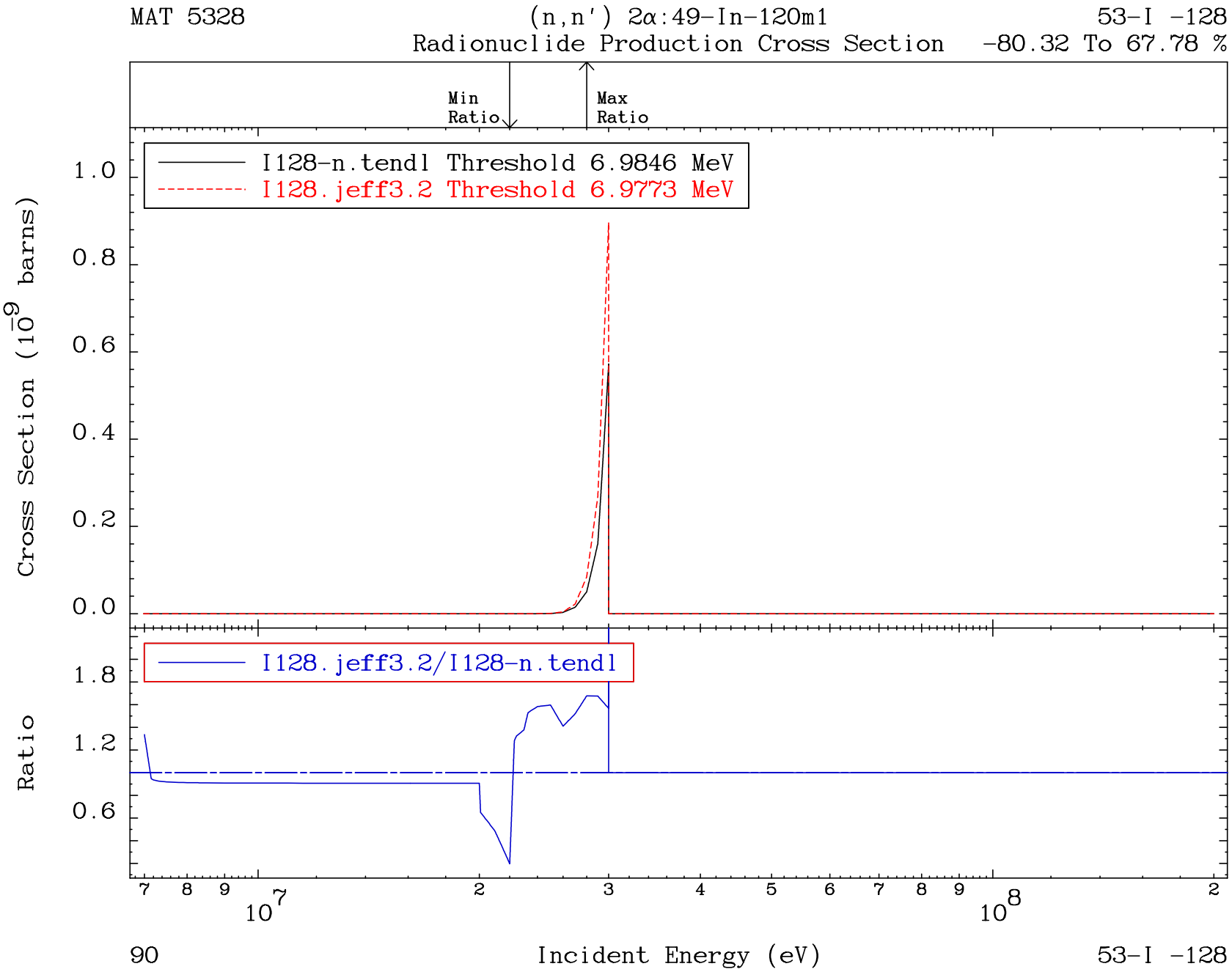

MAT 5328
(n,3n) α:51-Sb-122g
53-I -128
Radionuclide Production Cross Section
-3.647 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 18.114 MeV
I128.jeff3.2 Threshold 18.117 MeV
Cross Section (micro-barns)
16
12
8
4
0
I128.jeff3.2/I128-n.tendl
Ratio
1.00
0.98
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
53-I -128

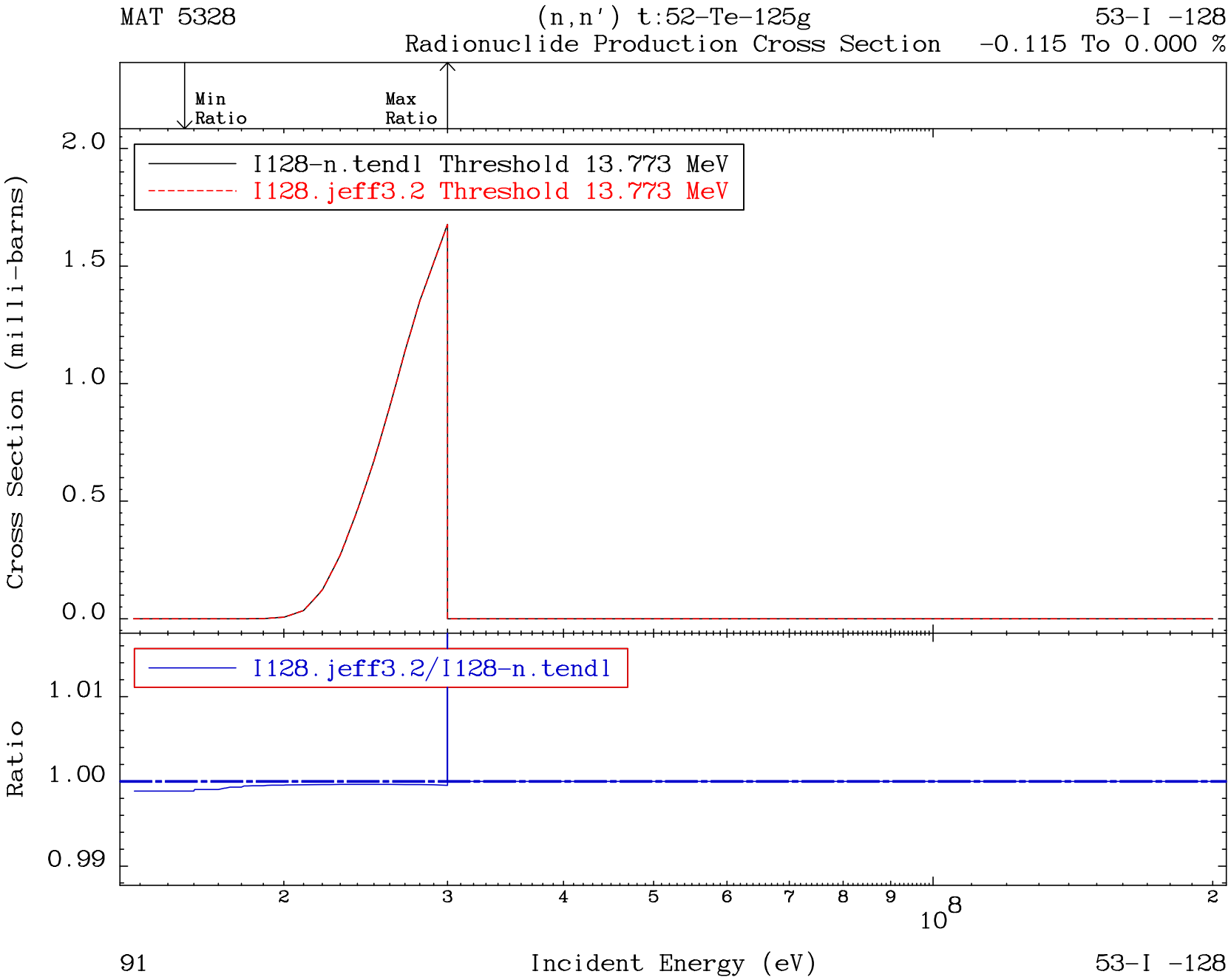

MAT 5328
(n,3n) α:51-Sb-122m5
53-I -128
Radionuclide Production Cross Section -24.17 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 18.279 MeV
I128.jeff3.2 Threshold 18.282 MeV
Cross Section (micro-barns)
10
8
6
4
2
0
I128.jeff3.2/I128-n.tendl
Ratio
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
53-I -128

