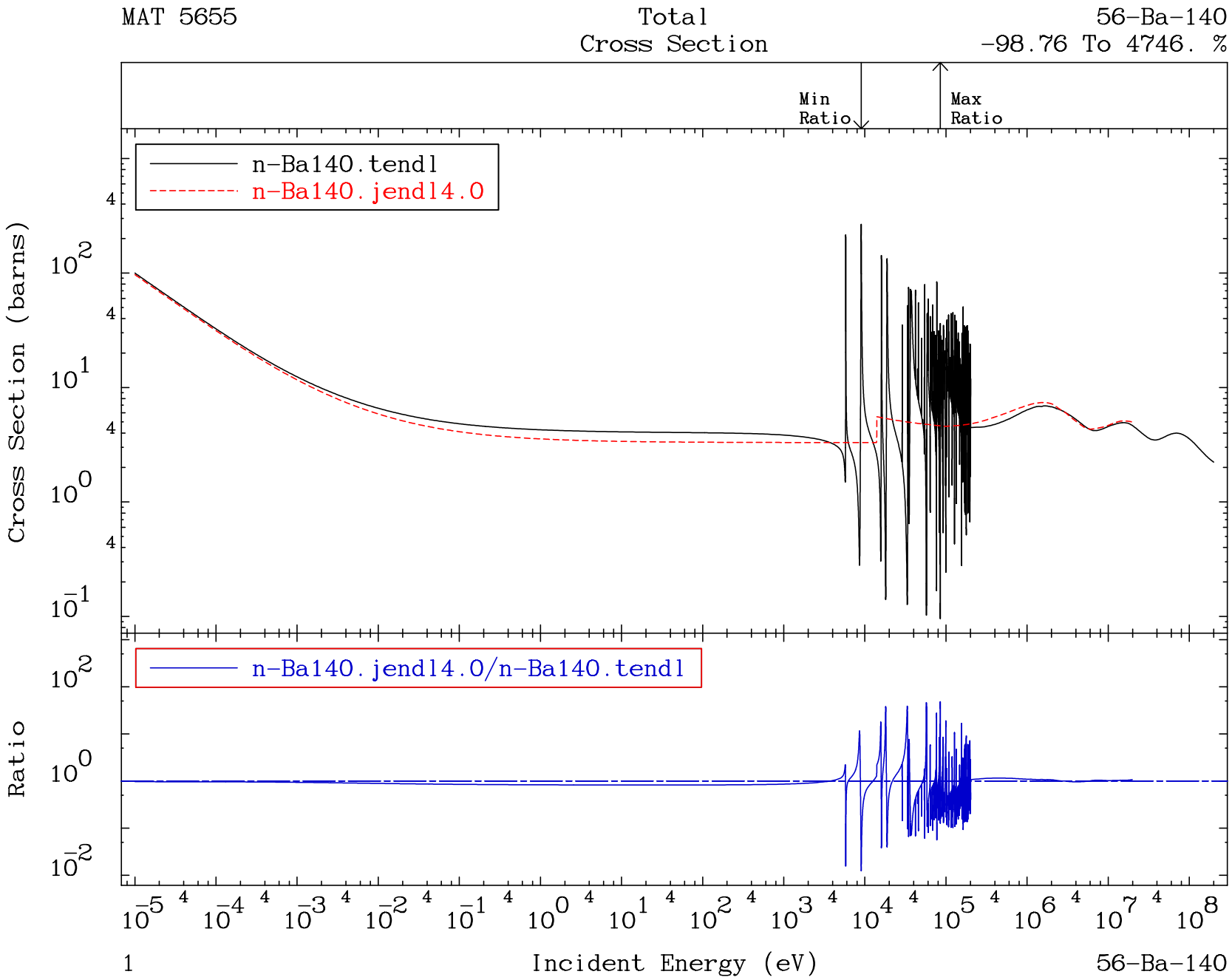
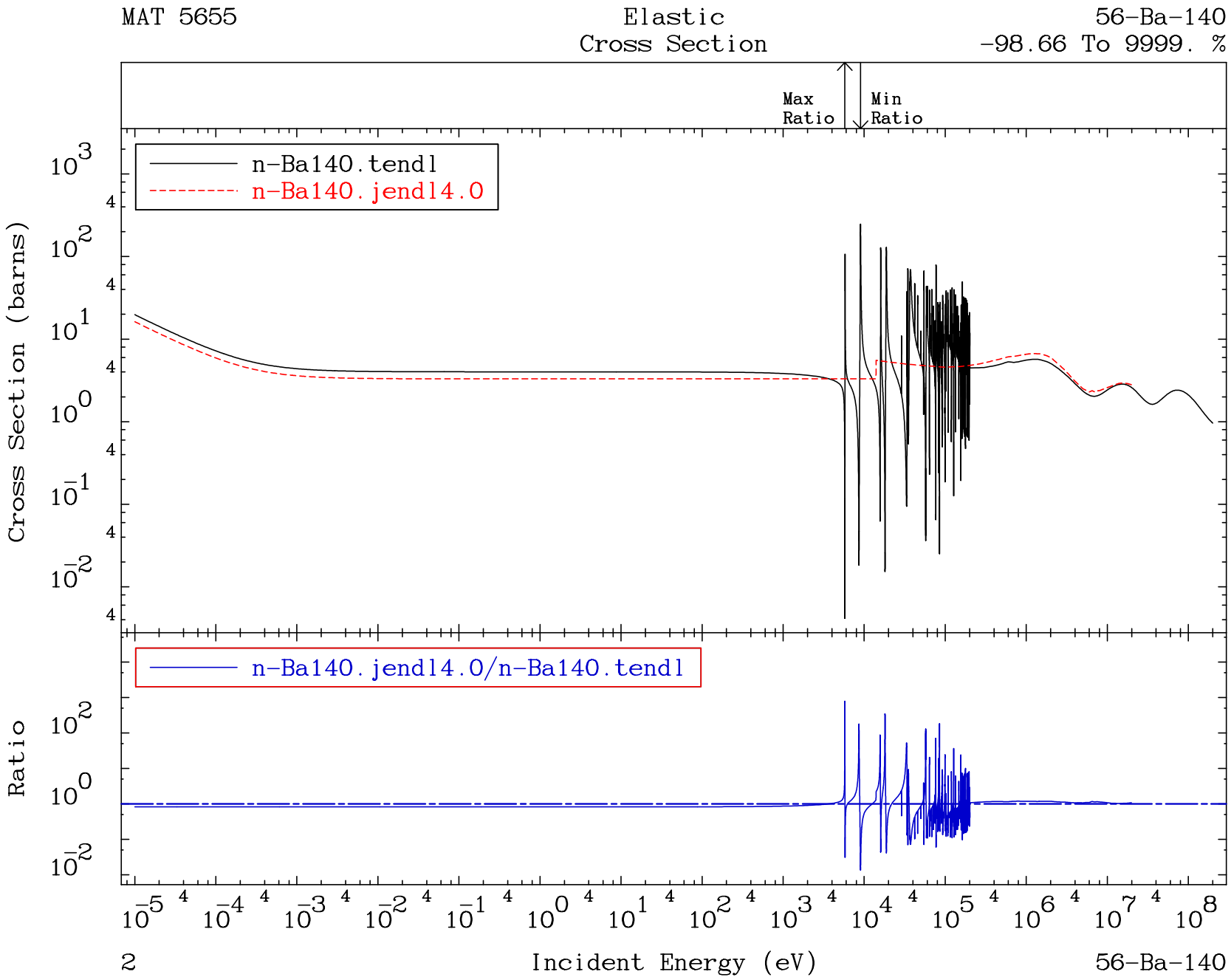
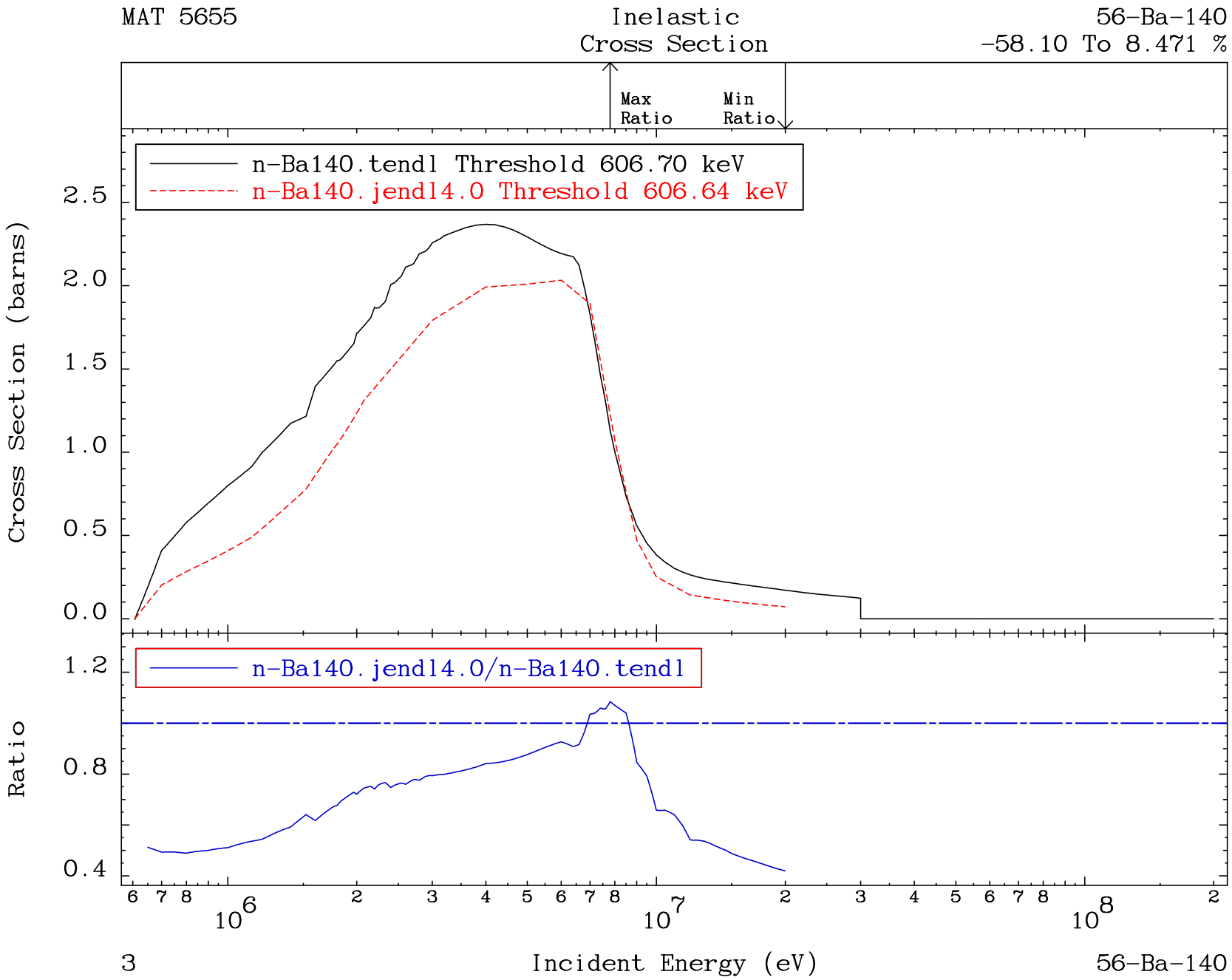
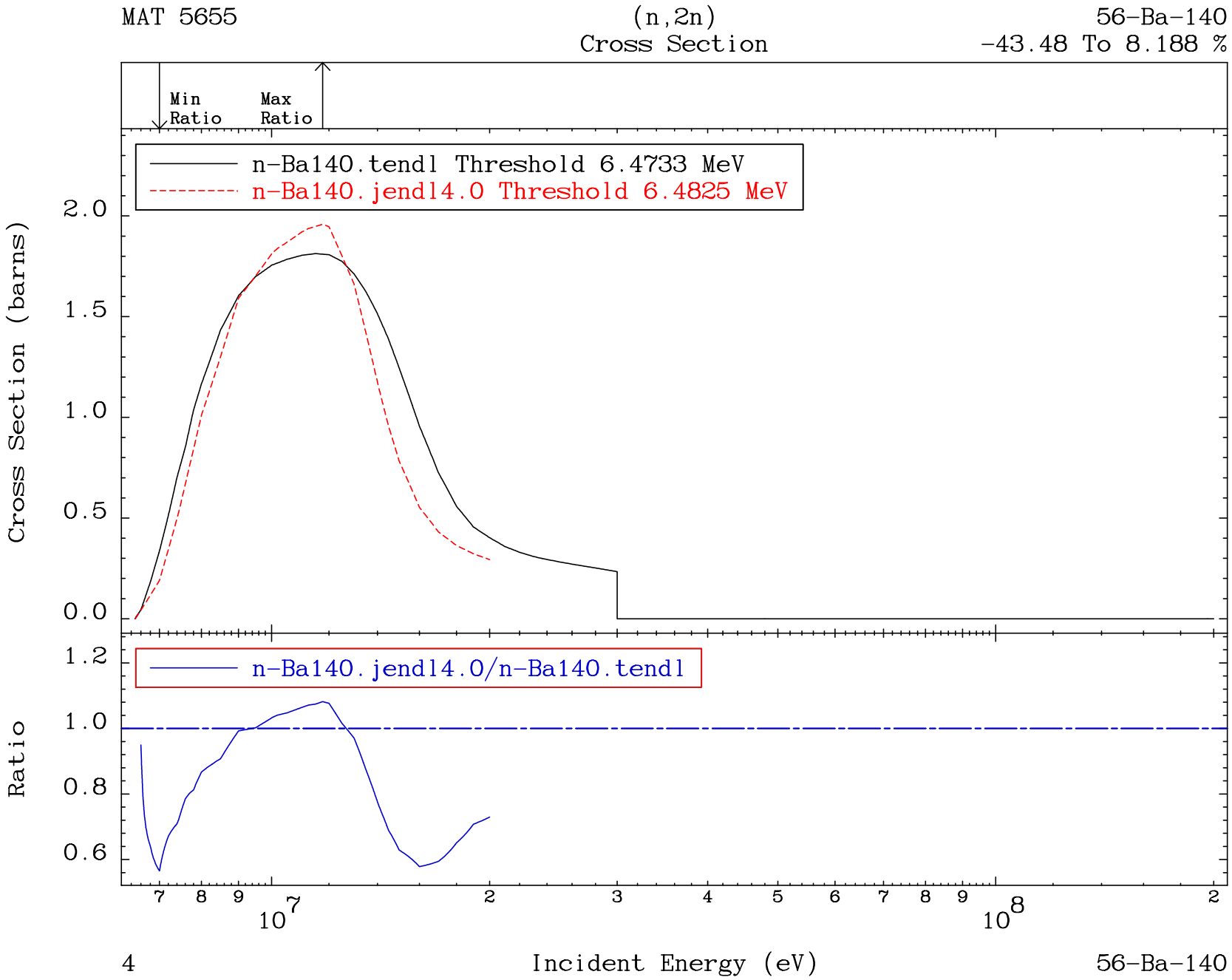
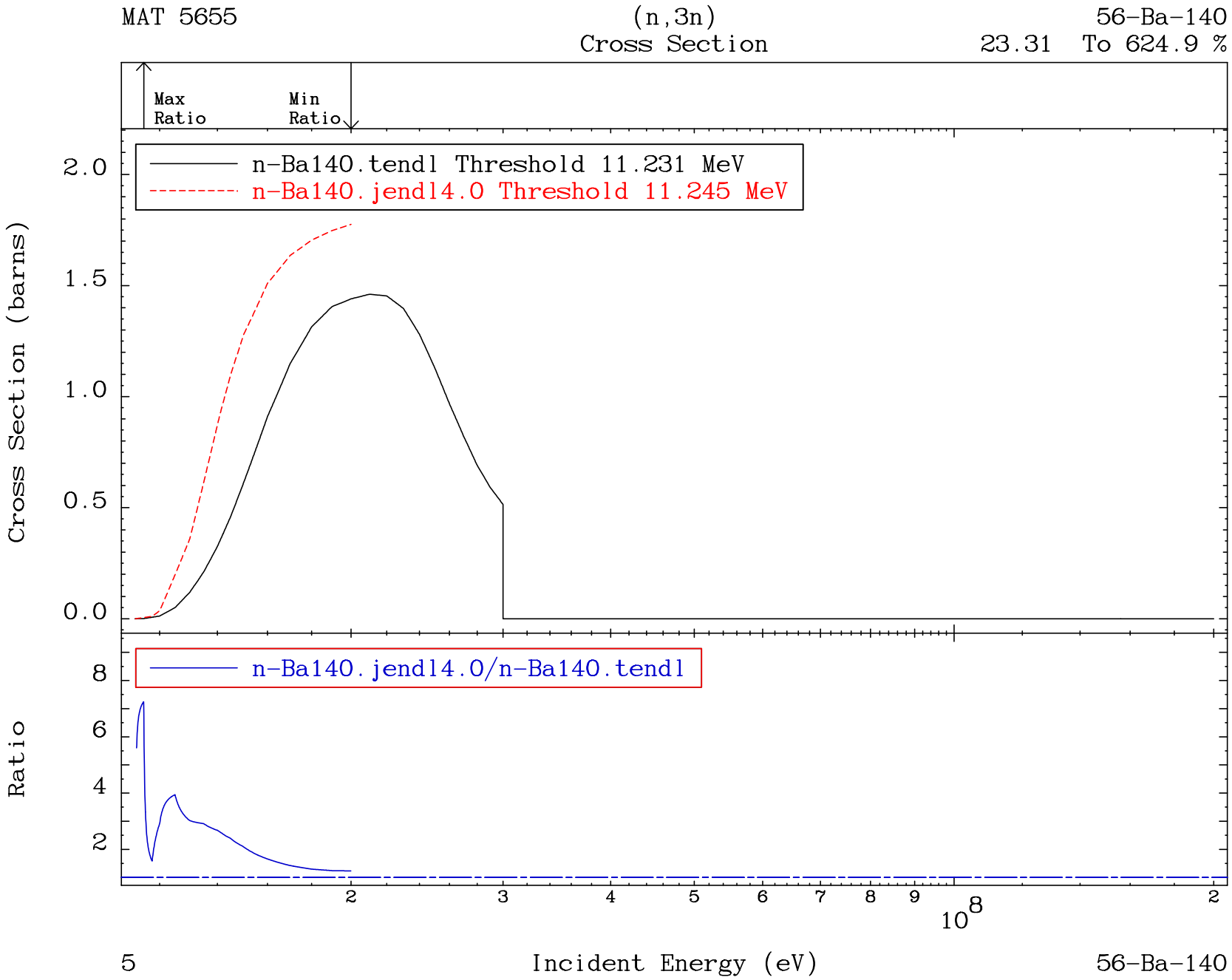
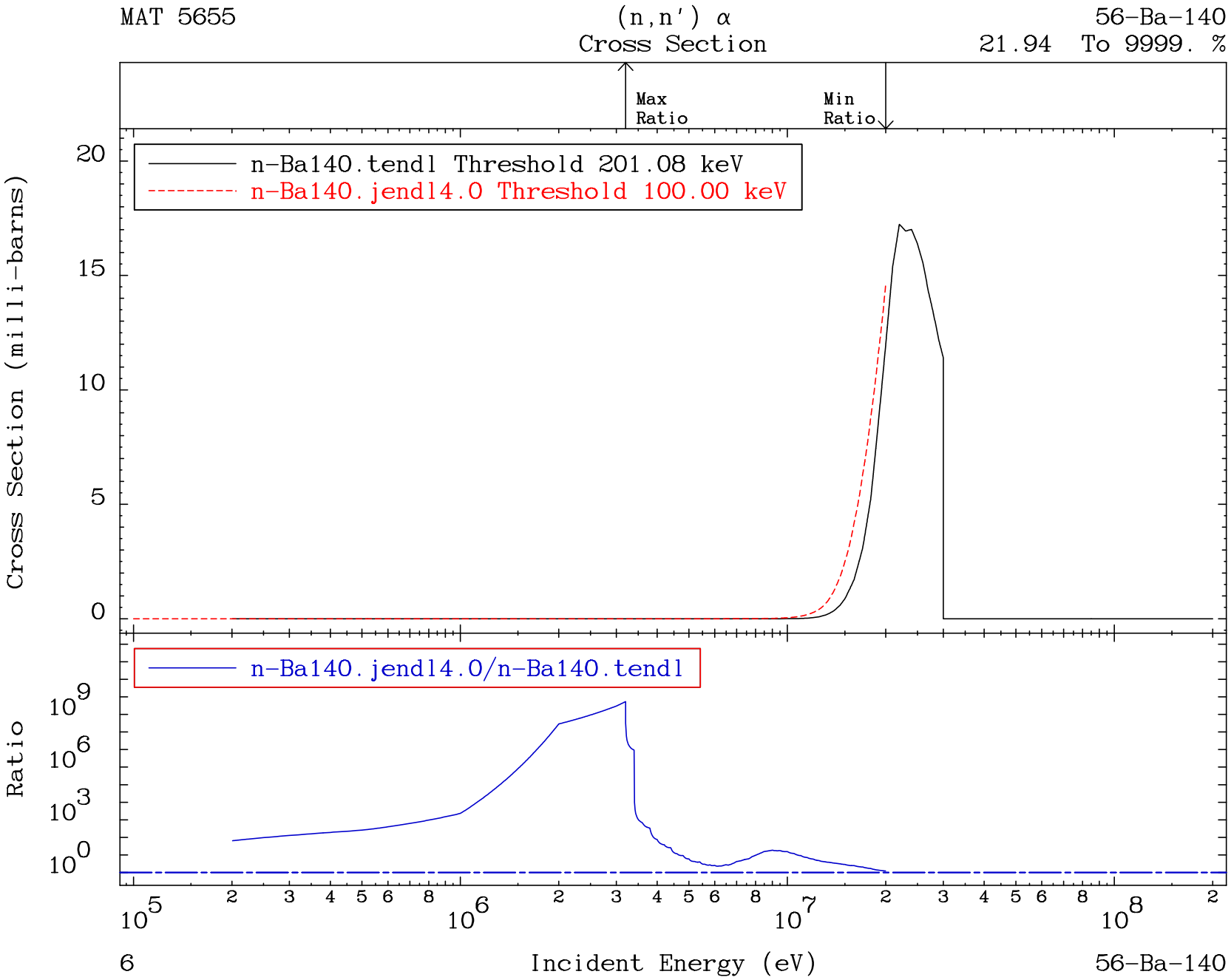