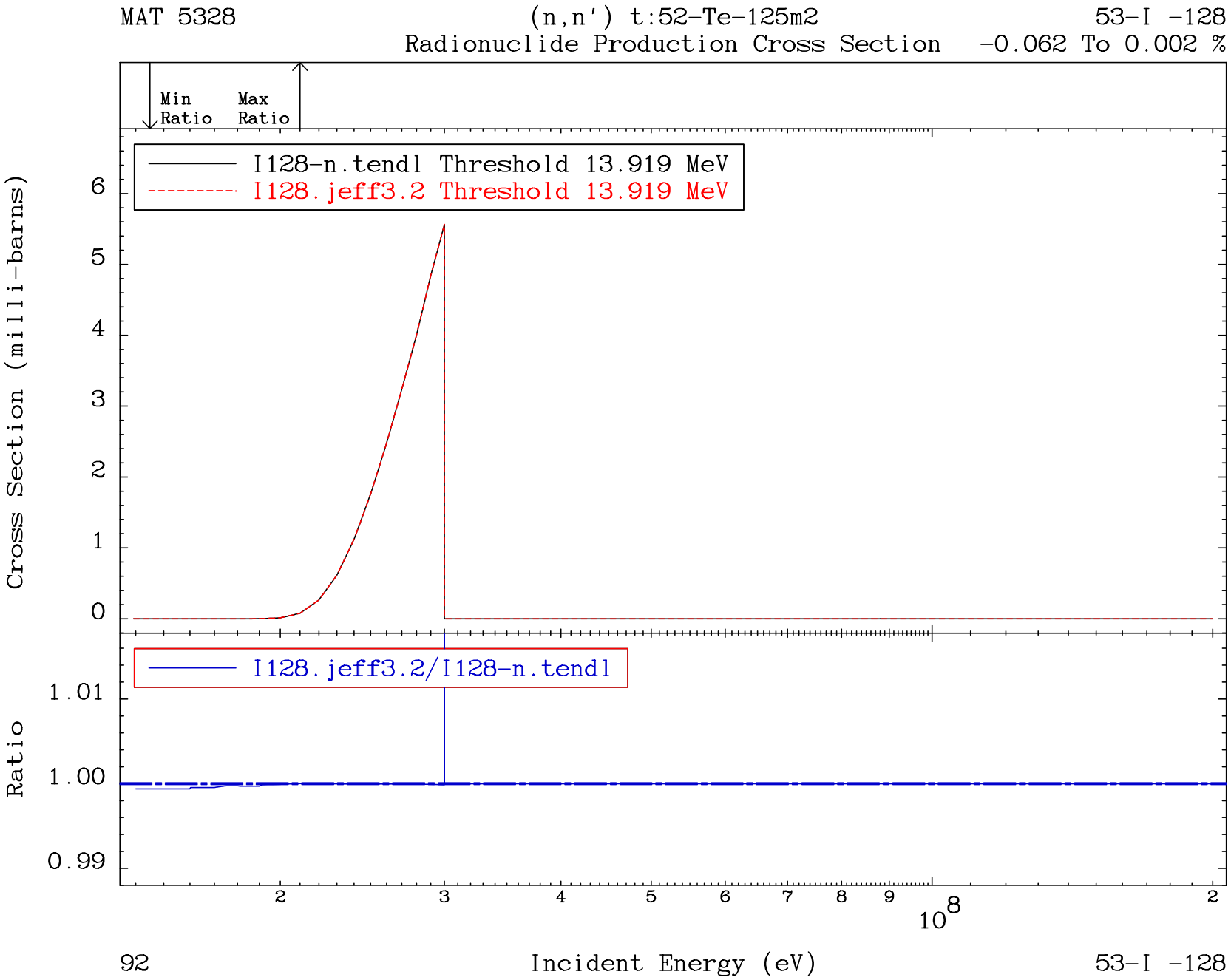

MAT 5328
(n,n') p:52-Te-127g
53-I -128
Radionuclide Production Cross Section -1.815 To 24.59 %
Min Ratio
I128-n.tendl Threshold 6.7992 MeV
I128.jeff3.2 Threshold 6.7992 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
I128.jeff3.2/I128-n.tendl
Ratio
1.3
1.2
1.1
1.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
87
Incident Energy (eV)
53-I -128

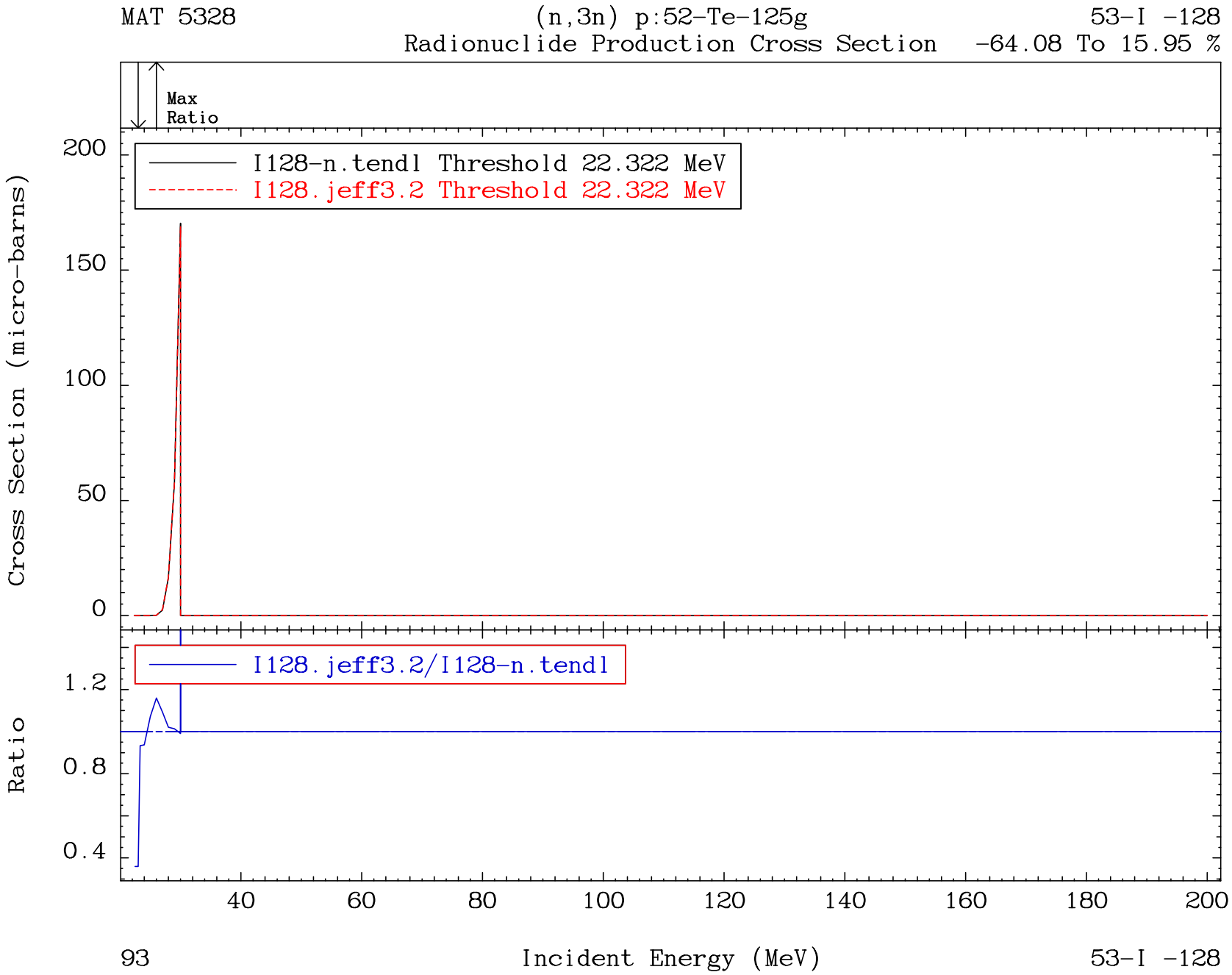

MAT 5328
(n,n') p:52-Te-127m2
53-I -128
Radionuclide Production Cross Section -1.639 To 1.894 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 6.8881 MeV
I128.jeff3.2 Threshold 6.8881 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
1.02
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
88
Incident Energy (eV)
53-I -128

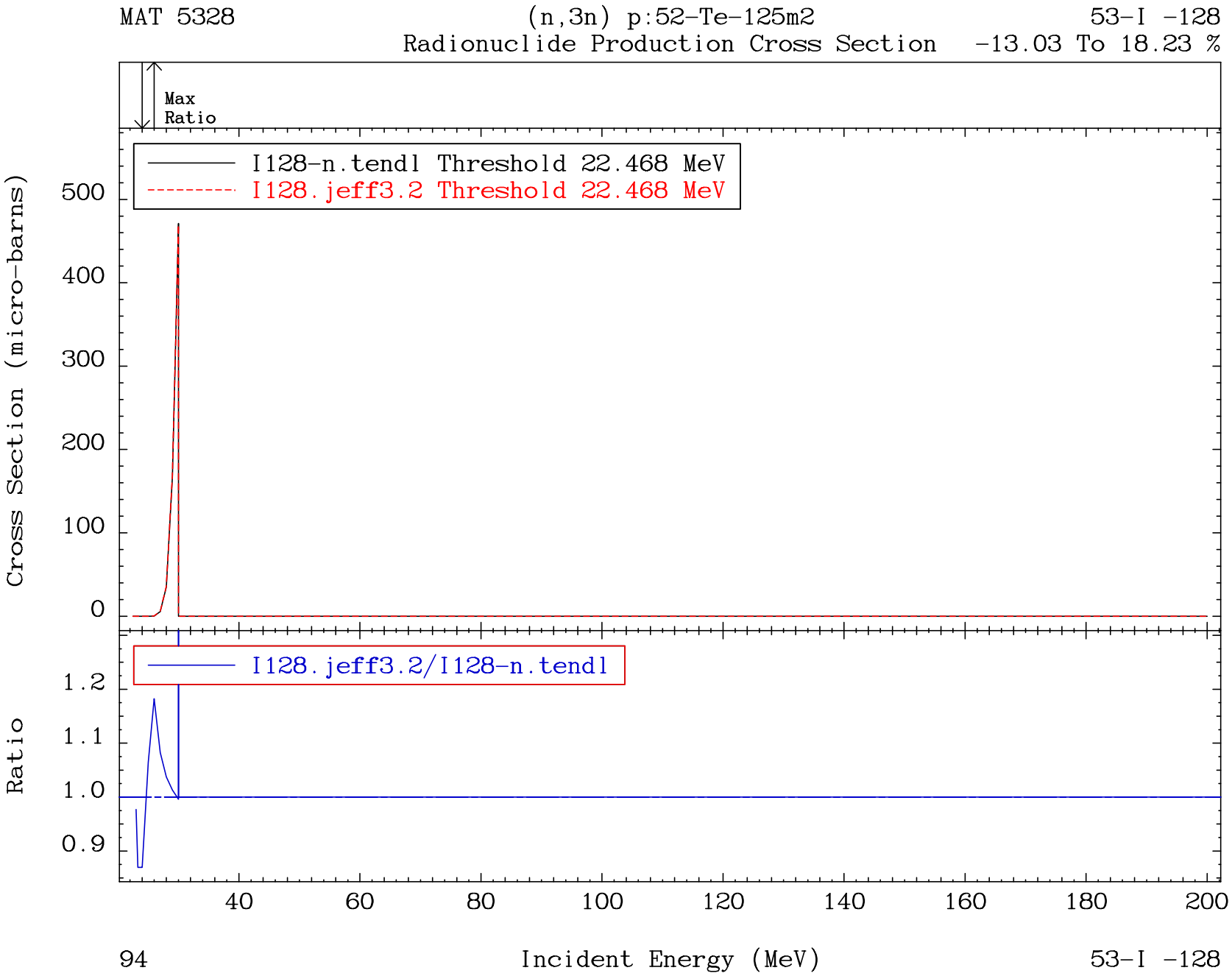

MAT 5328
(n,n') 2α:49-In-120g
53-I -128
Radionuclide Production Cross Section -86.55 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 6.9140 MeV
I128.jeff3.2 Threshold 6.9067 MeV
Cross Section (10^{-12} barns)
700
600
500
400
300
200
100
0
I128.jeff3.2/I128-n.tendl
Ratio
1.2
0.8
0.4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
89
Incident Energy (eV)
53-I -128

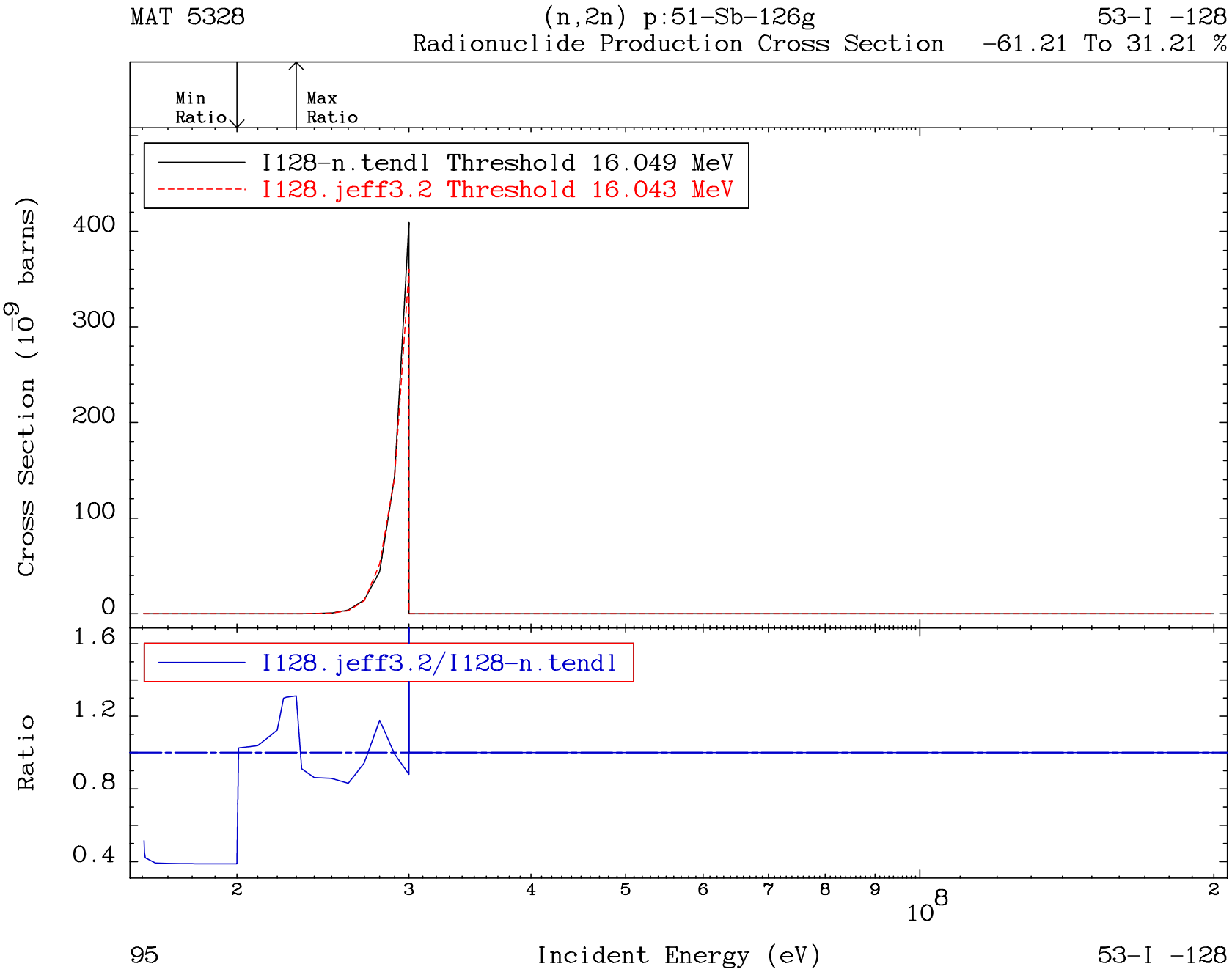

MAT 5328
(n,n') 2α:49-In-120m1
53-I -128
Radionuclide Production Cross Section
-80.32 To 67.78 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 6.9846 MeV
I128.jeff3.2 Threshold 6.9773 MeV
Cross Section (10^{-9} barns)
1.0
0.8
0.6
0.4
0.2
0.0
I128.jeff3.2/I128-n.tendl
Ratio
1.8
1.2
0.6
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
90
Incident Energy (eV)
53-I -128

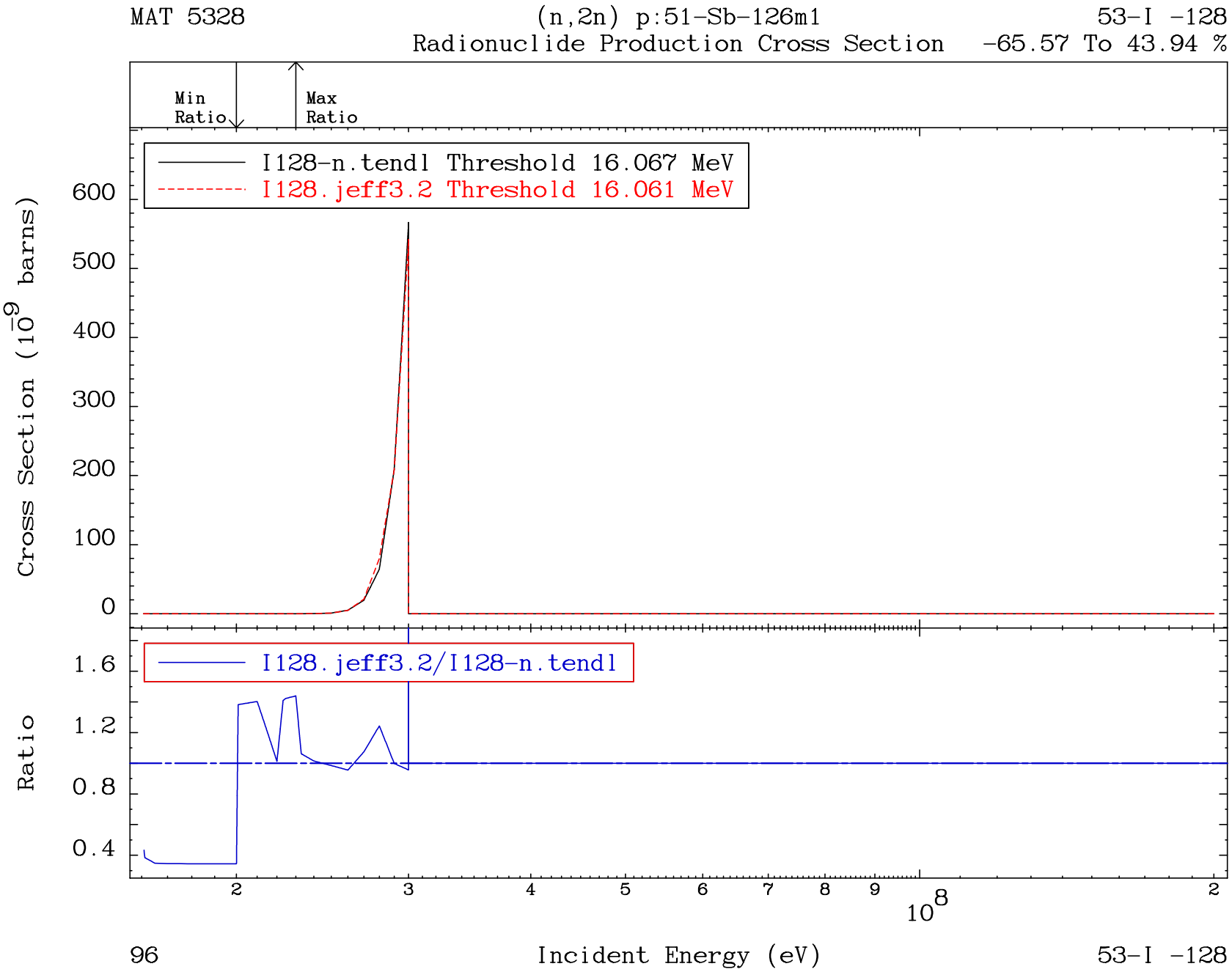

MAT 5328
(n,n') t:52-Te-125g
53-I -128
Radionuclide Production Cross Section
-0.115 To 0.000 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 13.773 MeV
I128.jeff3.2 Threshold 13.773 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
I128.jeff3.2/I128-n.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
53-I -128

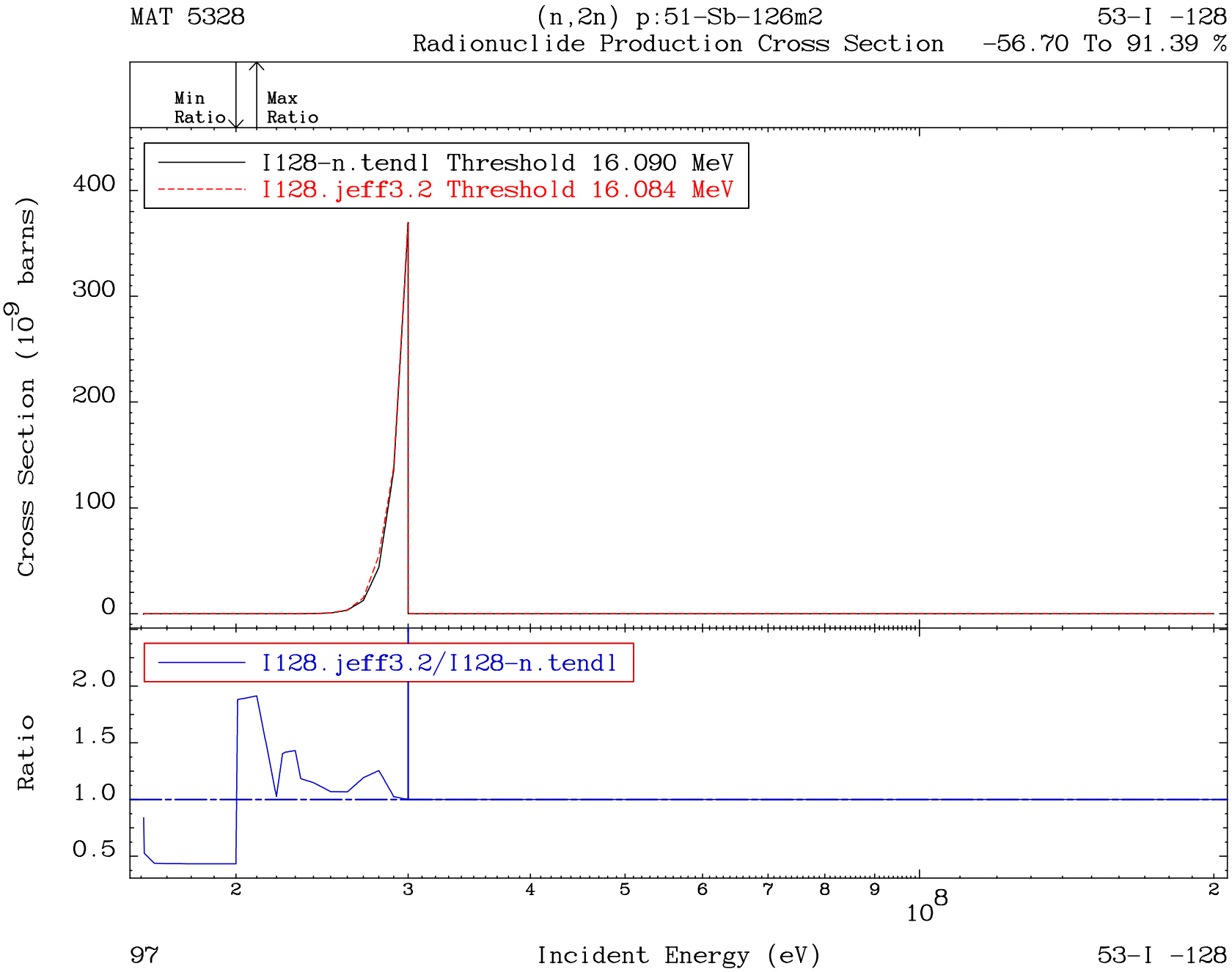

MAT 5328
(n,n') t:52-Te-125m2
53-I -128
Radionuclide Production Cross Section
-0.062 To 0.002 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 13.919 MeV
I128.jeff3.2 Threshold 13.919 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
I128.jeff3.2/I128-n.tendl
Ratio
0.99
1.00
1.01
2
3
4
5
6
7
8
9
2
10^8
92
Incident Energy (eV)
53-I -128