MAT 5655
Total
Cross Section
56-Ba-140
-98.76 To 4746. %
Min
Ratio
Max
Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
1
56-Ba-140

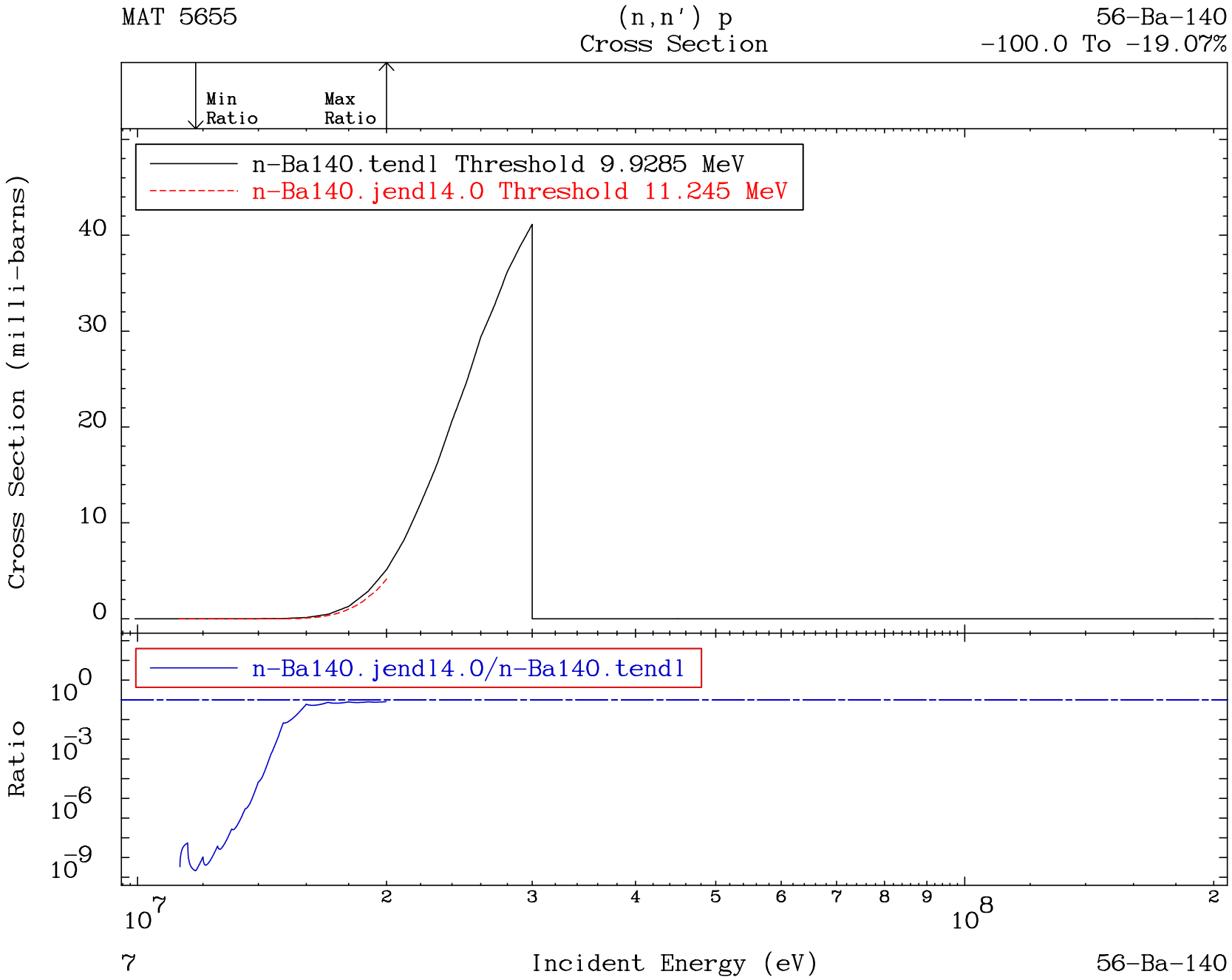

MAT 5655
Elastic
Cross Section
56-Ba-140
-98.66 To 9999. %
Max Ratio
Min Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
2
56-Ba-140

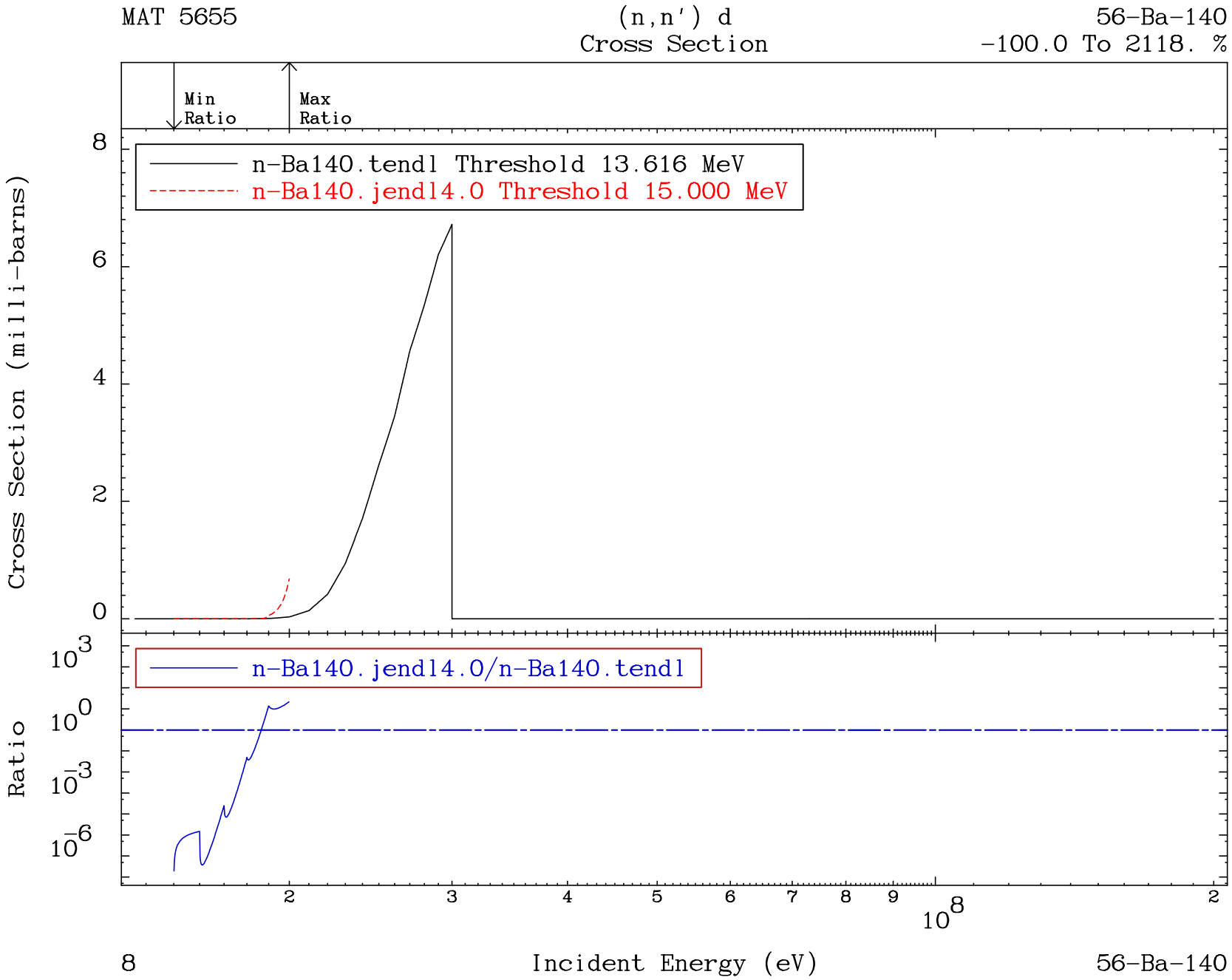

MAT 5655
Inelastic
Cross Section
56-Ba-140
-58.10 To 8.471 %
Max
Ratio
Min
Ratio
n-Ba140.tendl Threshold 606.70 keV
n-Ba140.jendl4.0 Threshold 606.64 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
1.2
0.8
0.4
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
56-Ba-140

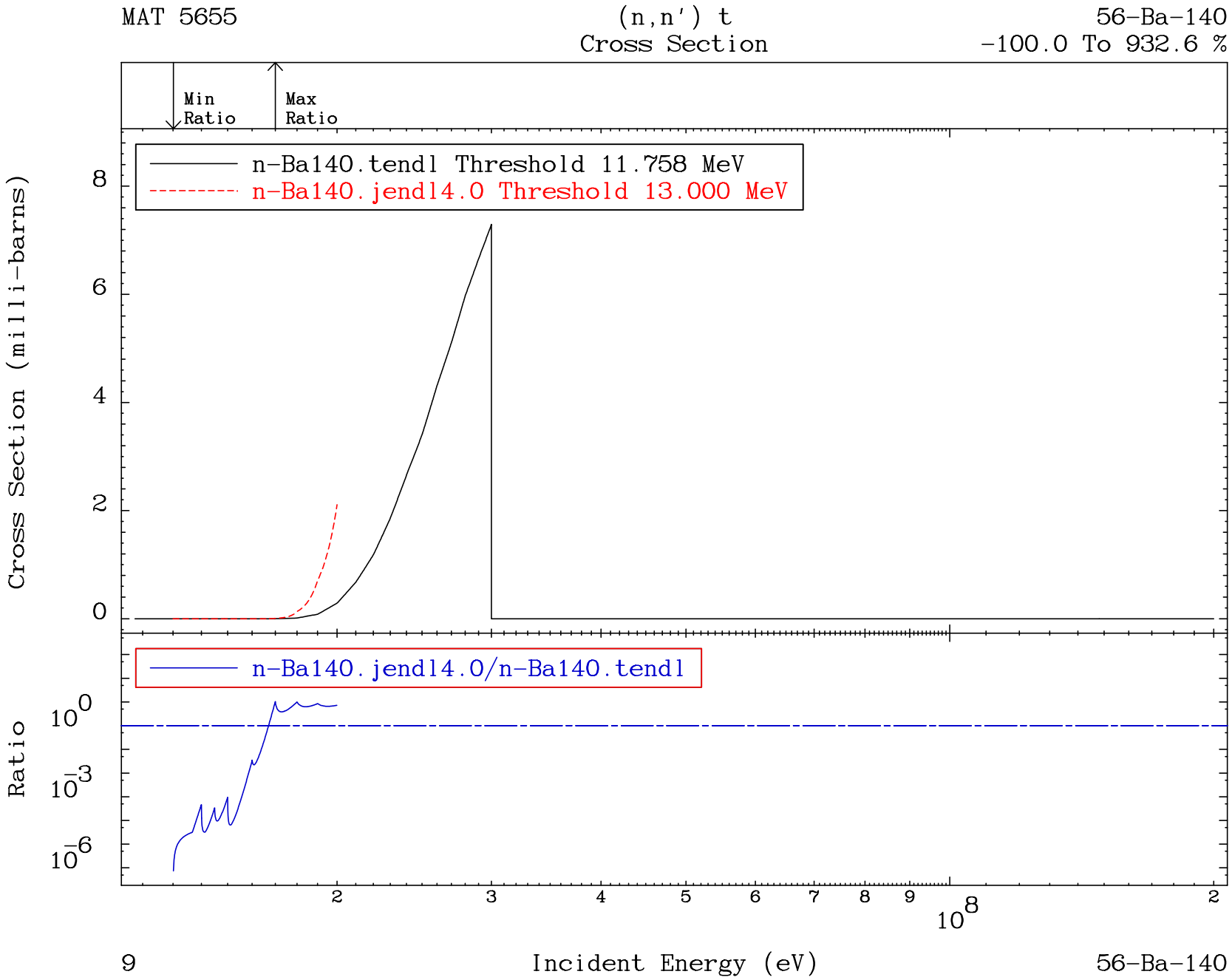

MAT 5655
(n,2n)
Cross Section
56-Ba-140
-43.48 To 8.188 %
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 6.4733 MeV
n-Ba140.jendl4.0 Threshold 6.4825 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
1.2
1.0
0.8
0.6
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
56-Ba-140

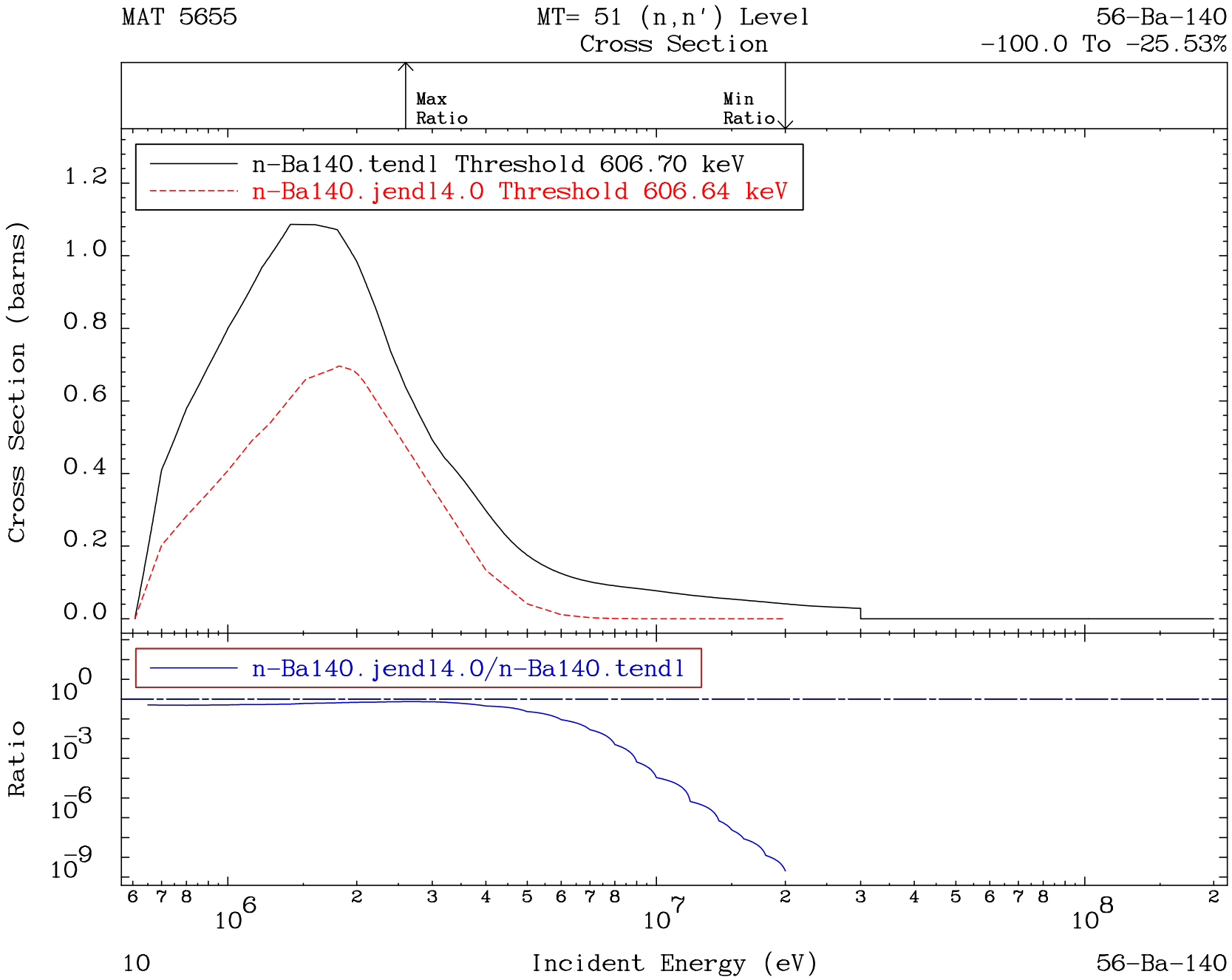

MAT 5655
(n,3n)
Cross Section
56-Ba-140
23.31 To 624.9 %
Max Ratio
Min Ratio
n-Ba140.tendl Threshold 11.231 MeV
n-Ba140.jendl4.0 Threshold 11.245 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
8
6
4
2
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
56-Ba-140