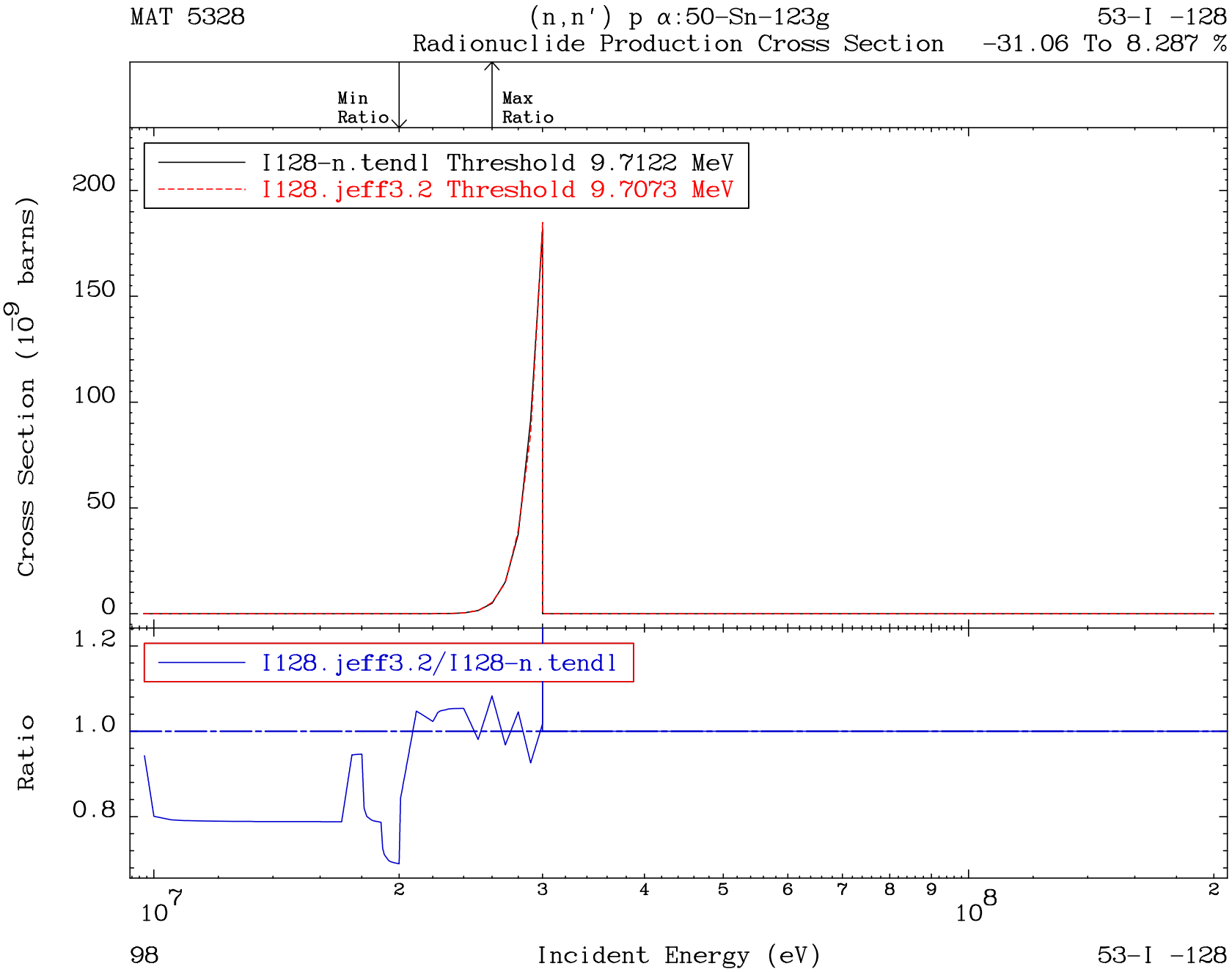

MAT 5328
(n,3n) p:52-Te-125g
53-I -128
Radionuclide Production Cross Section -64.08 To 15.95 %
Max
Ratio
I128-n.tendl Threshold 22.322 MeV
I128.jeff3.2 Threshold 22.322 MeV
Cross Section (micro-barns)
200
150
100
50
0
I128.jeff3.2/I128-n.tendl
Ratio
1.2
0.8
0.4
40
60
80
100
120
140
160
180
200
93
Incident Energy (MeV)
53-I -128

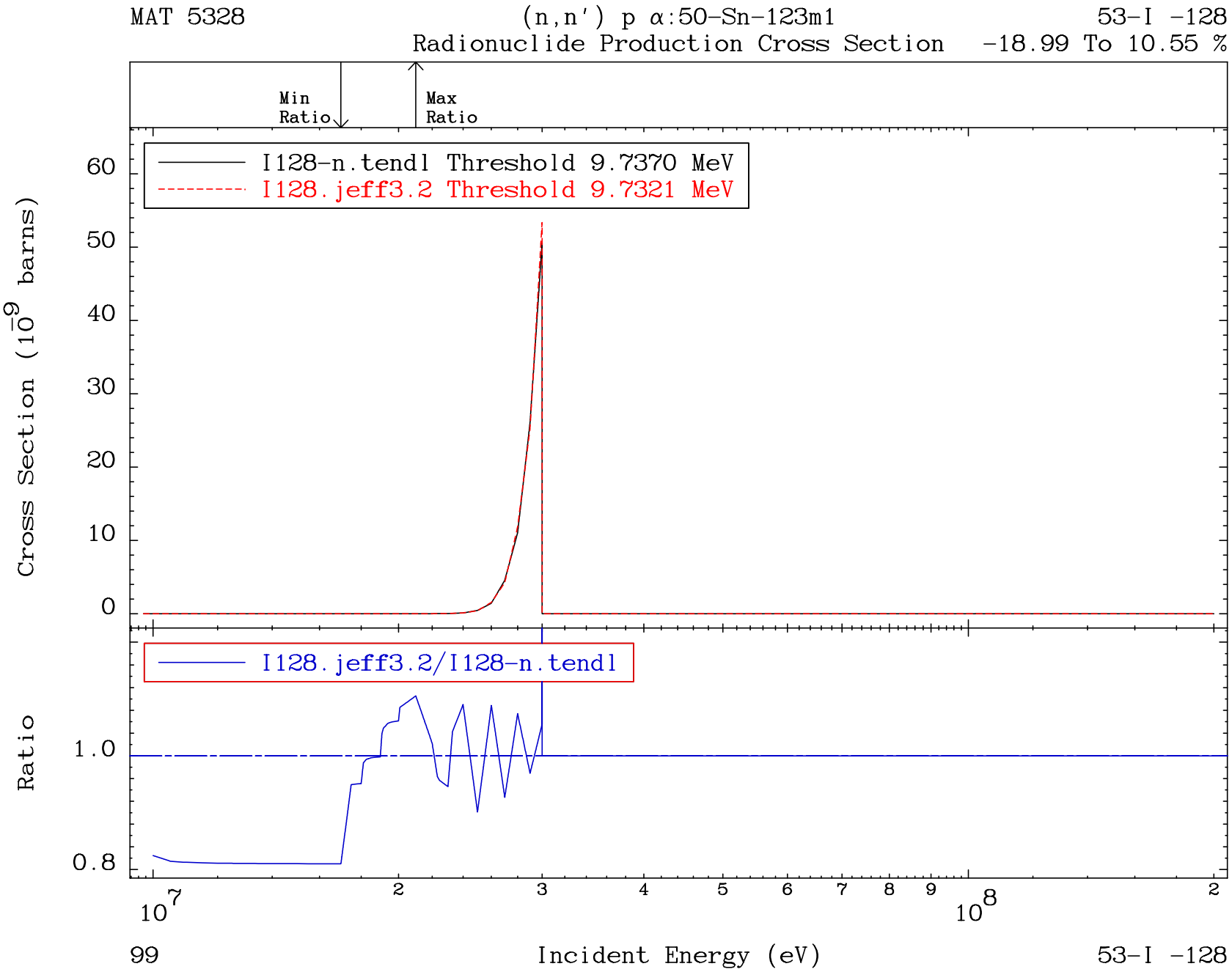

MAT 5328
(n,3n) p:52-Te-125m2
53-I -128
Radionuclide Production Cross Section -13.03 To 18.23 %
Max Ratio
I128-n.tendl Threshold 22.468 MeV
I128.jeff3.2 Threshold 22.468 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
I128.jeff3.2/I128-n.tendl
Ratio
1.2
1.1
1.0
0.9
40
60
80
100
120
140
160
180
200
94
Incident Energy (MeV)
53-I -128

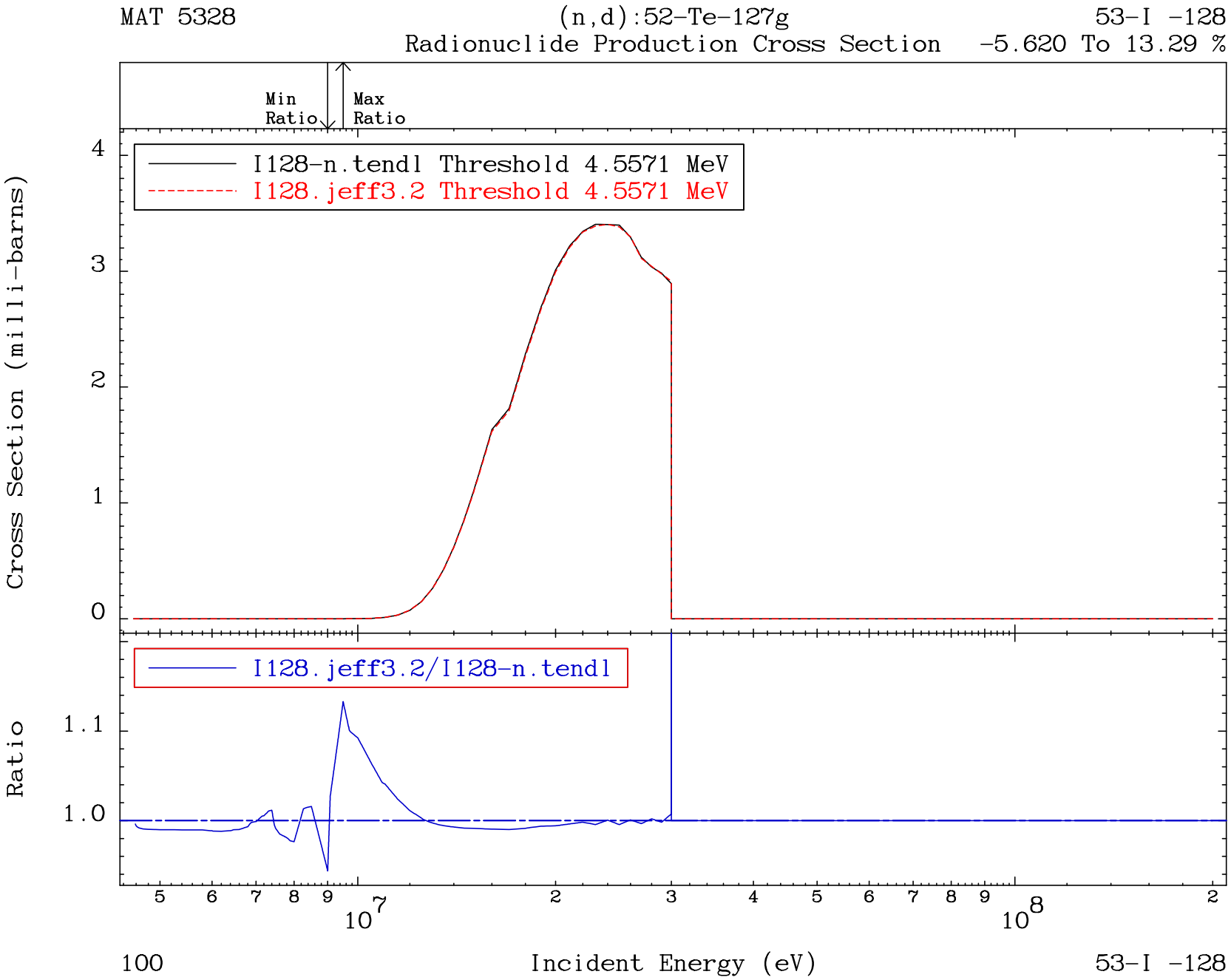

MAT 5328
(n,2n) p:51-Sb-126g
53-I -128
Radionuclide Production Cross Section -61.21 To 31.21 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 16.049 MeV
I128.jeff3.2 Threshold 16.043 MeV
Cross Section (10^{-9} barns)
400
300
200
100
0
I128.jeff3.2/I128-n.tendl
Ratio
1.6
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
95
Incident Energy (eV)
53-I -128

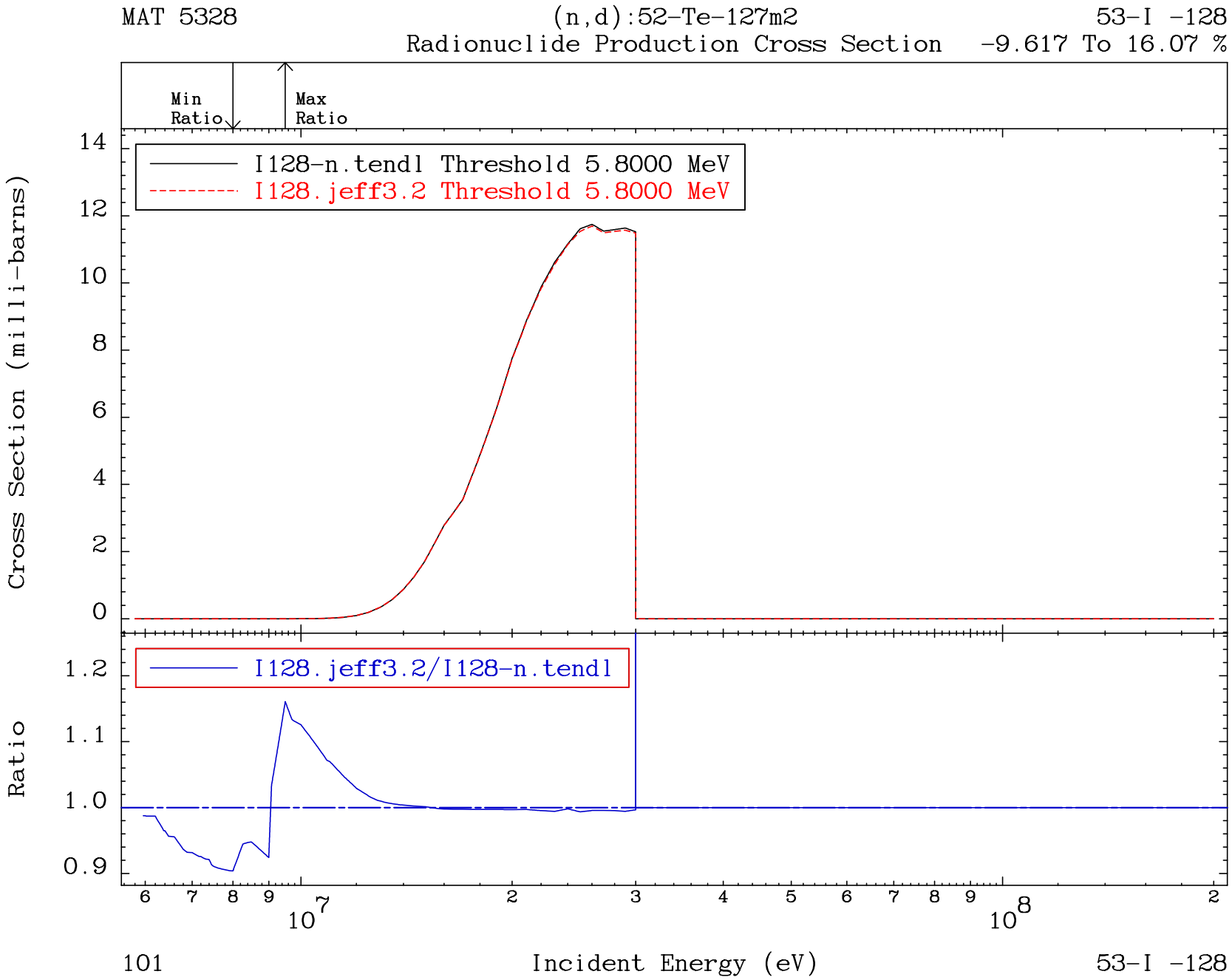

MAT 5328
(n,2n) p:51-Sb-126m1
53-I -128
Radionuclide Production Cross Section -65.57 To 43.94 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 16.067 MeV
I128.jeff3.2 Threshold 16.061 MeV
Cross Section (10^{-9} barns)
600
500
400
300
200
100
0
I128.jeff3.2/I128-n.tendl
Ratio
1.6
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
96
Incident Energy (eV)
53-I -128

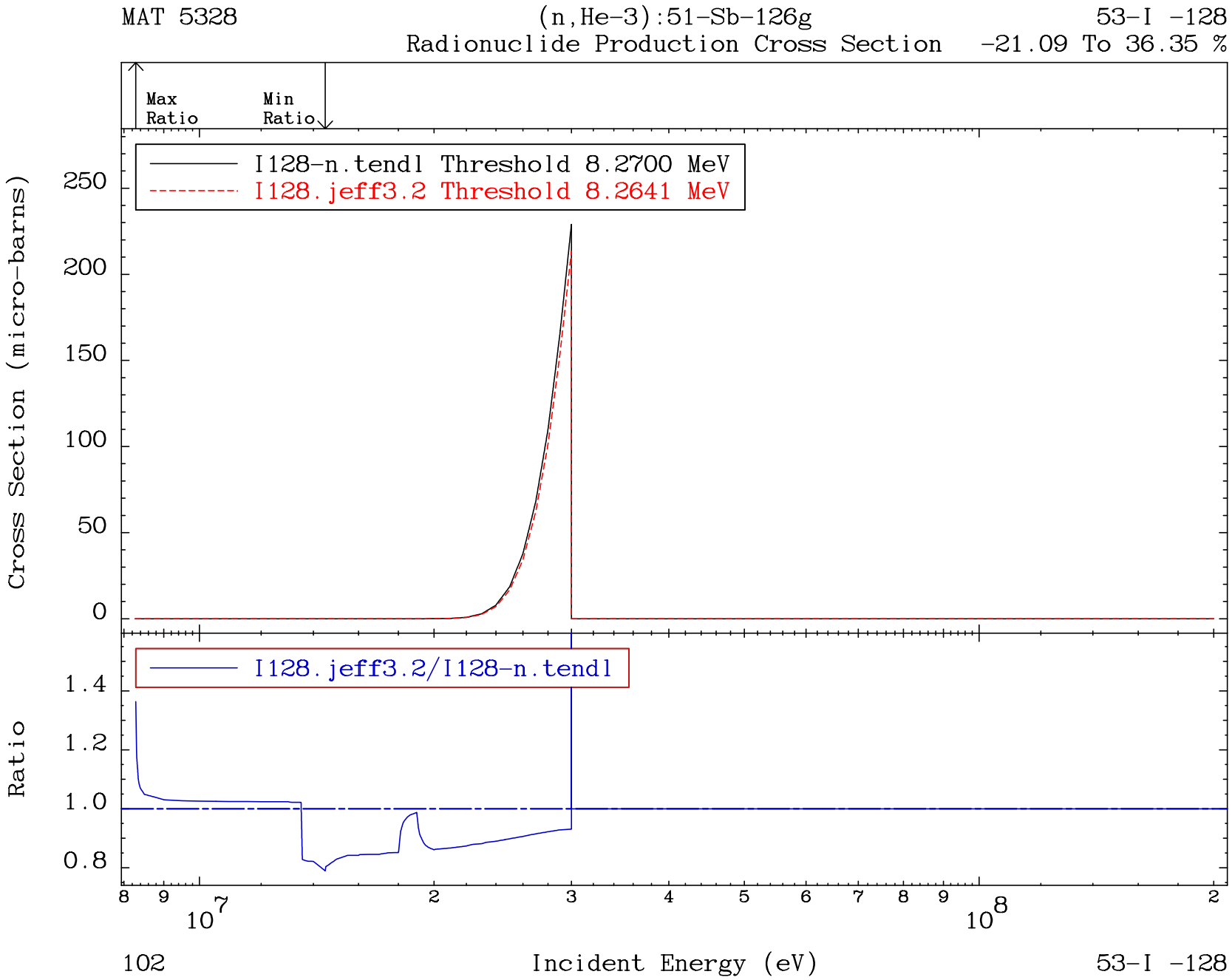

MAT 5328
(n,2n) p:51-Sb-126m2
53-I -128
Radionuclide Production Cross Section -56.70 To 91.39 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 16.090 MeV
I128.jeff3.2 Threshold 16.084 MeV
Cross Section (10^{-9} barns)
400
300
200
100
0
I128.jeff3.2/I128-n.tendl
Ratio
2.0
1.5
1.0
0.5
2
3
4
5
6
7
8
9
10^8
2
97
Incident Energy (eV)
53-I -128