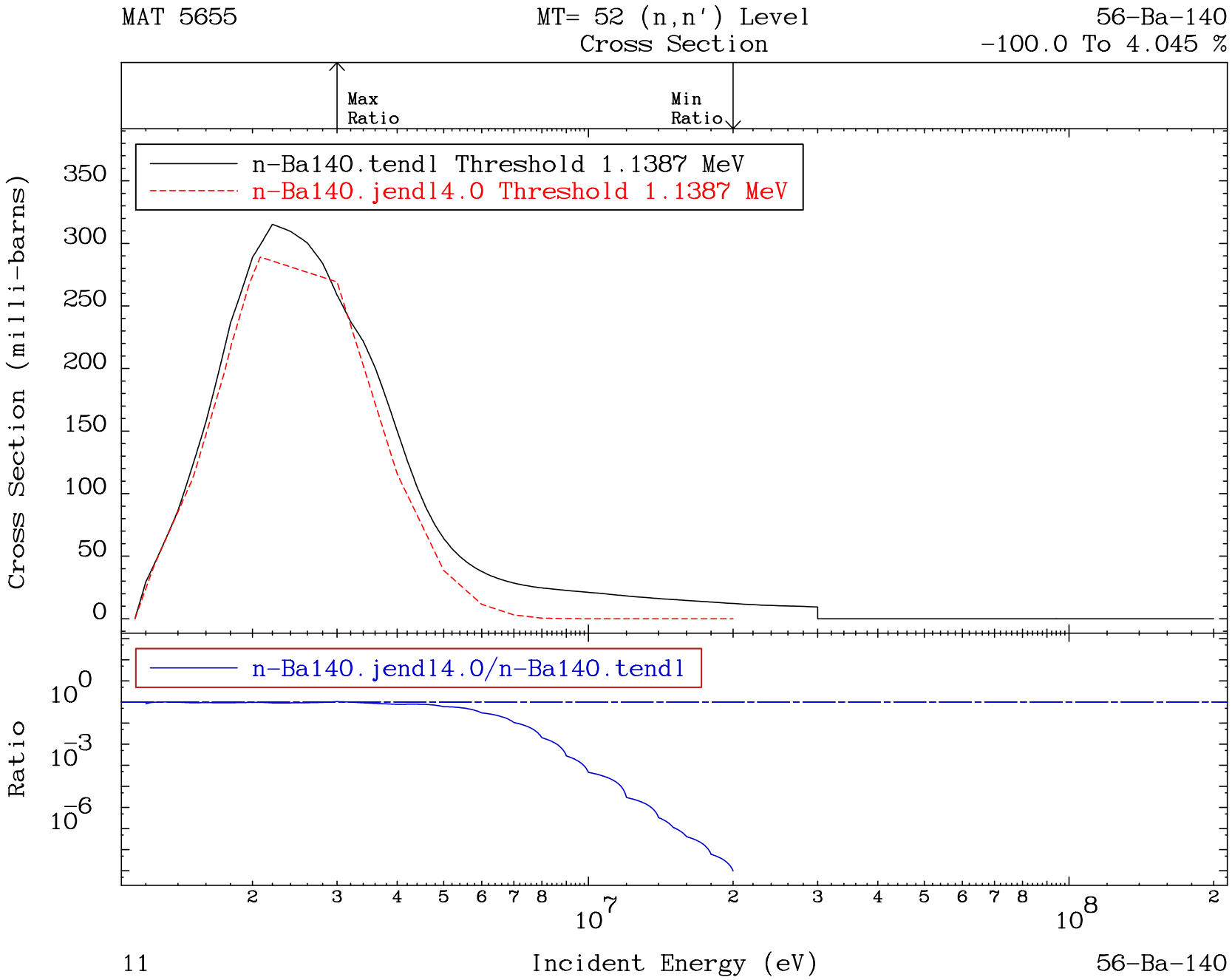

MAT 5655
(n,n') α
Cross Section
56-Ba-140
21.94 To 9999. %
Max Ratio
Min Ratio
n-Ba140.tendl Threshold 201.08 keV
n-Ba140.jendl4.0 Threshold 100.00 keV
Cross Section (milli-barns)
20
15
10
5
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^9
10^6
10^3
10^0
10^5
2 3 4 5 6 8
10^6
2 3 4 5 6 8
10^7
2 3 4 5 6 8
10^8
2
6
Incident Energy (eV)
56-Ba-140

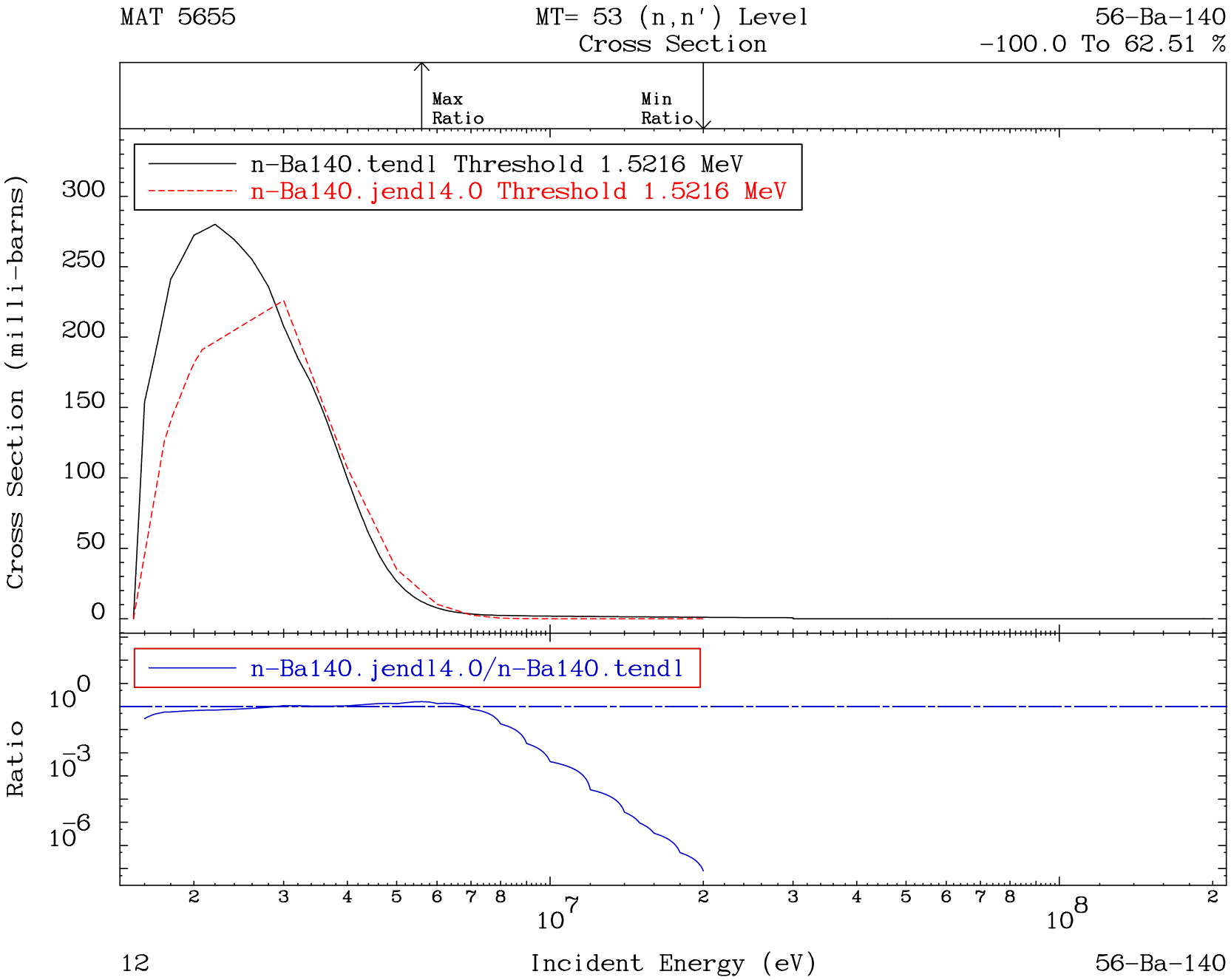

MAT 5655
(n,n') p
Cross Section
56-Ba-140
-100.0 To -19.07%
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 9.9285 MeV
n-Ba140.jendl4.0 Threshold 11.245 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
56-Ba-140

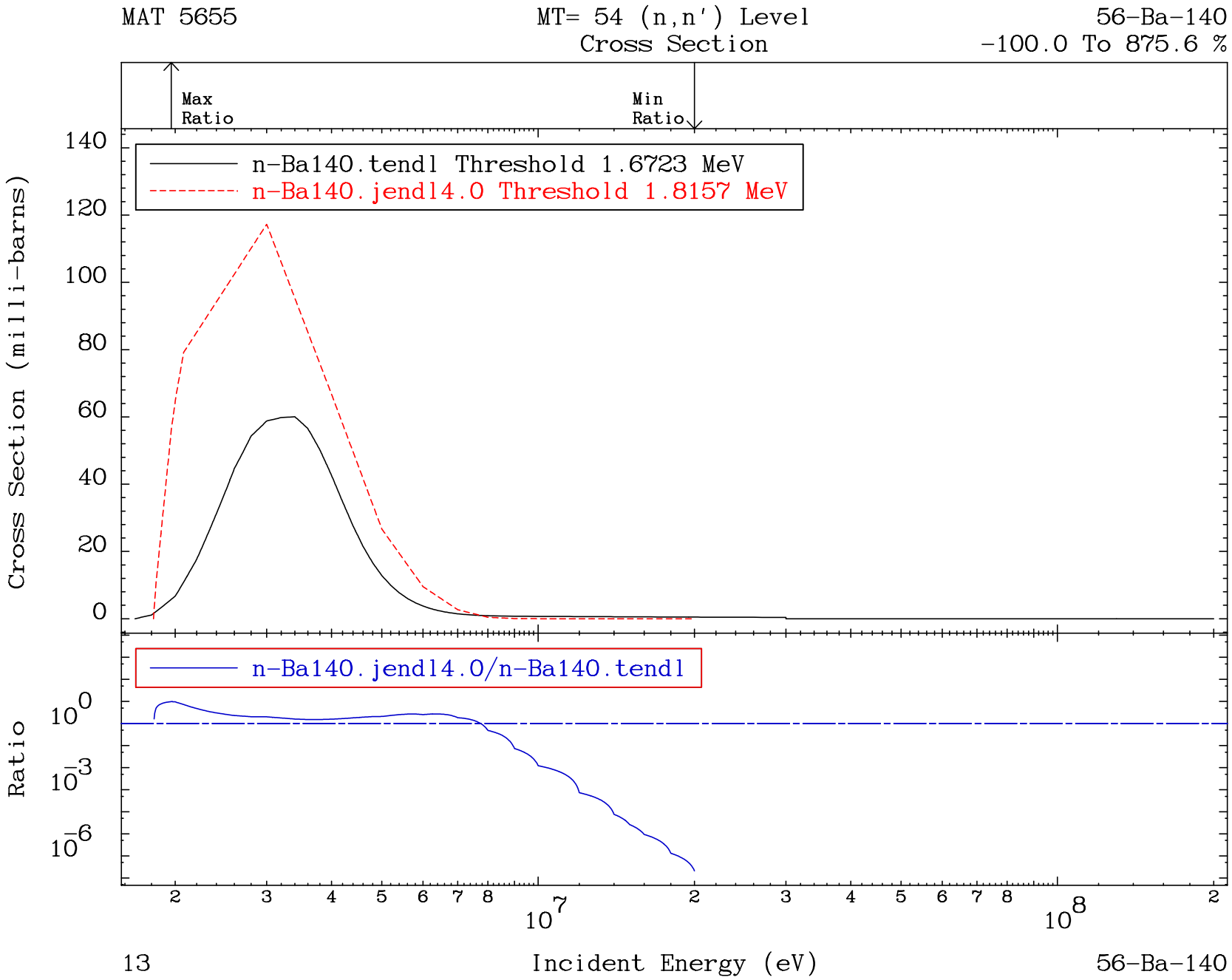

MAT 5655
(n,n') d
Cross Section
56-Ba-140
-100.0 To 2118. %
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 13.616 MeV
n-Ba140.jendl4.0 Threshold 15.000 MeV
Cross Section (milli-barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
8
56-Ba-140

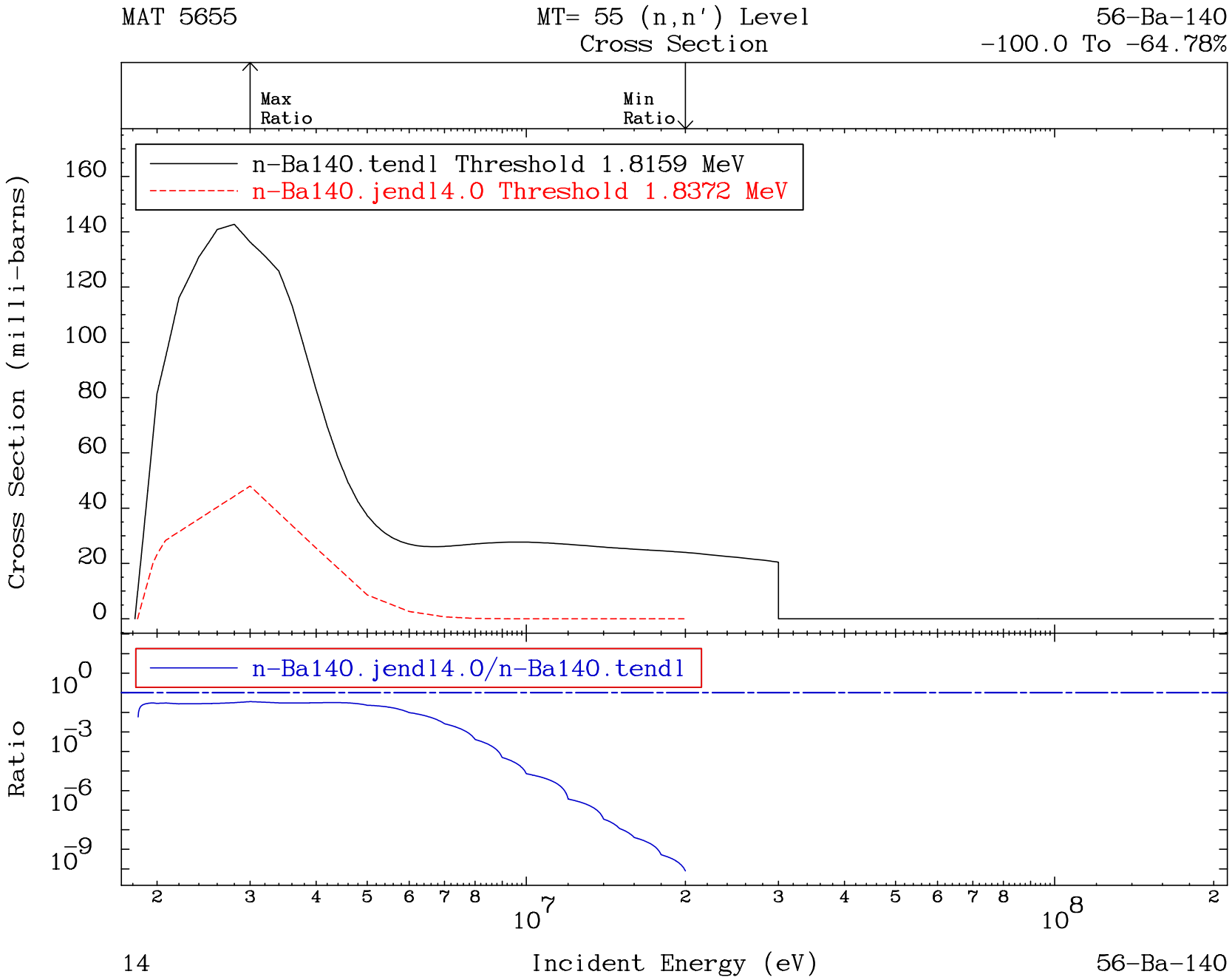

MAT 5655
(n,n') t
Cross Section
56-Ba-140
-100.0 To 932.6 %
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 11.758 MeV
n-Ba140.jendl4.0 Threshold 13.000 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
56-Ba-140

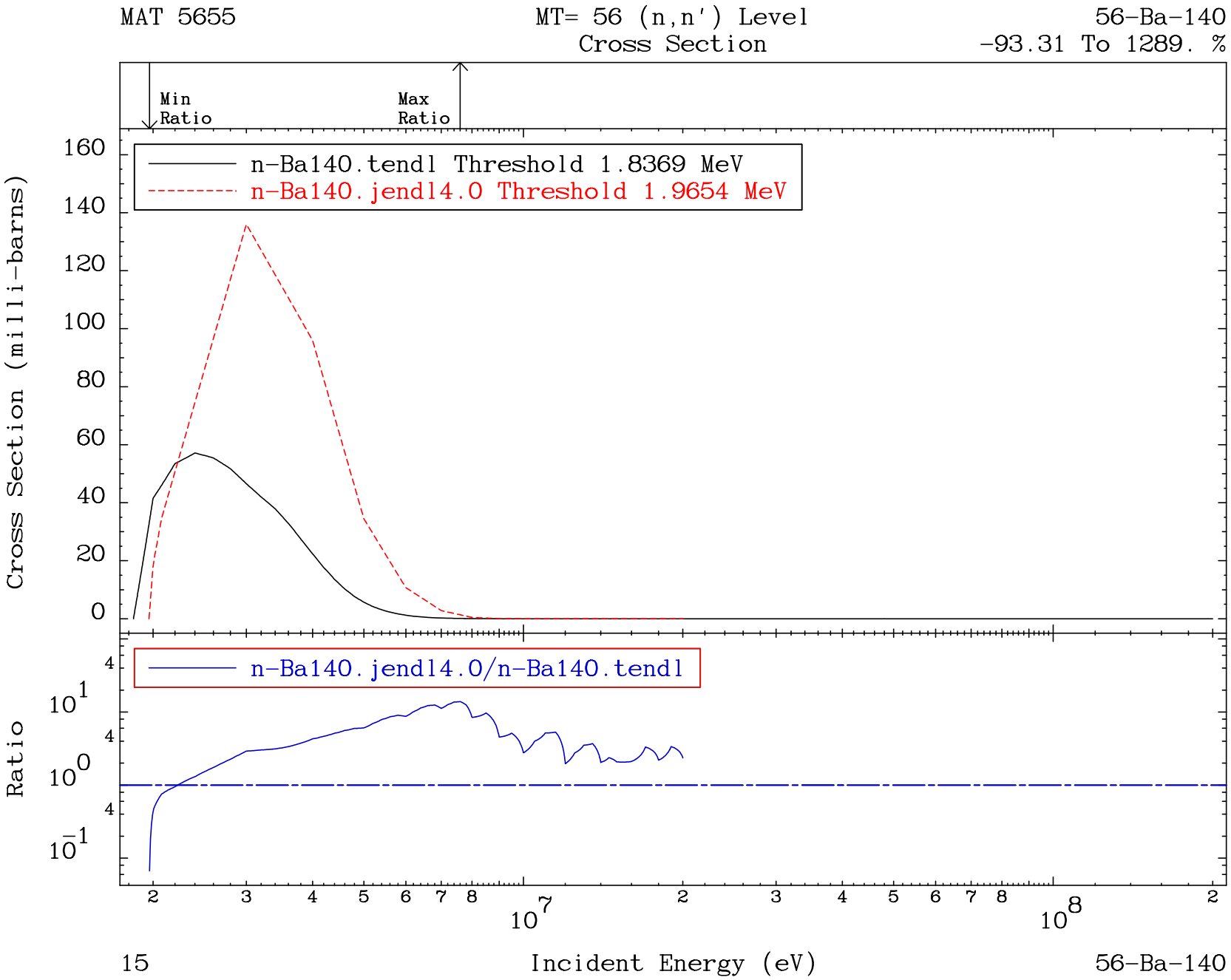

MAT 5655
MT= 51 (n,n') Level
Cross Section
56-Ba-140
-100.0 To -25.53%
Max
Ratio
Min
Ratio
n-Ba140.tendl Threshold 606.70 keV
n-Ba140.jendl4.0 Threshold 606.64 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-3
10^-6
10^-9
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
56-Ba-140

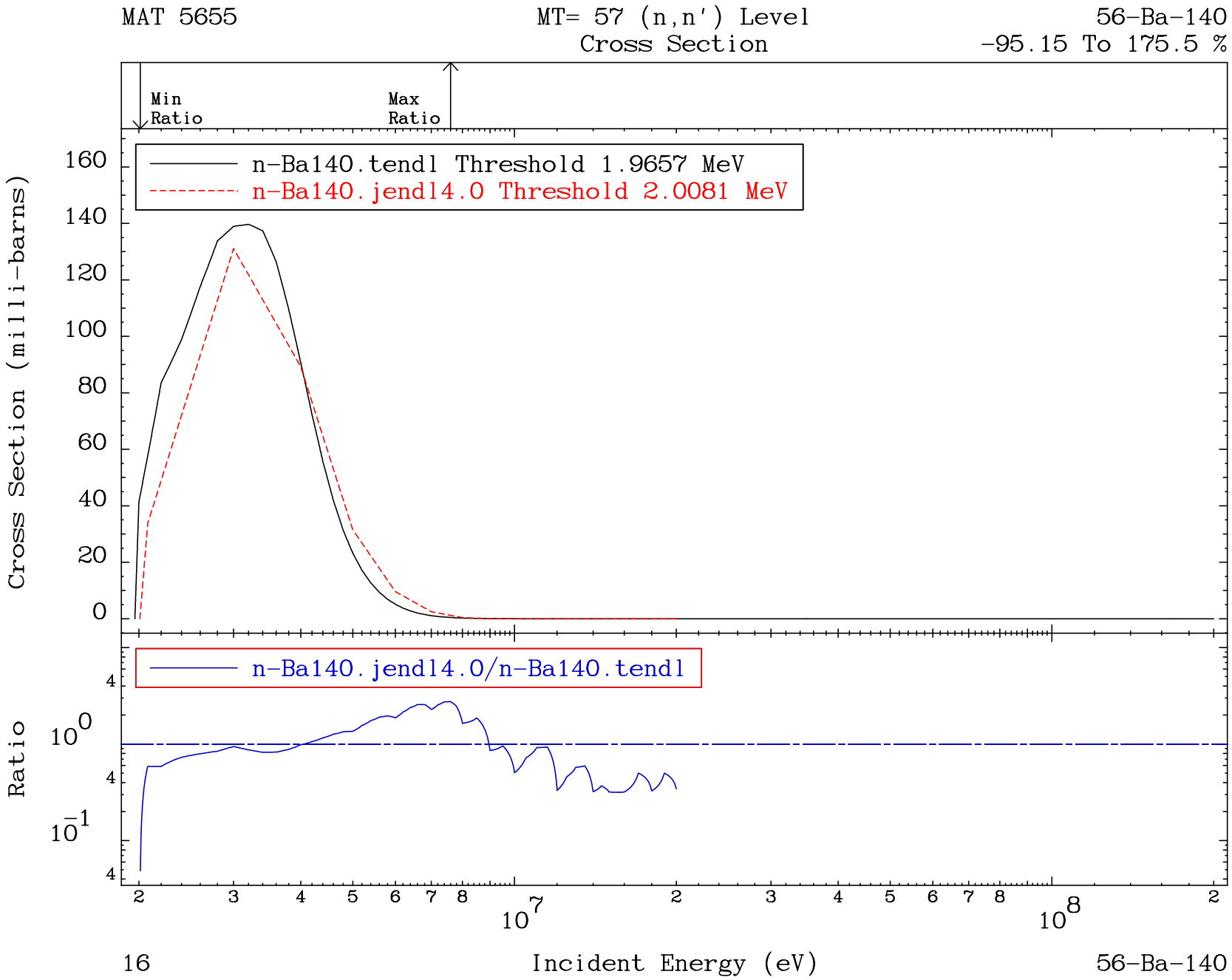

MAT 5655
MT= 52 (n,n') Level
Cross Section
56-Ba-140
-100.0 To 4.045 %
Max Ratio
Min Ratio
n-Ba140.tendl Threshold 1.1387 MeV
n-Ba140.jendl4.0 Threshold 1.1387 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
56-Ba-140

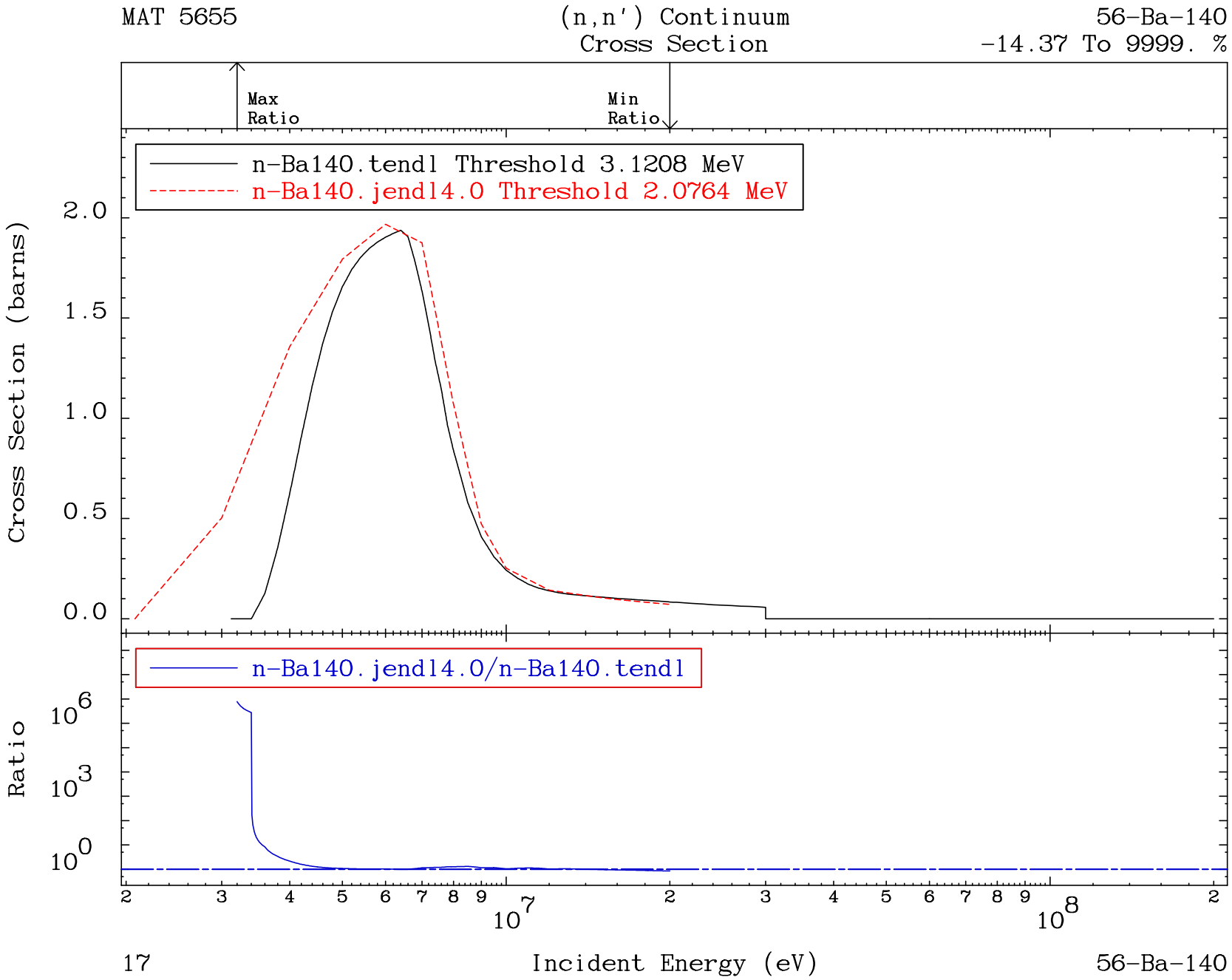

MAT 5655
MT= 53 (n,n') Level
Cross Section
56-Ba-140
-100.0 To 62.51 %
Max Ratio
Min Ratio
n-Ba140.tendl Threshold 1.5216 MeV
n-Ba140.jendl4.0 Threshold 1.5216 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
56-Ba-140

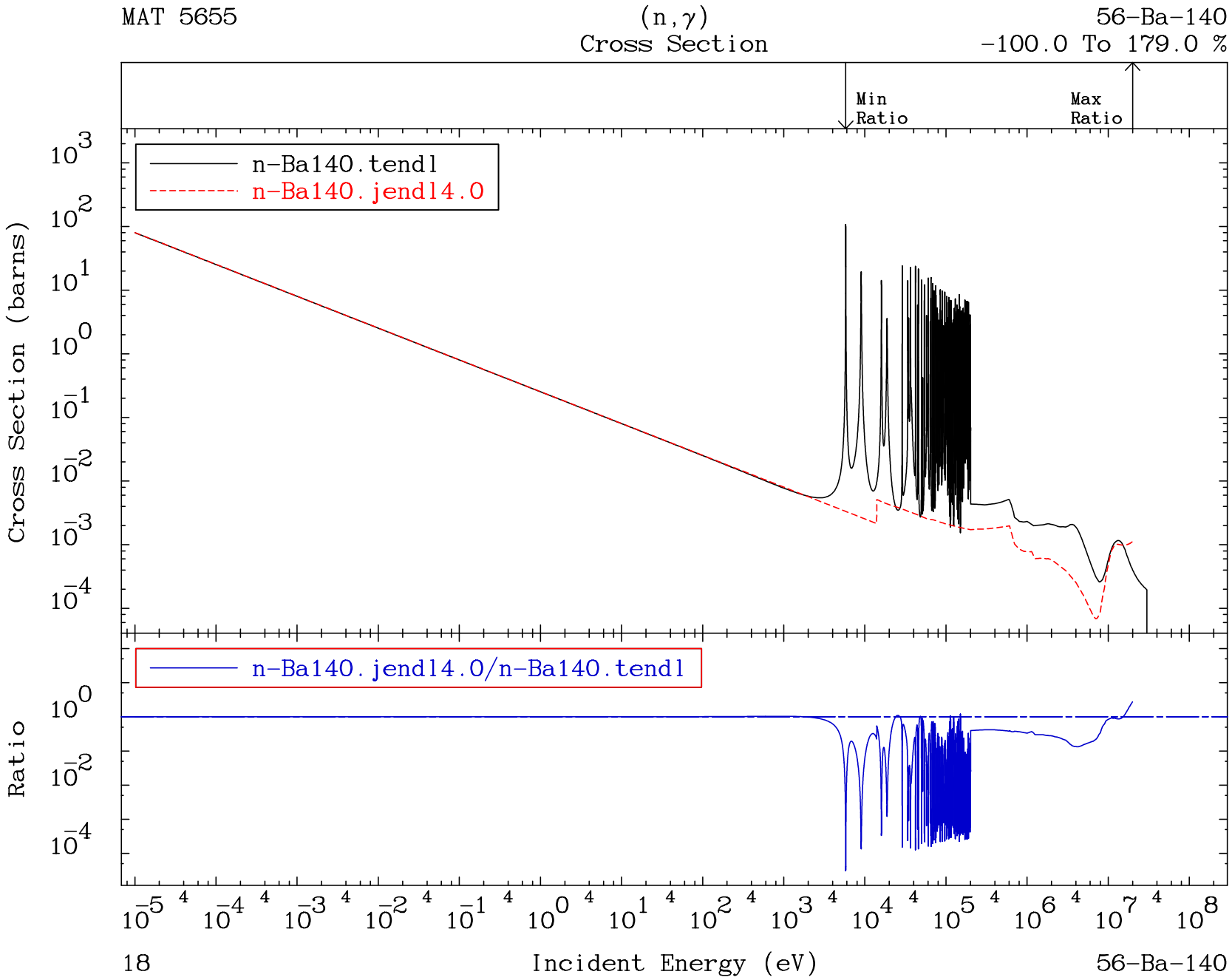

MAT 5655
MT= 54 (n,n') Level
Cross Section
56-Ba-140
-100.0 To 875.6 %
Max Ratio
Min Ratio
n-Ba140.tendl Threshold 1.6723 MeV
n-Ba140.jendl4.0 Threshold 1.8157 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
56-Ba-140

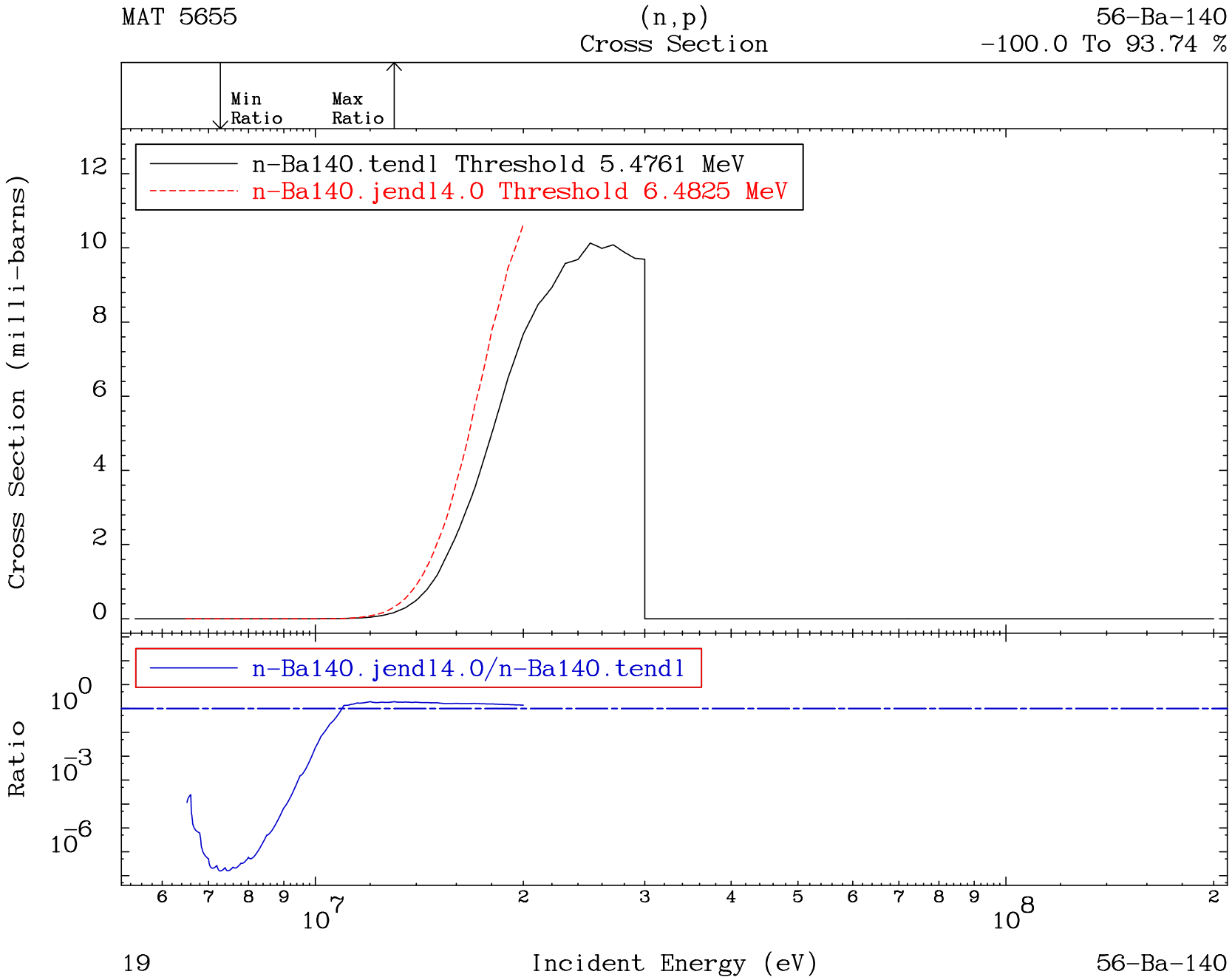

MAT 5655
MT= 55 (n,n') Level
Cross Section
56-Ba-140
-100.0 To -64.78%
Max
Ratio
Min
Ratio
n-Ba140.tendl Threshold 1.8159 MeV
n-Ba140.jendl4.0 Threshold 1.8372 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-3
10^-6
10^-9
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
14
Incident Energy (eV)
56-Ba-140