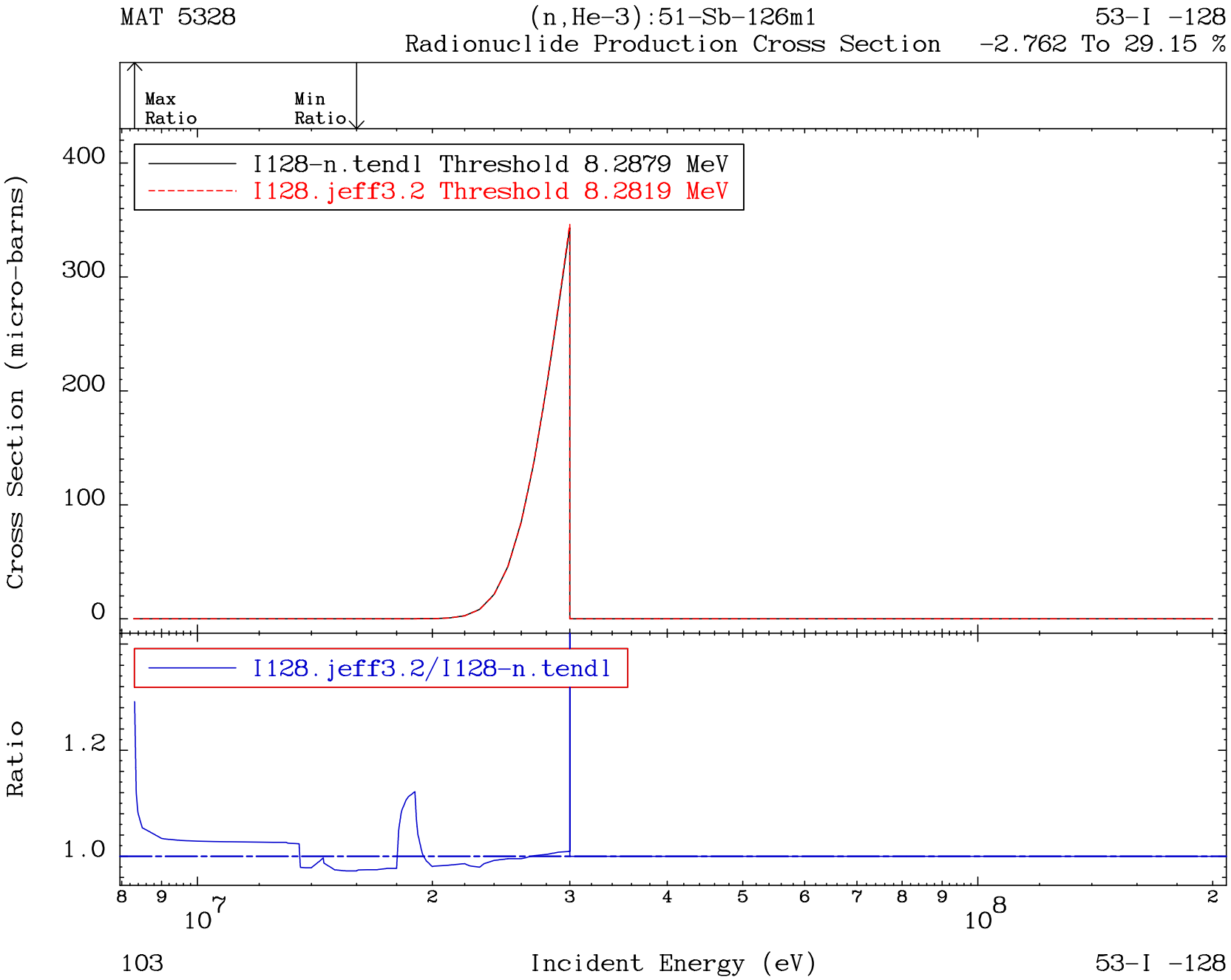

MAT 5328
(n,n') p α:50-Sn-123g
53-I -128
Radionuclide Production Cross Section -31.06 To 8.287 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 9.7122 MeV
I128.jeff3.2 Threshold 9.7073 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
I128.jeff3.2/I128-n.tendl
Ratio
1.2
1.0
0.8
10^{7}
2
3
4
5
6
7
8
9
10^{8}
2
98
Incident Energy (eV)
53-I -128

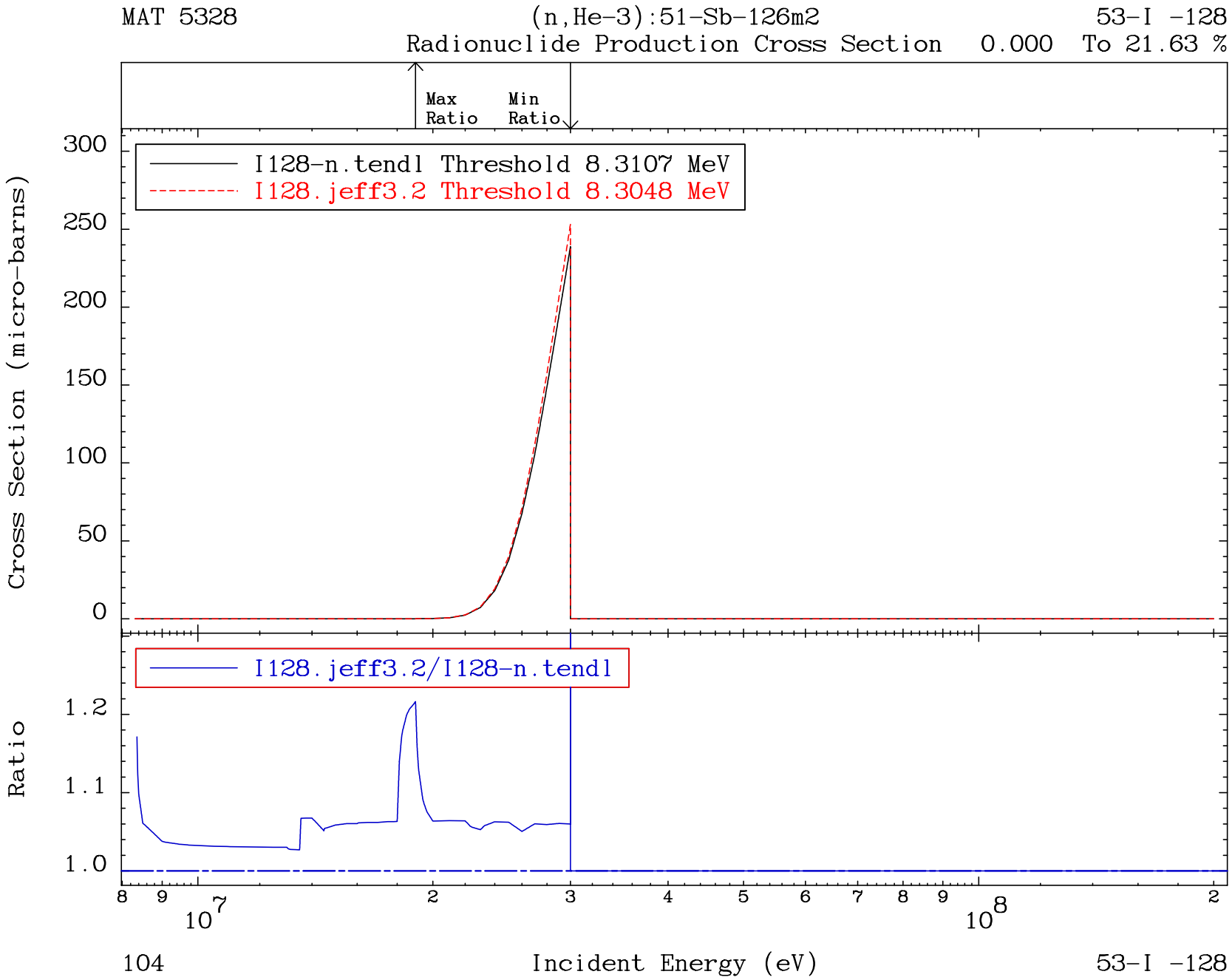

MAT 5328
(n,n') p α:50-Sn-123m1
53-I -128
Radionuclide Production Cross Section -18.99 To 10.55 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 9.7370 MeV
I128.jeff3.2 Threshold 9.7321 MeV
Cross Section (10^{-9} barns)
60
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
1.0
0.8
10^{7}
2
3
4
5
6
7
8
9
10^{8}
2
99
Incident Energy (eV)
53-I -128