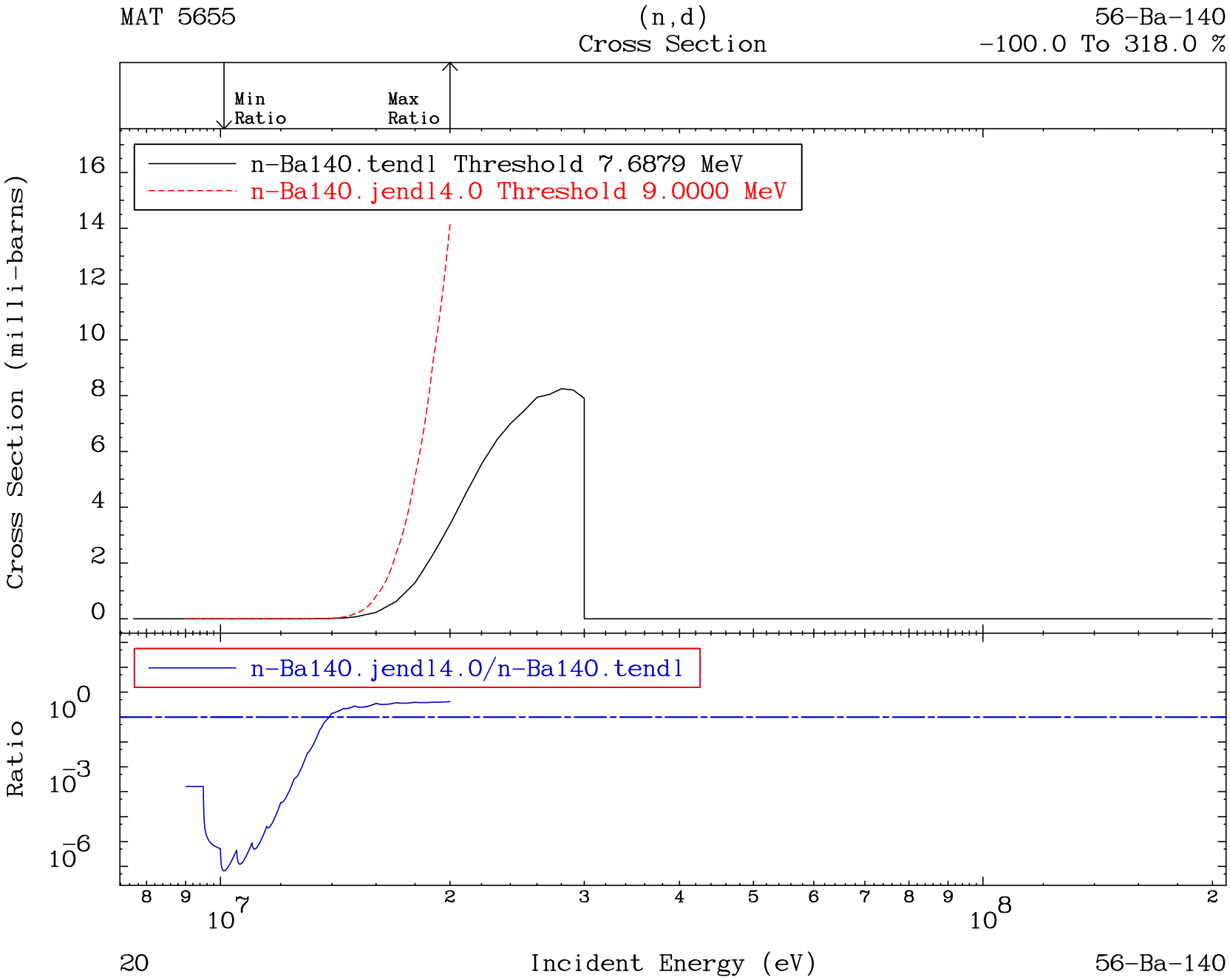

MAT 5655
MT= 56 (n,n') Level
Cross Section
56-Ba-140
-93.31 To 1289. %
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 1.8369 MeV
n-Ba140.jendl4.0 Threshold 1.9654 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^1
10^0
10^-1
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
56-Ba-140

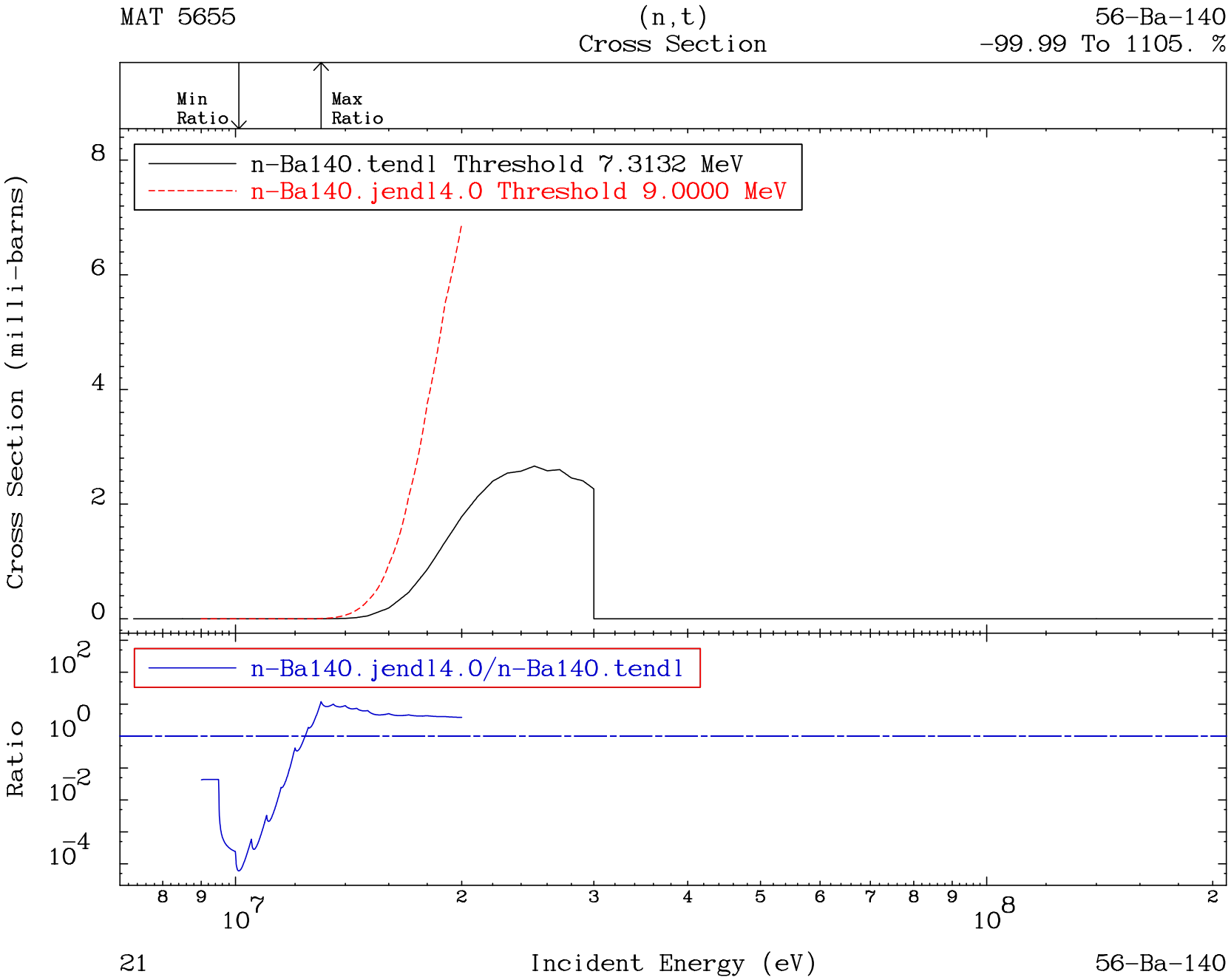

MAT 5655
MT= 57 (n,n') Level
Cross Section
56-Ba-140
-95.15 To 175.5 %
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 1.9657 MeV
n-Ba140.jendl4.0 Threshold 2.0081 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-1
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
56-Ba-140

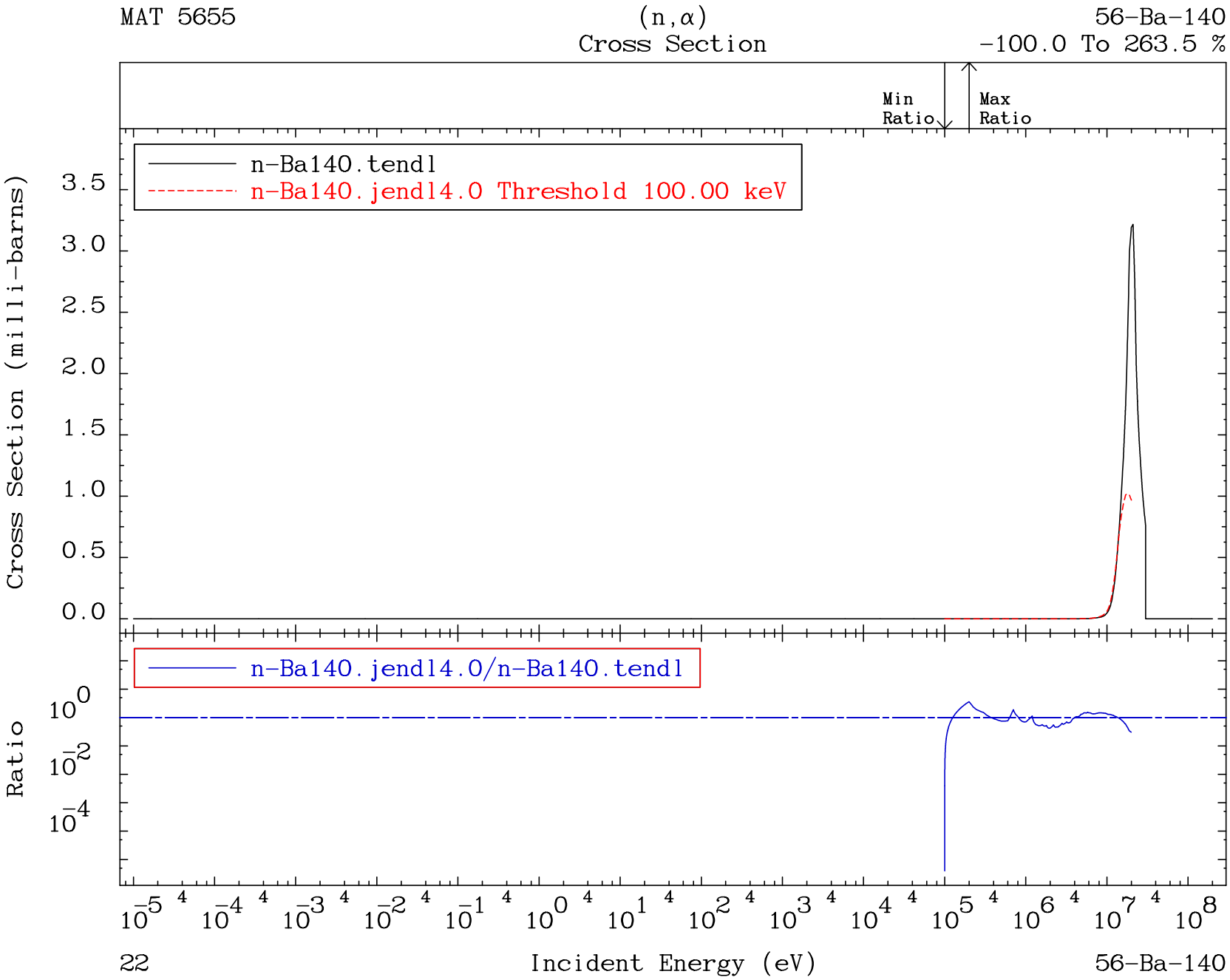

MAT 5655
(n,n') Continuum
Cross Section
56-Ba-140
-14.37 To 9999. %
Max
Ratio
Min
Ratio
n-Ba140.tendl Threshold 3.1208 MeV
n-Ba140.jendl4.0 Threshold 2.0764 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^6
10^3
10^0
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
17
Incident Energy (eV)
56-Ba-140

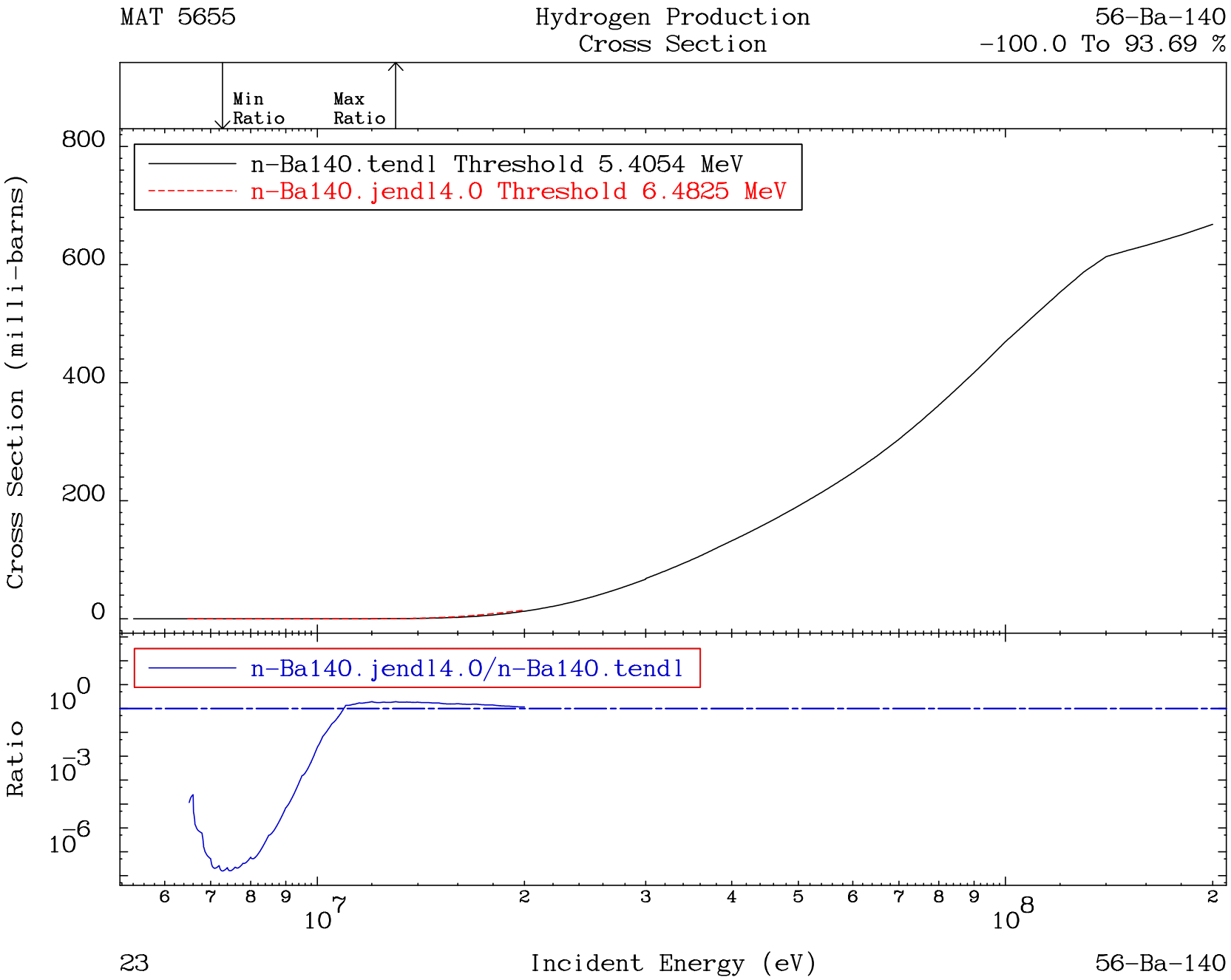

MAT 5655
(n,γ)
Cross Section
56-Ba-140
-100.0 To 179.0 %
Min Ratio
Max Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
18
56-Ba-140

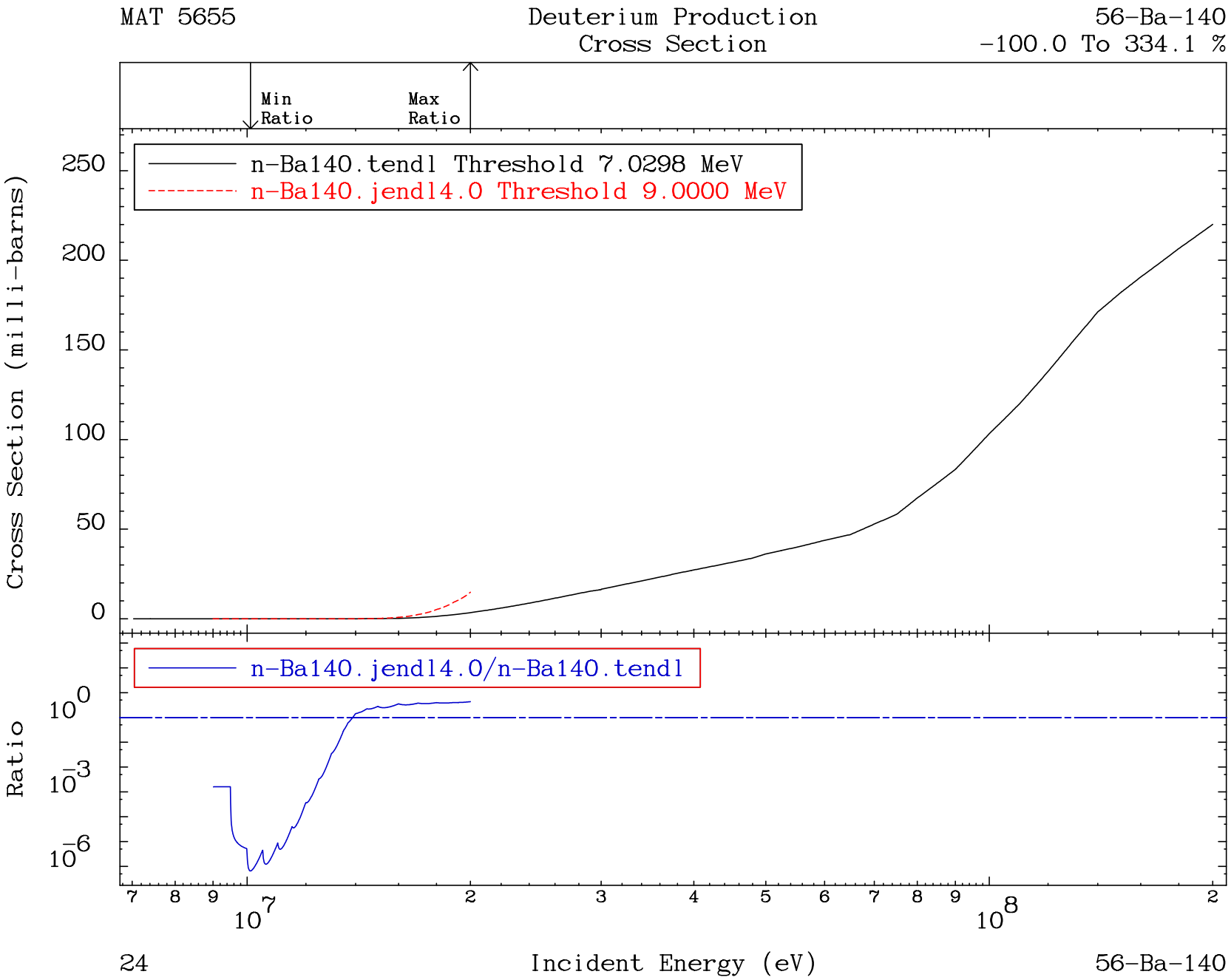

MAT 5655
(n,p)
Cross Section
56-Ba-140
-100.0 To 93.74 %
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 5.4761 MeV
n-Ba140.jendl4.0 Threshold 6.4825 MeV
Cross Section (milli-barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
19
56-Ba-140

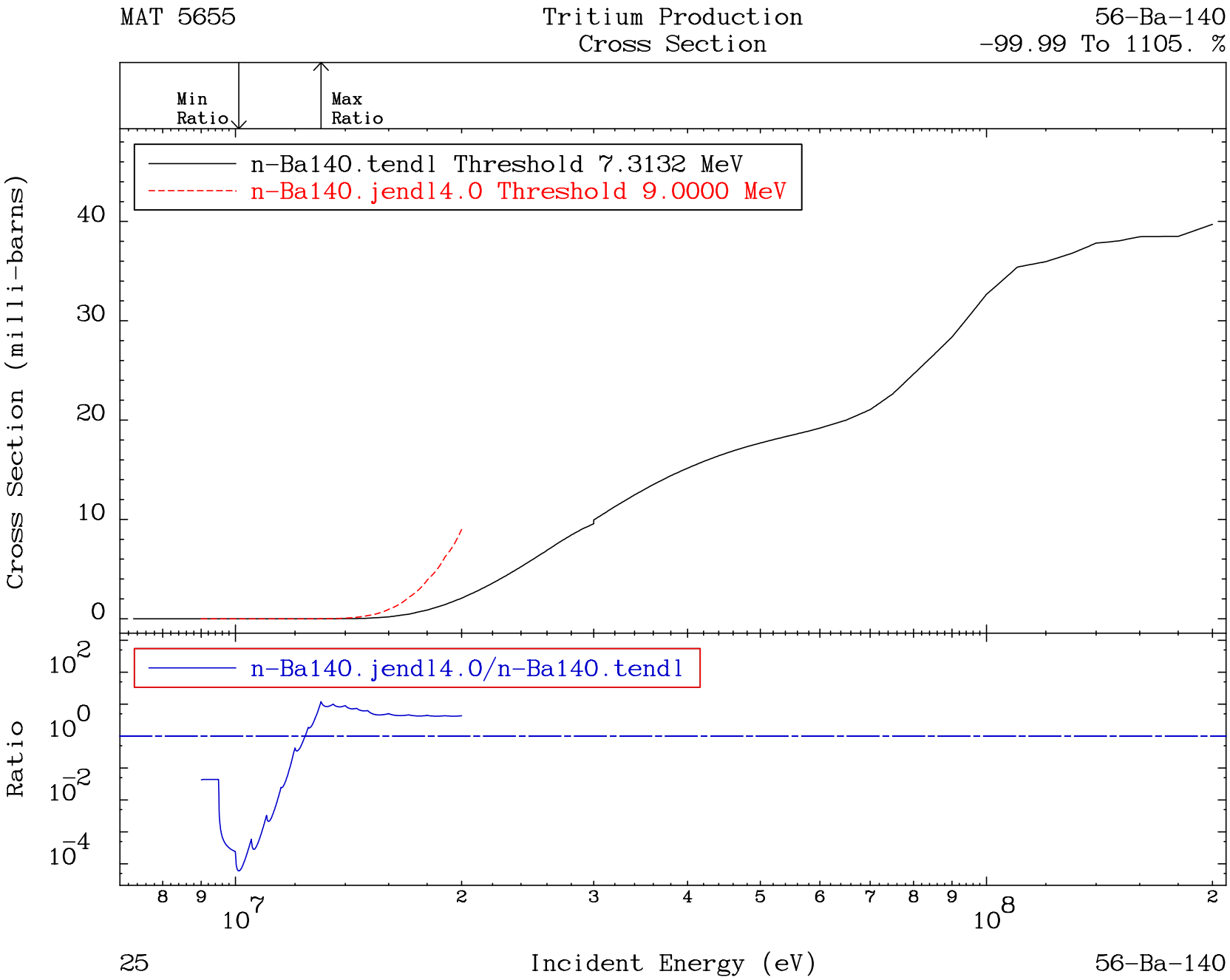

MAT 5655
(n,d)
Cross Section
56-Ba-140
-100.0 To 318.0 %
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 7.6879 MeV
n-Ba140.jendl4.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-3
10^-6
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
56-Ba-140

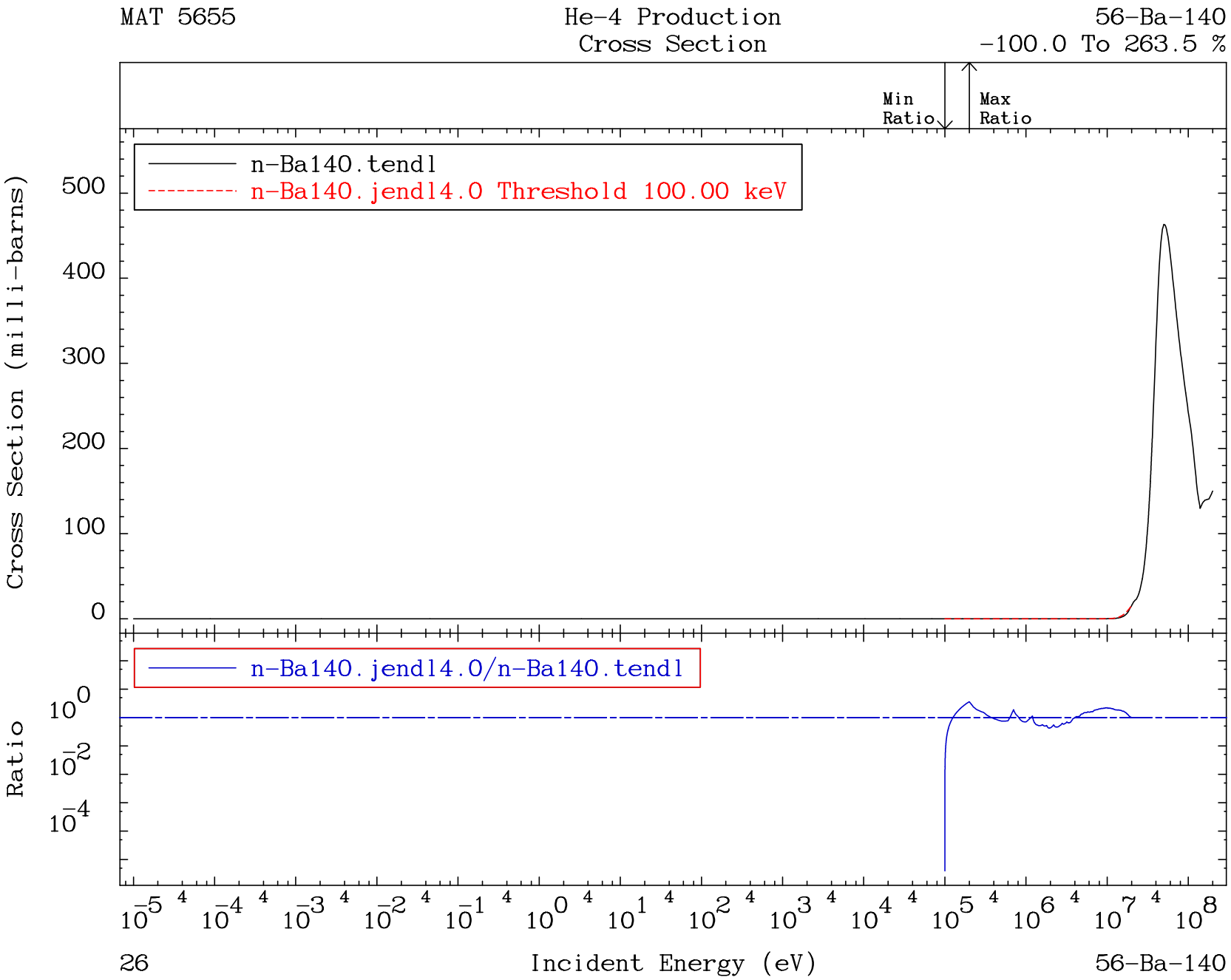

MAT 5655
(n,t)
Cross Section
56-Ba-140
-99.99 To 1105. %
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 7.3132 MeV
n-Ba140.jendl4.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
21
56-Ba-140

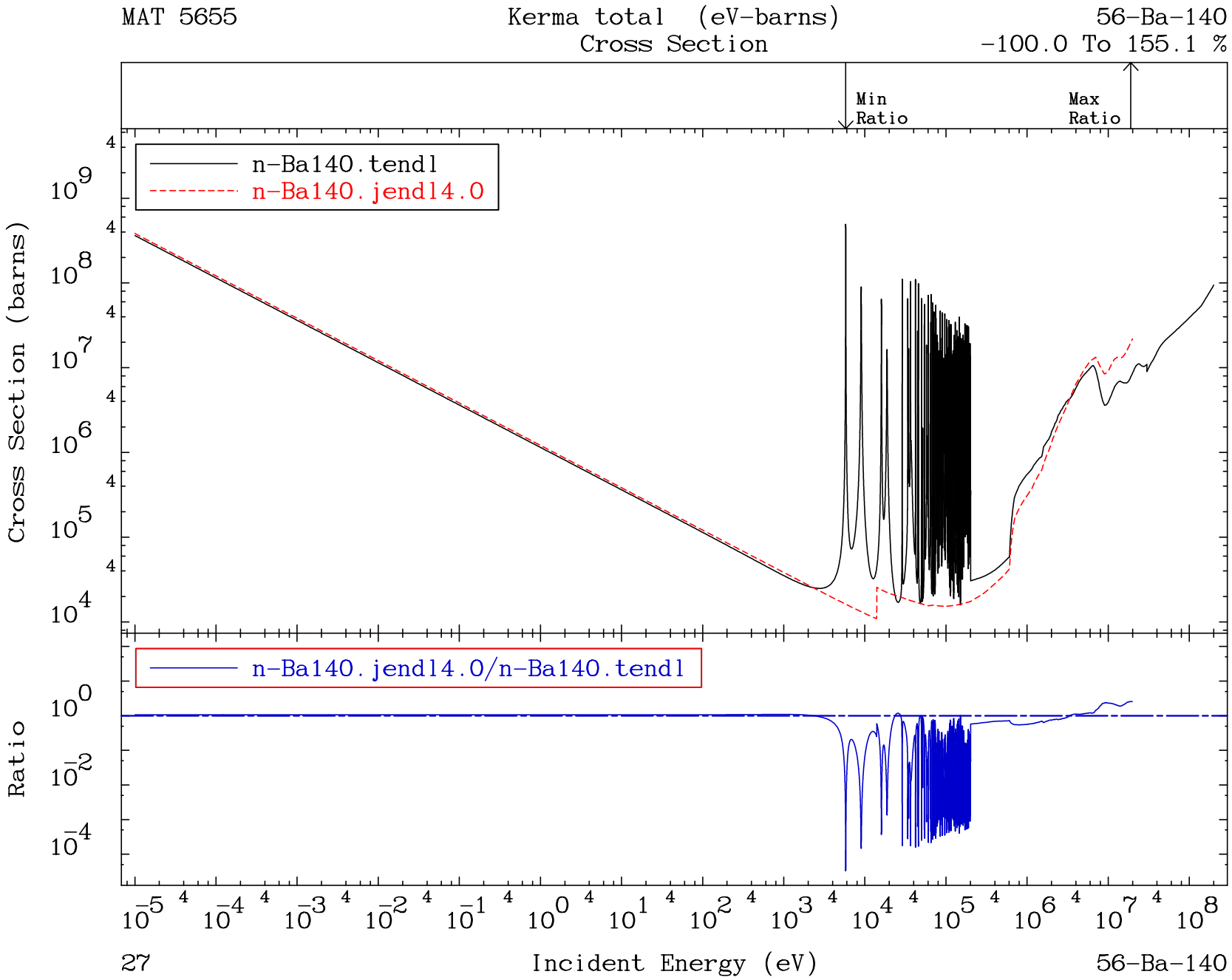

MAT 5655
(n,α)
Cross Section
56-Ba-140
-100.0 To 263.5 %
Min Ratio
Max Ratio
n-Ba140.tendl
n-Ba140.jendl4.0 Threshold 100.00 keV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-2
10^-4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
22
Incident Energy (eV)
56-Ba-140

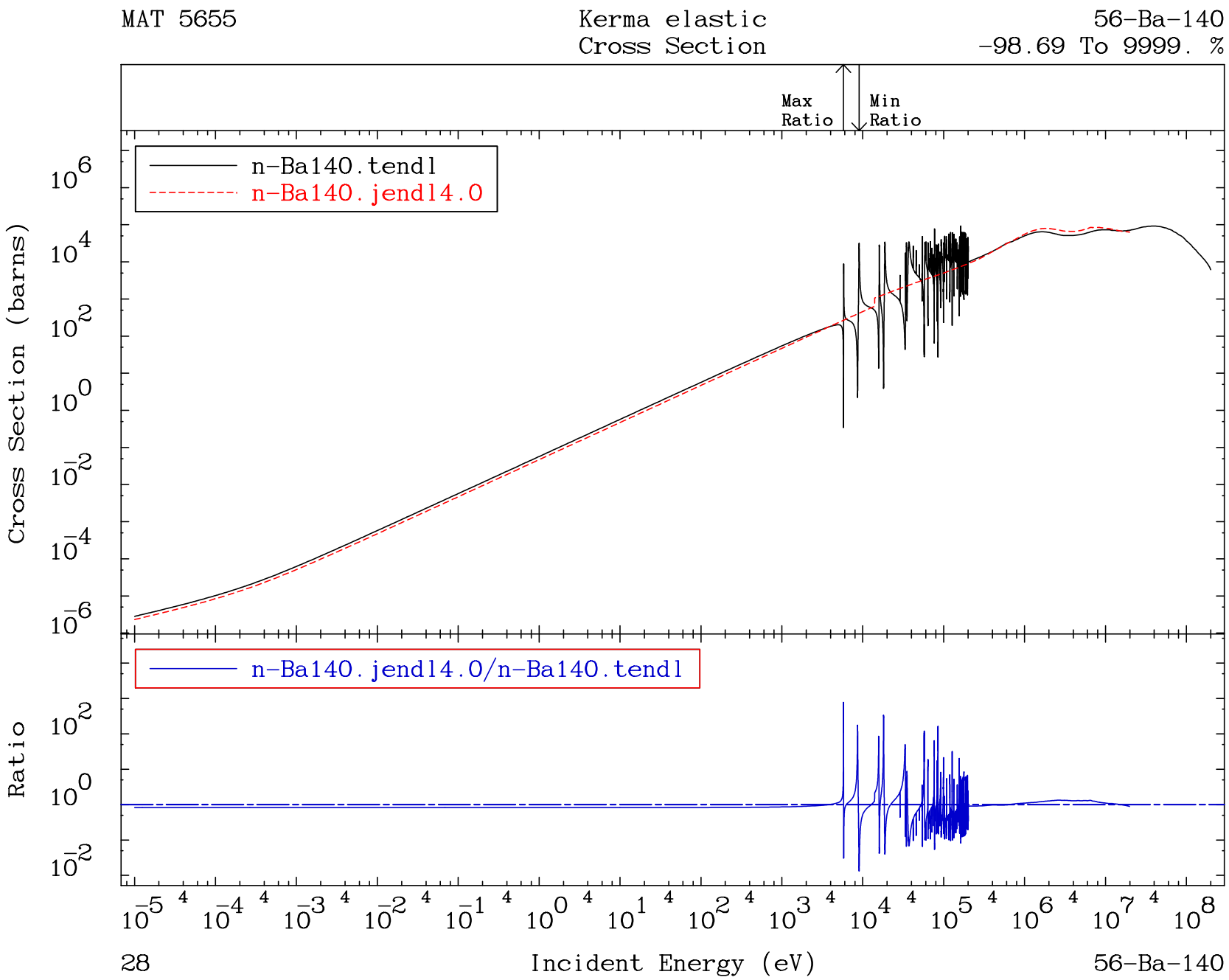

MAT 5655
Hydrogen Production
Cross Section
56-Ba-140
-100.0 To 93.69 %
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 5.4054 MeV
n-Ba140.jendl4.0 Threshold 6.4825 MeV
Cross Section (milli-barns)
800
600
400
200
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-3
10^-6
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
56-Ba-140

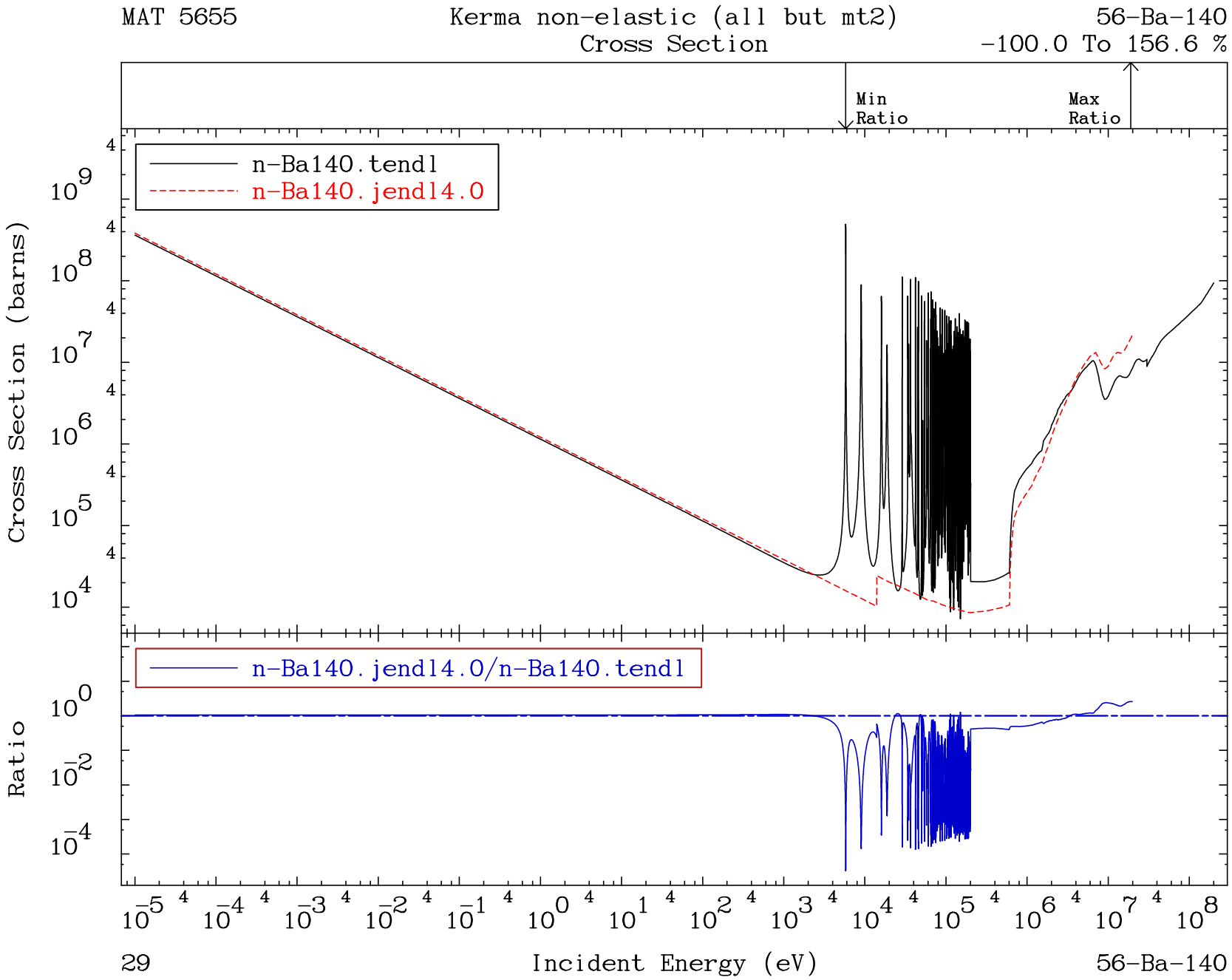

MAT 5655
Deuterium Production
Cross Section
56-Ba-140
-100.0 To 334.1 %
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 7.0298 MeV
n-Ba140.jendl4.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-3
10^-6
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
56-Ba-140