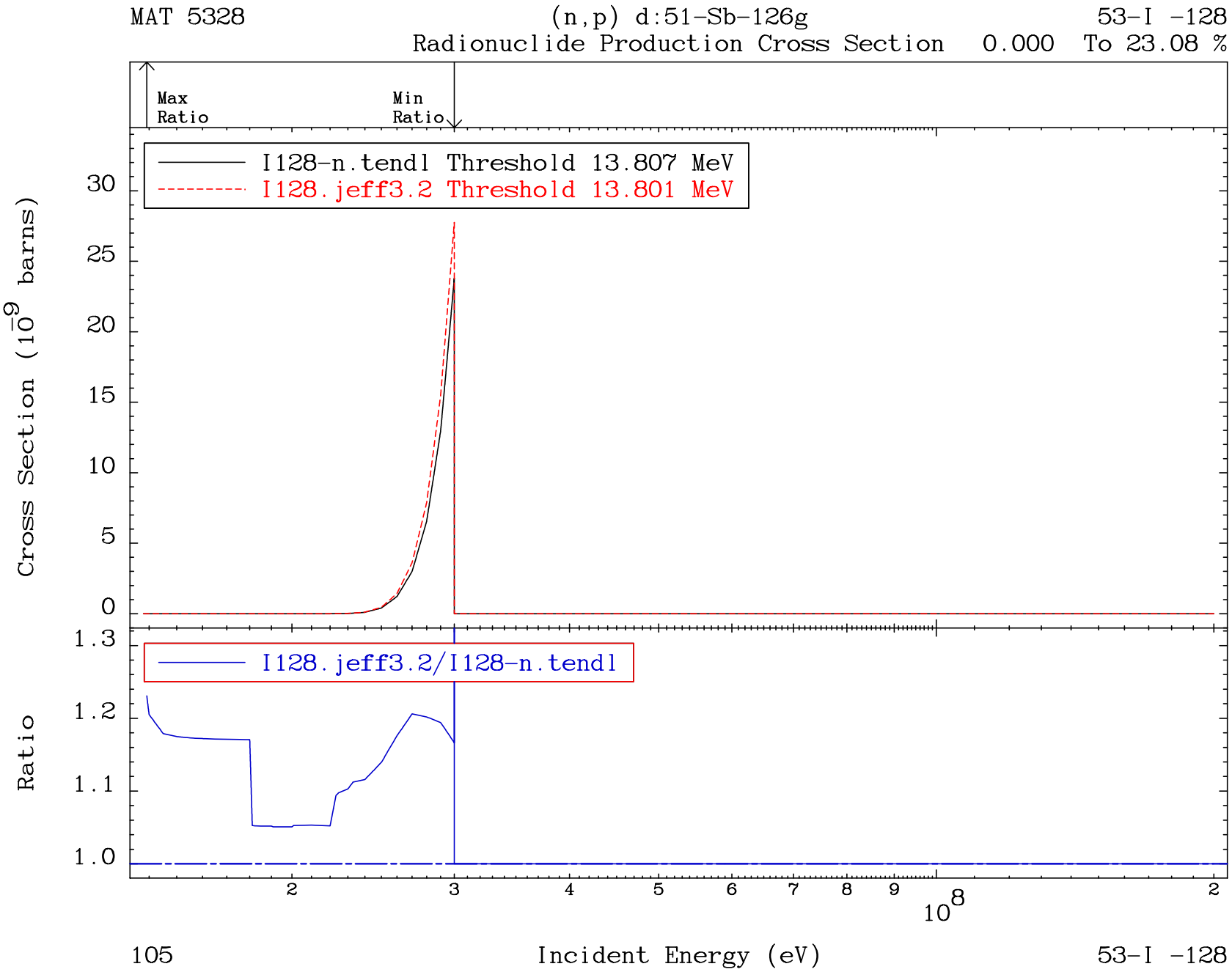

MAT 5328
(n,d):52-Te-127g
53-I -128
Radionuclide Production Cross Section -5.620 To 13.29 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 4.5571 MeV
I128.jeff3.2 Threshold 4.5571 MeV
Cross Section (milli-barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
100
53-I -128

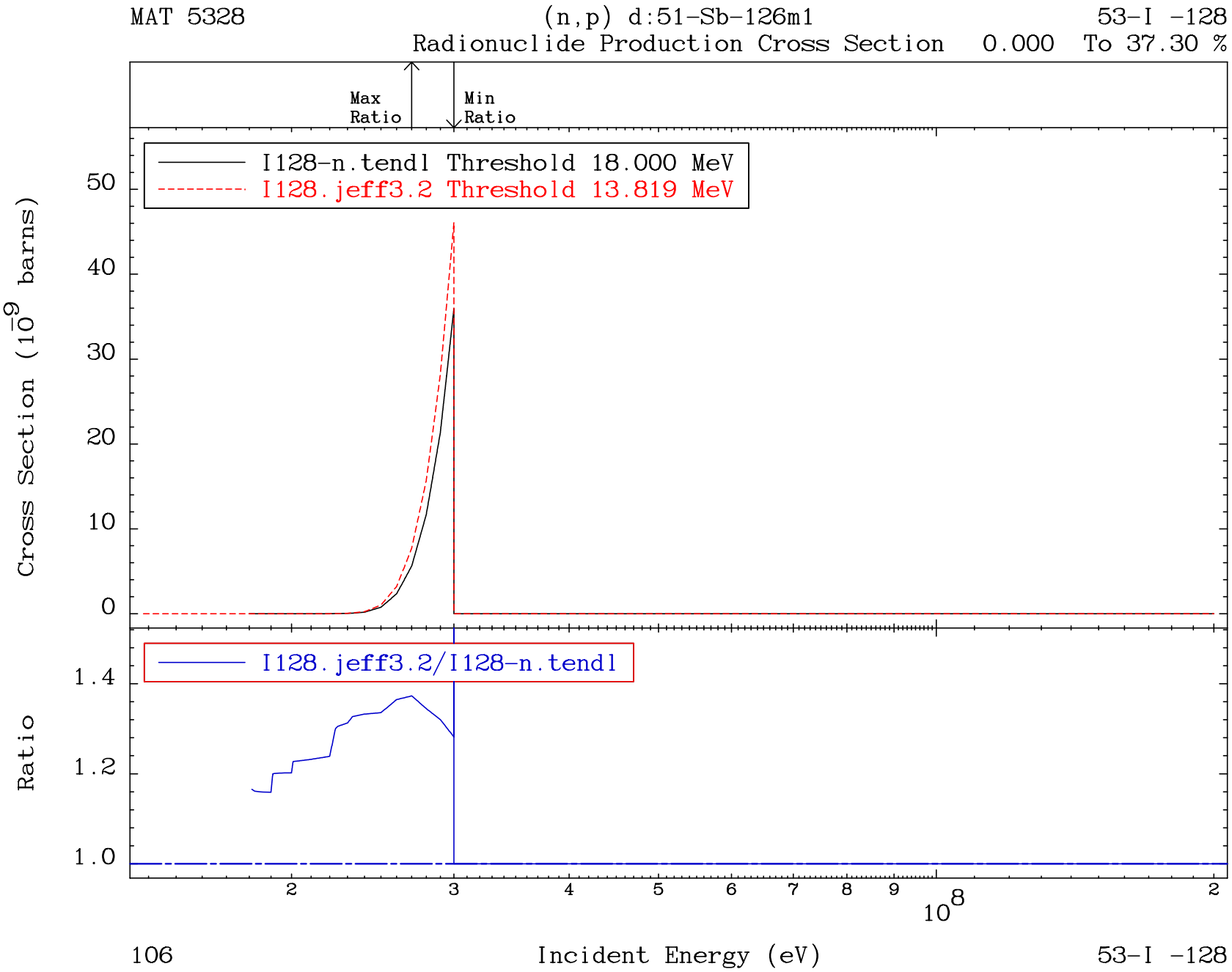

MAT 5328
(n,d):52-Te-127m2
53-I -128
Radionuclide Production Cross Section -9.617 To 16.07 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 5.8000 MeV
I128.jeff3.2 Threshold 5.8000 MeV
Cross Section (milli-barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
101
53-I -128

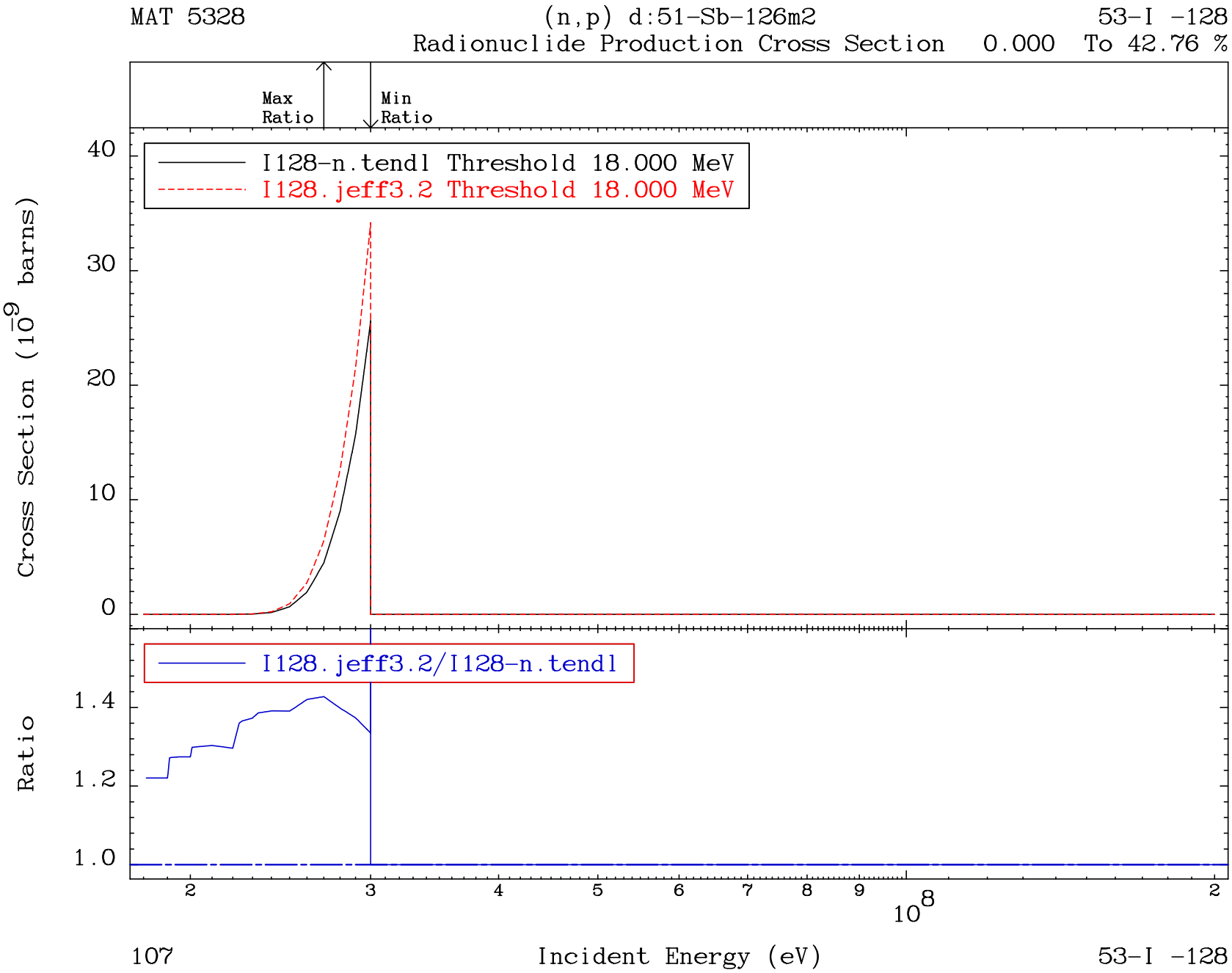

MAT 5328
(n,He-3):51-Sb-126g
53-I -128
Radionuclide Production Cross Section -21.09 To 36.35 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 8.2700 MeV
I128.jeff3.2 Threshold 8.2641 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
I128.jeff3.2/I128-n.tendl
Ratio
1.4
1.2
1.0
0.8
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
102
Incident Energy (eV)
53-I -128