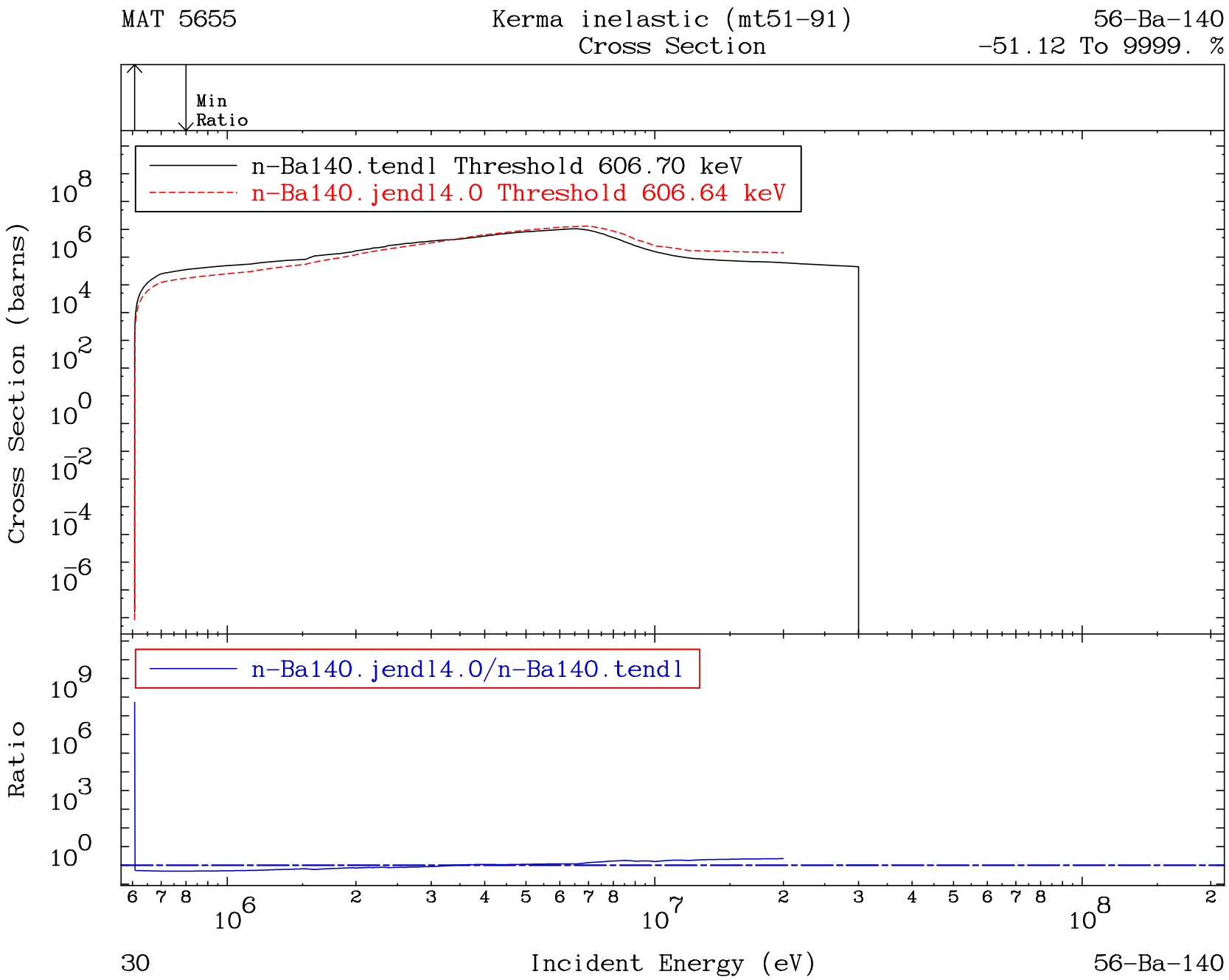

MAT 5655
Tritium Production
Cross Section
56-Ba-140
-99.99 To 1105. %
Min Ratio
Max Ratio
n-Ba140.tendl Threshold 7.3132 MeV
n-Ba140.jendl4.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^2
10^0
10^-2
10^-4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
56-Ba-140

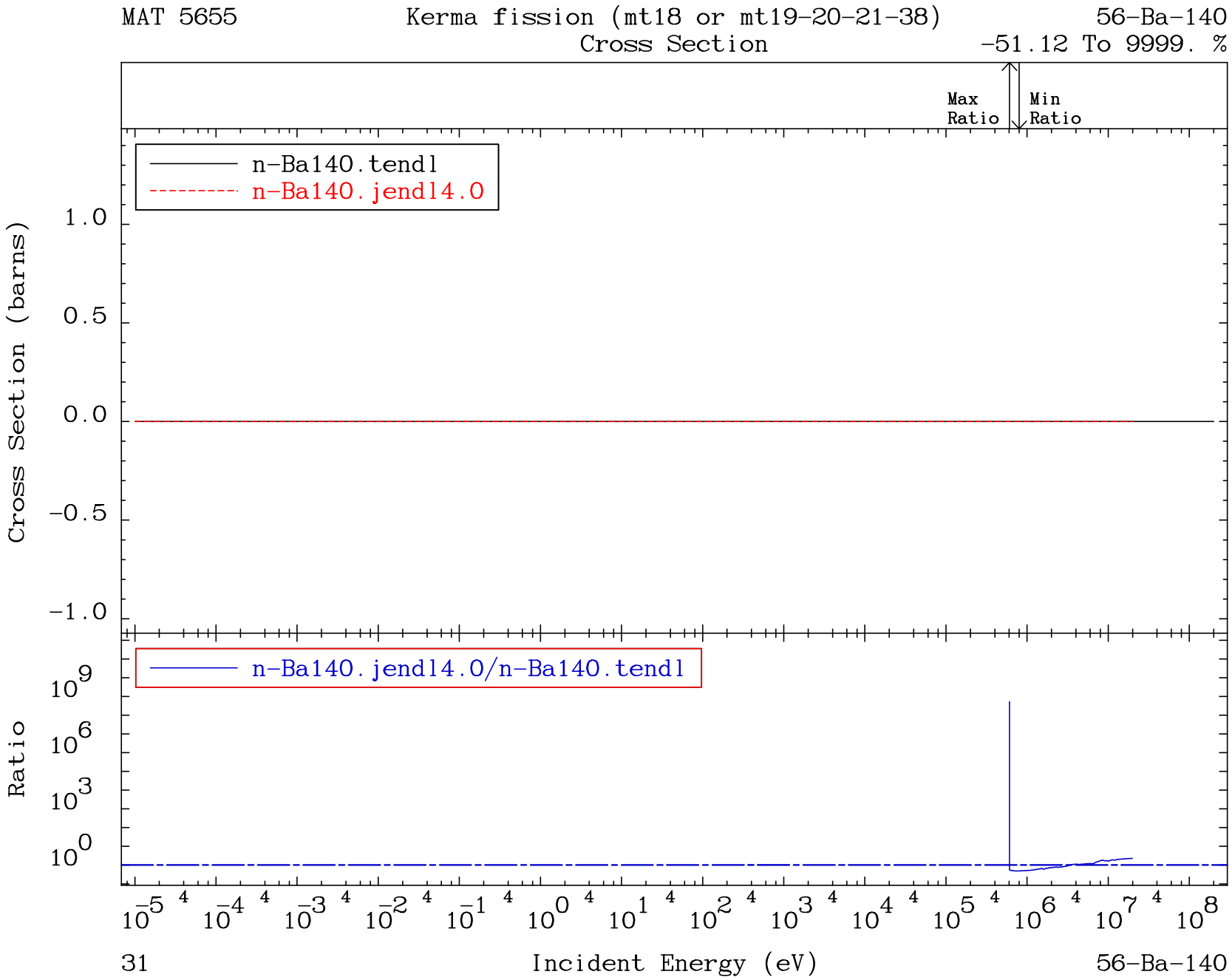

MAT 5655
He-4 Production
Cross Section
56-Ba-140
-100.0 To 263.5 %
Min Ratio
Max Ratio
n-Ba140.tendl
n-Ba140.jendl4.0 Threshold 100.00 keV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-2
10^-4
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
26
Incident Energy (eV)
56-Ba-140

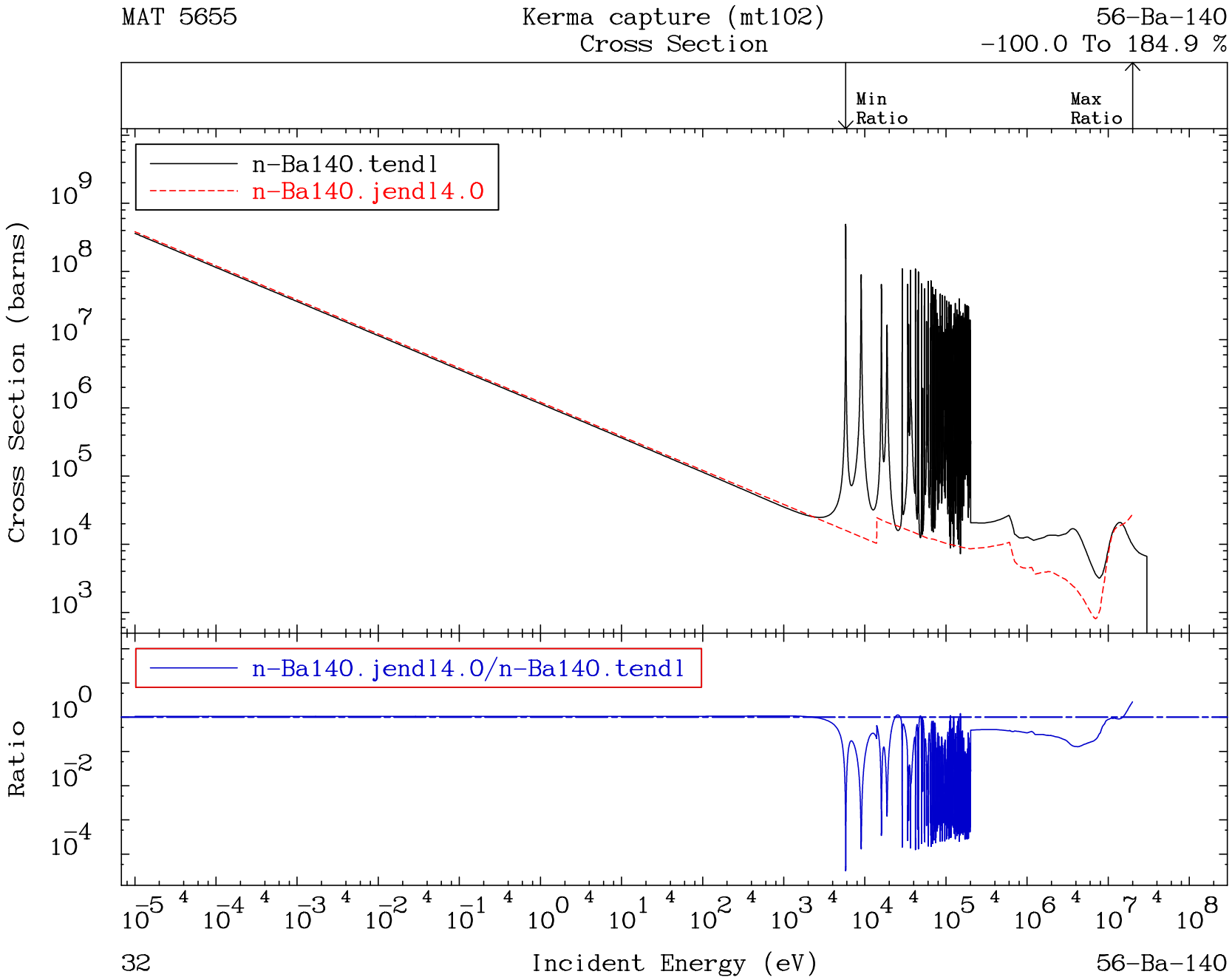

MAT 5655
Kerma total (eV-barns)
Cross Section
56-Ba-140
-100.0 To 155.1 %
Min Ratio
Max Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
27
56-Ba-140

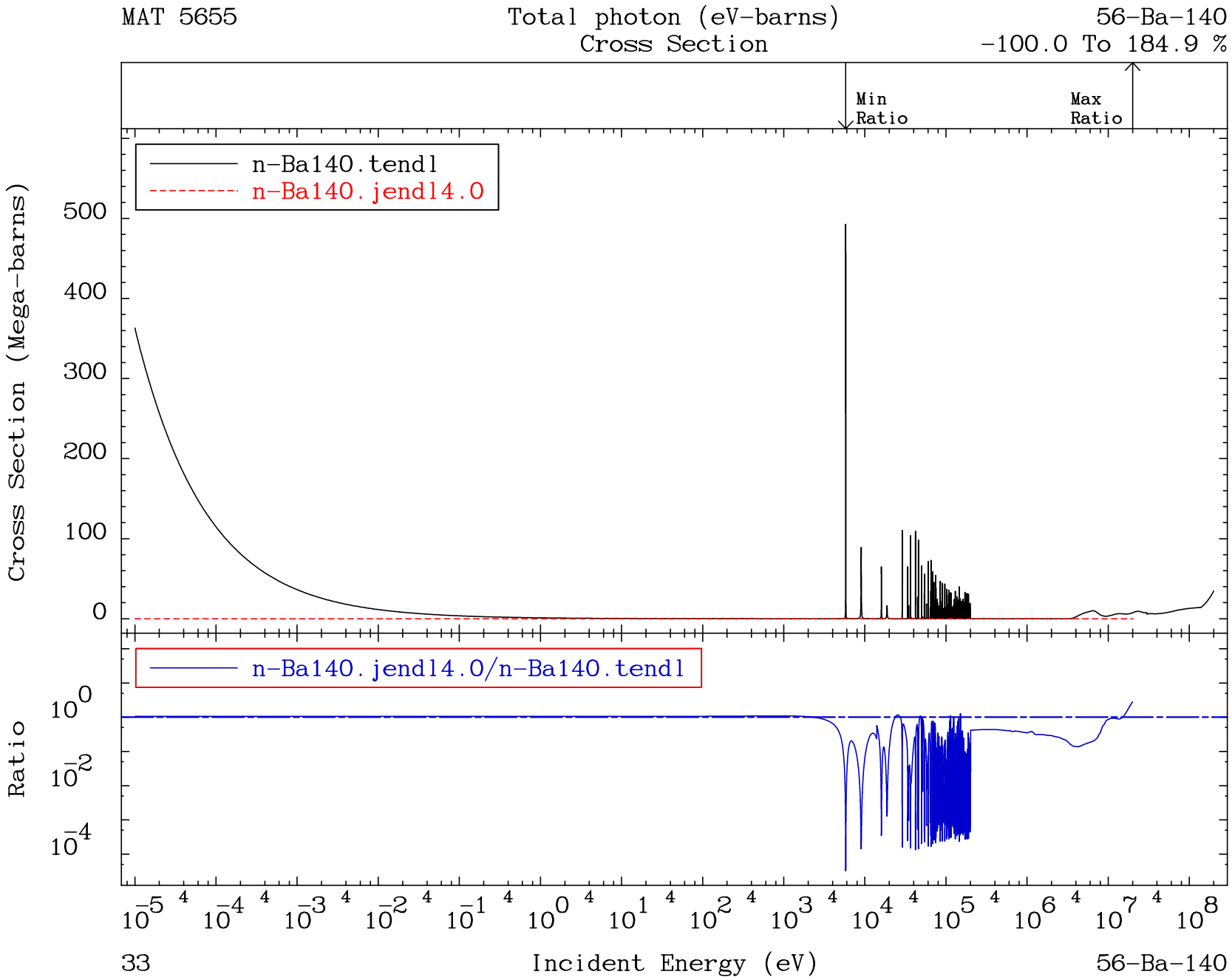

MAT 5655
Kerma elastic
Cross Section
56-Ba-140
-98.69 To 9999. %
Max Ratio
Min Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
28
56-Ba-140

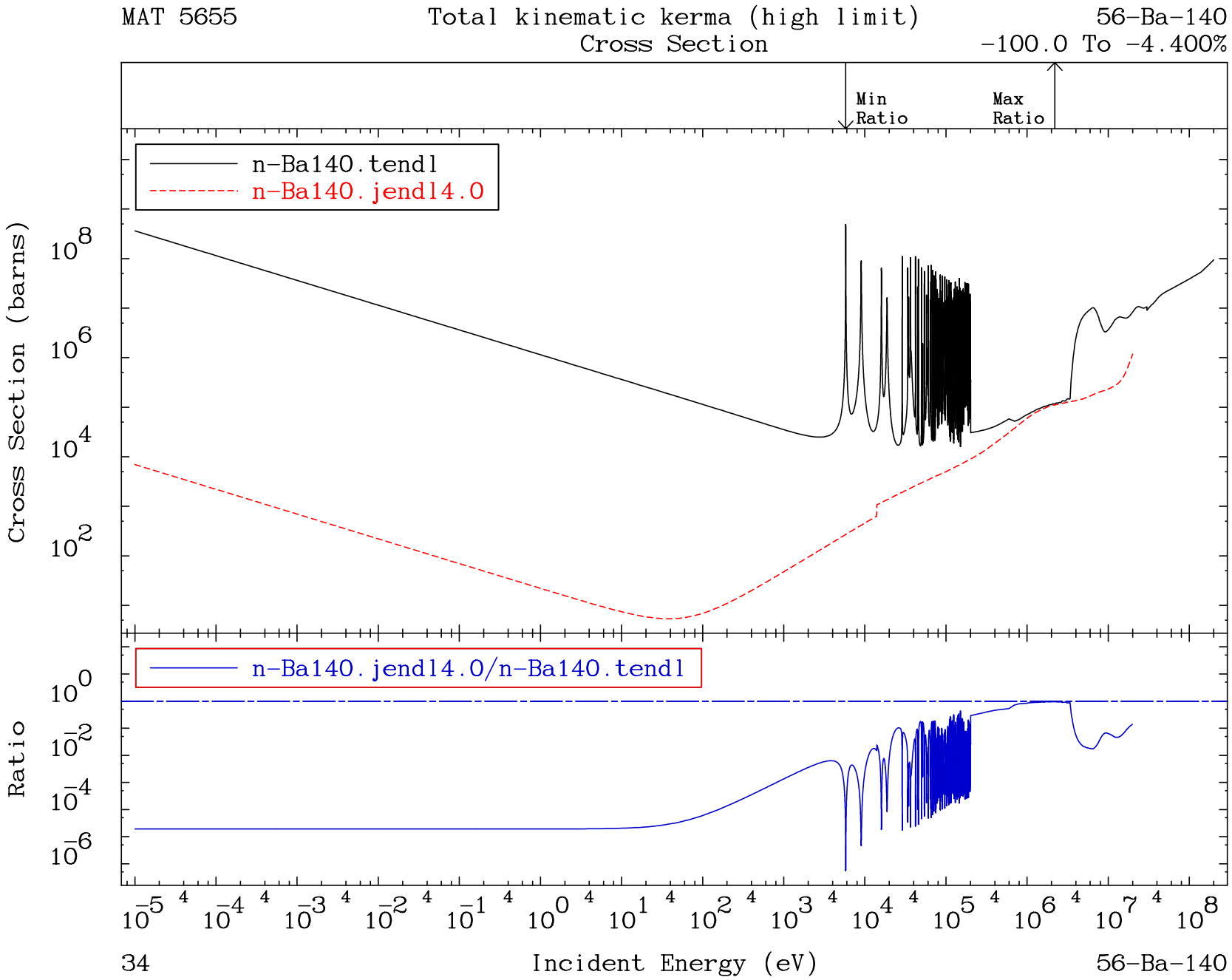

MAT 5655
Kerma non-elastic (all but mt2)
Cross Section
56-Ba-140
-100.0 To 156.6 %
Min Ratio
Max Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
29
56-Ba-140

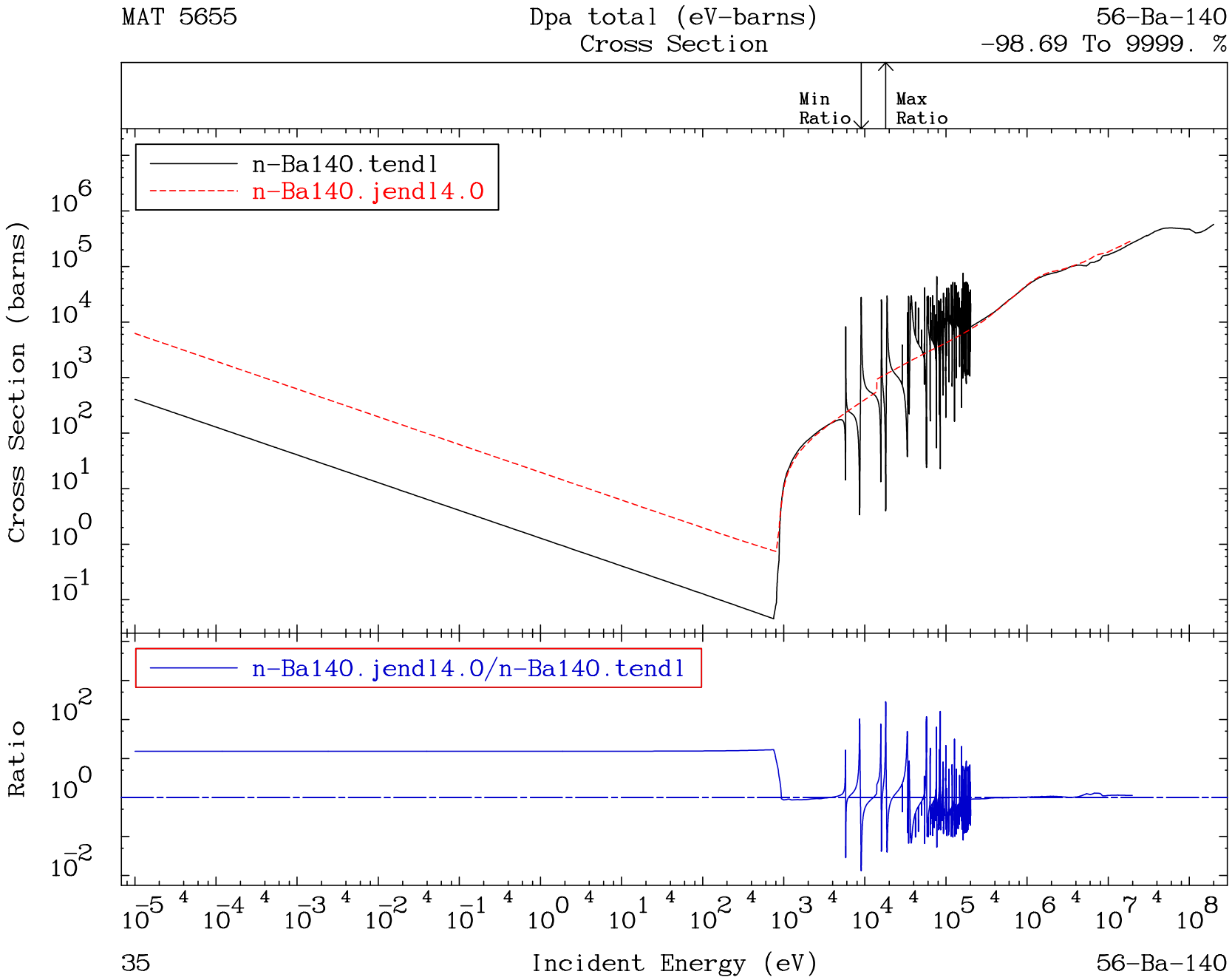

MAT 5655
Kerma inelastic (mt51-91)
Cross Section
56-Ba-140
-51.12 To 9999. %
Min
Ratio
n-Ba140.tendl Threshold 606.70 keV
n-Ba140.jendl4.0 Threshold 606.64 keV
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
30
56-Ba-140

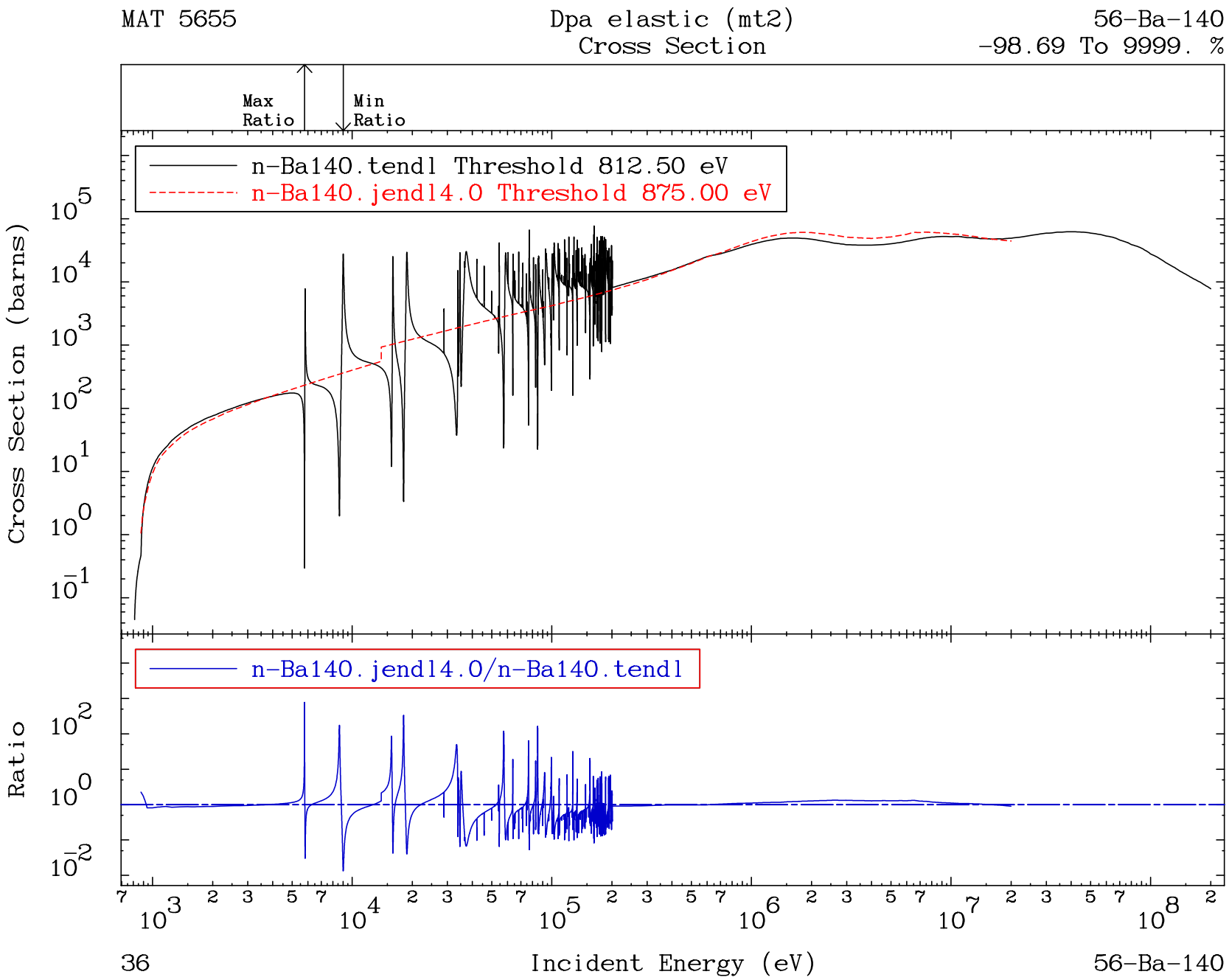

MAT 5655
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
56-Ba-140
-51.12 To 9999. %
Max Ratio
Min Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^9
10^6
10^3
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
31
Incident Energy (eV)
56-Ba-140

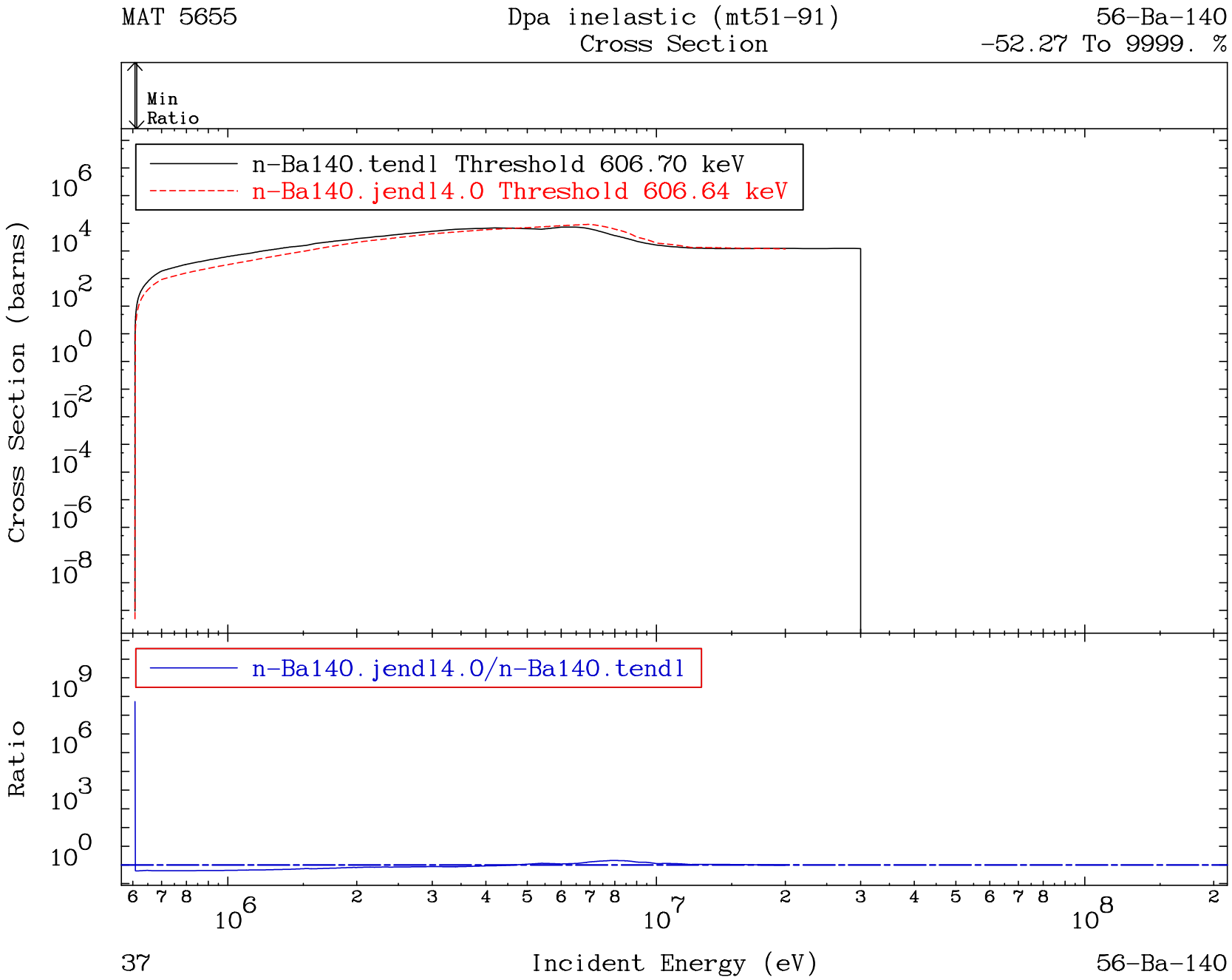

MAT 5655
Kerma capture (mt102)
Cross Section
56-Ba-140
-100.0 To 184.9 %
Min Ratio
Max Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
32
56-Ba-140

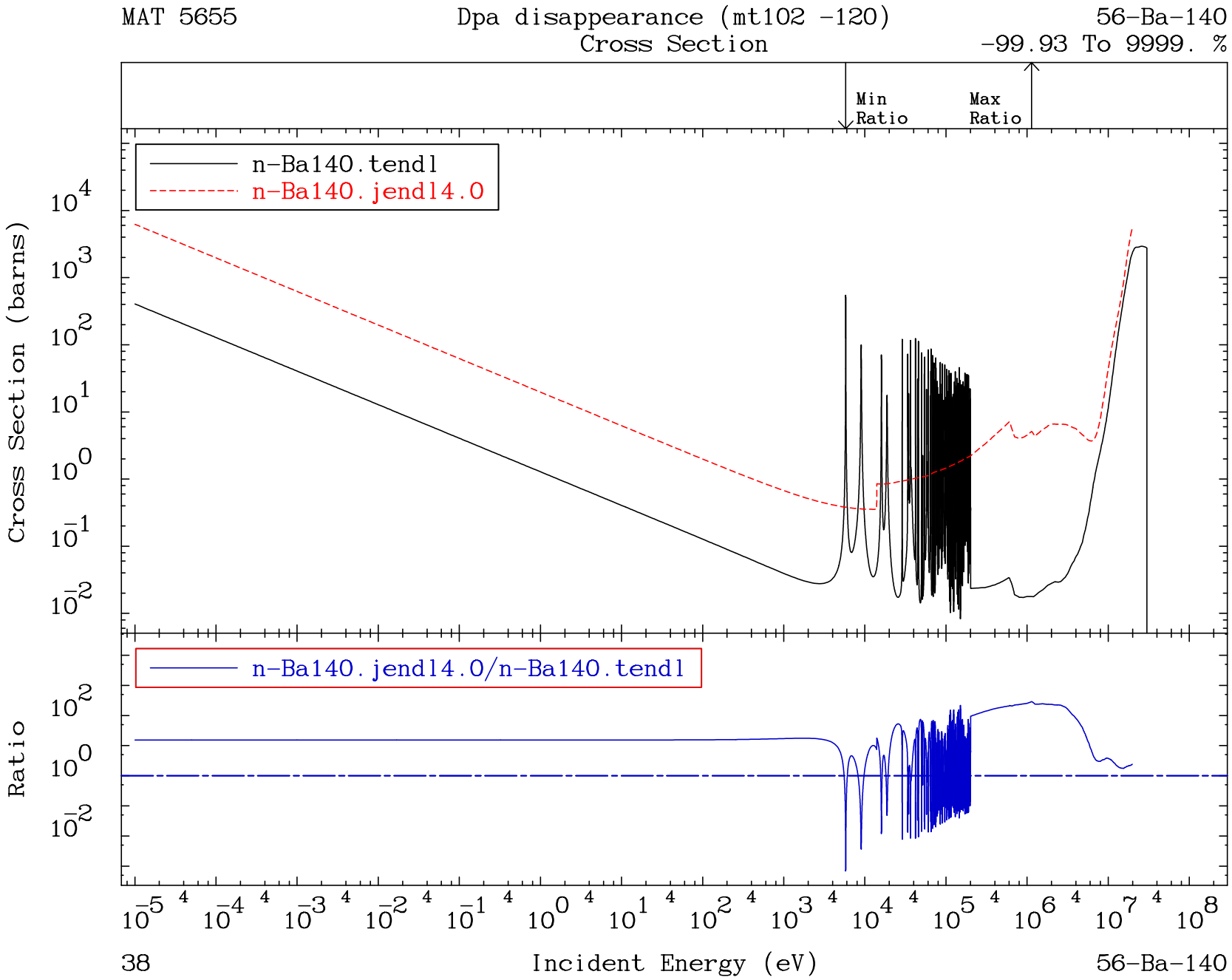

MAT 5655
Total photon (eV-barns)
Cross Section
56-Ba-140
-100.0 To 184.9 %
Min
Ratio
Max
Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (Mega-barns)
500
400
300
200
100
0
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
10^0
10^-2
10^-4
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
33
Incident Energy (eV)
56-Ba-140


MAT 5655
Total kinematic kerma (high limit)
Cross Section
56-Ba-140
-100.0 To -4.400%
Min Ratio
Max Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
34
56-Ba-140


MAT 5655
Dpa total (eV-barns)
Cross Section
56-Ba-140
-98.69 To 9999. %
Min Ratio
Max Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
35
56-Ba-140


MAT 5655
Dpa elastic (mt2)
Cross Section
56-Ba-140
-98.69 To 9999. %
Max Ratio
Min Ratio
n-Ba140.tendl Threshold 812.50 eV
n-Ba140.jendl4.0 Threshold 875.00 eV
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
36
56-Ba-140


MAT 5655
Dpa inelastic (mt51-91)
Cross Section
56-Ba-140
-52.27 To 9999. %
Min
Ratio
n-Ba140.tendl Threshold 606.70 keV
n-Ba140.jendl4.0 Threshold 606.64 keV
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
37
56-Ba-140


MAT 5655
Dpa disappearance (mt102 -120)
Cross Section
56-Ba-140
-99.93 To 9999. %
Min Ratio
Max Ratio
n-Ba140.tendl
n-Ba140.jendl4.0
Cross Section (barns)
n-Ba140.jendl4.0/n-Ba140.tendl
Ratio
Incident Energy (eV)
38
56-Ba-140