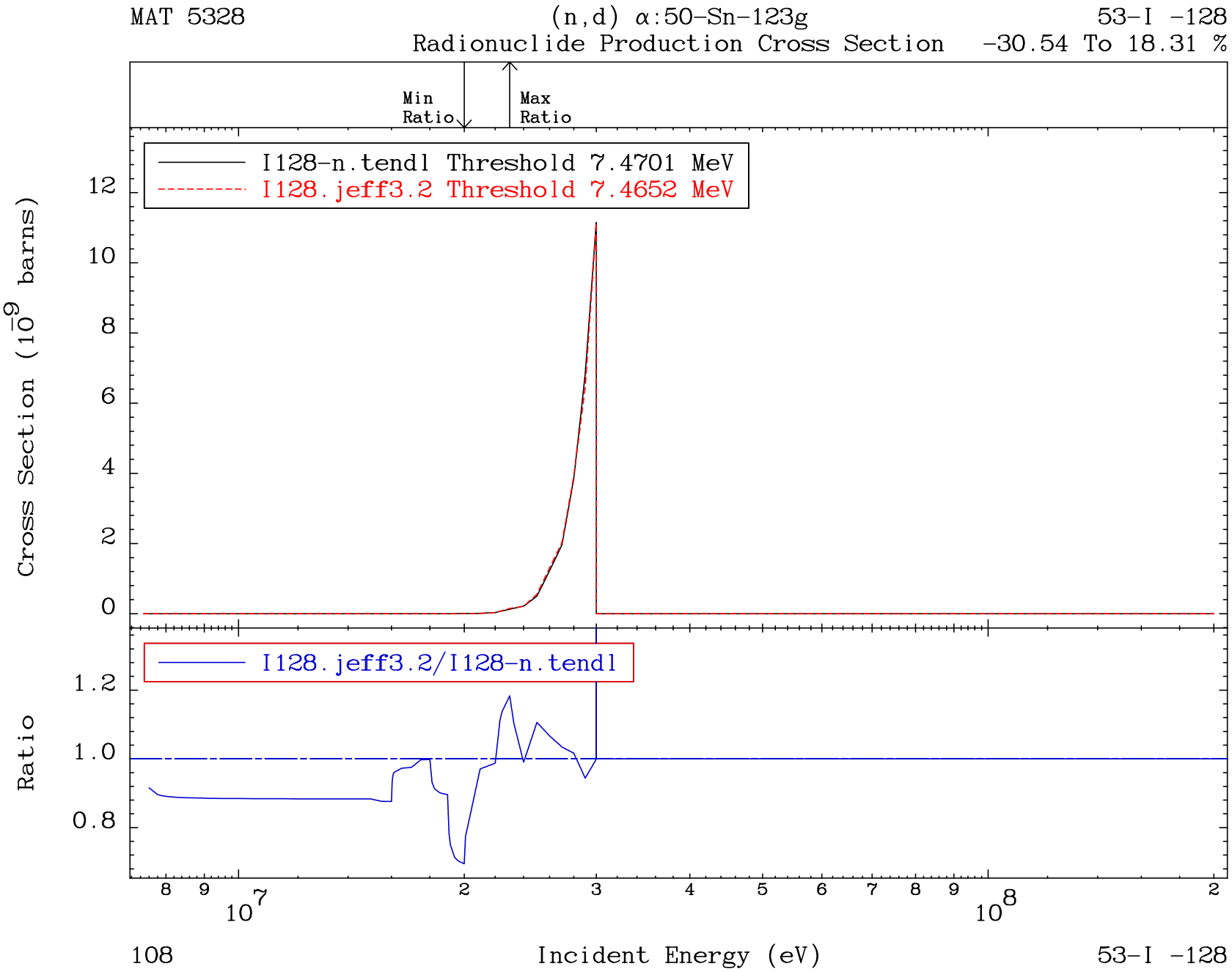

MAT 5328
(n,He-3):51-Sb-126m1
53-I -128
Radionuclide Production Cross Section -2.762 To 29.15 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 8.2879 MeV
I128.jeff3.2 Threshold 8.2819 MeV
Cross Section (micro-barns)
400
300
200
100
0
I128.jeff3.2/I128-n.tendl
Ratio
1.2
1.0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
103
Incident Energy (eV)
53-I -128

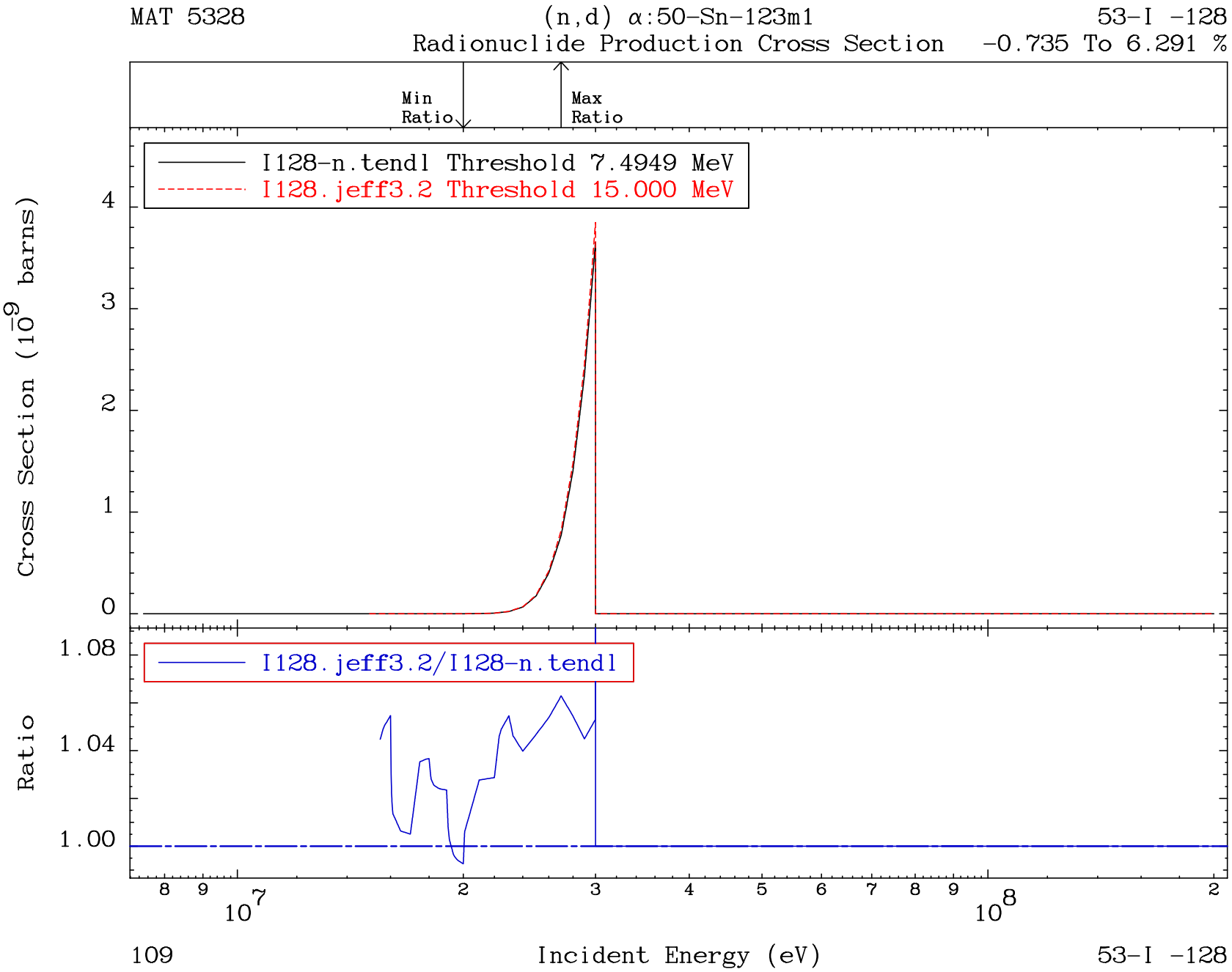

MAT 5328
(n,He-3):51-Sb-126m2
53-I -128
Radionuclide Production Cross Section 0.000 To 21.63 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 8.3107 MeV
I128.jeff3.2 Threshold 8.3048 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
I128.jeff3.2/I128-n.tendl
Ratio
1.2
1.1
1.0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
104
Incident Energy (eV)
53-I -128


MAT 5328
(n,p) d:51-Sb-126g
53-I -128
Radionuclide Production Cross Section 0.000 To 23.08 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 13.807 MeV
I128.jeff3.2 Threshold 13.801 MeV
Cross Section (10^{-9} barns)
30
25
20
15
10
5
0
I128.jeff3.2/I128-n.tendl
Ratio
1.3
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
105
Incident Energy (eV)
53-I -128


MAT 5328
(n,p) d:51-Sb-126m1
53-I -128
Radionuclide Production Cross Section 0.000 To 37.30 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 18.000 MeV
I128.jeff3.2 Threshold 13.819 MeV
Cross Section (10^{-9} barns)
50
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
106
Incident Energy (eV)
53-I -128


MAT 5328
(n,p) d:51-Sb-126m2
53-I -128
Radionuclide Production Cross Section 0.000 To 42.76 %
Max Ratio
Min Ratio
I128-n.tendl Threshold 18.000 MeV
I128.jeff3.2 Threshold 18.000 MeV
Cross Section (10^{-9} barns)
40
30
20
10
0
I128.jeff3.2/I128-n.tendl
Ratio
1.4
1.2
1.0
2
3
4
5
6
7
8
9
10^8
2
107
Incident Energy (eV)
53-I -128


MAT 5328
(n,d) α:50-Sn-123g
53-I -128
Radionuclide Production Cross Section -30.54 To 18.31 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 7.4701 MeV
I128.jeff3.2 Threshold 7.4652 MeV
Cross Section (10^{-9} barns)
I128.jeff3.2/I128-n.tendl
Ratio
Incident Energy (eV)
108
53-I -128


MAT 5328
(n,d) α:50-Sn-123m1
53-I -128
Radionuclide Production Cross Section -0.735 To 6.291 %
Min Ratio
Max Ratio
I128-n.tendl Threshold 7.4949 MeV
I128.jeff3.2 Threshold 15.000 MeV
Cross Section (10^{-9} barns)
0
1
2
3
4
I128.jeff3.2/I128-n.tendl
Ratio
1.00
1.04
1.08
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
109
Incident Energy (eV)
53-I -128