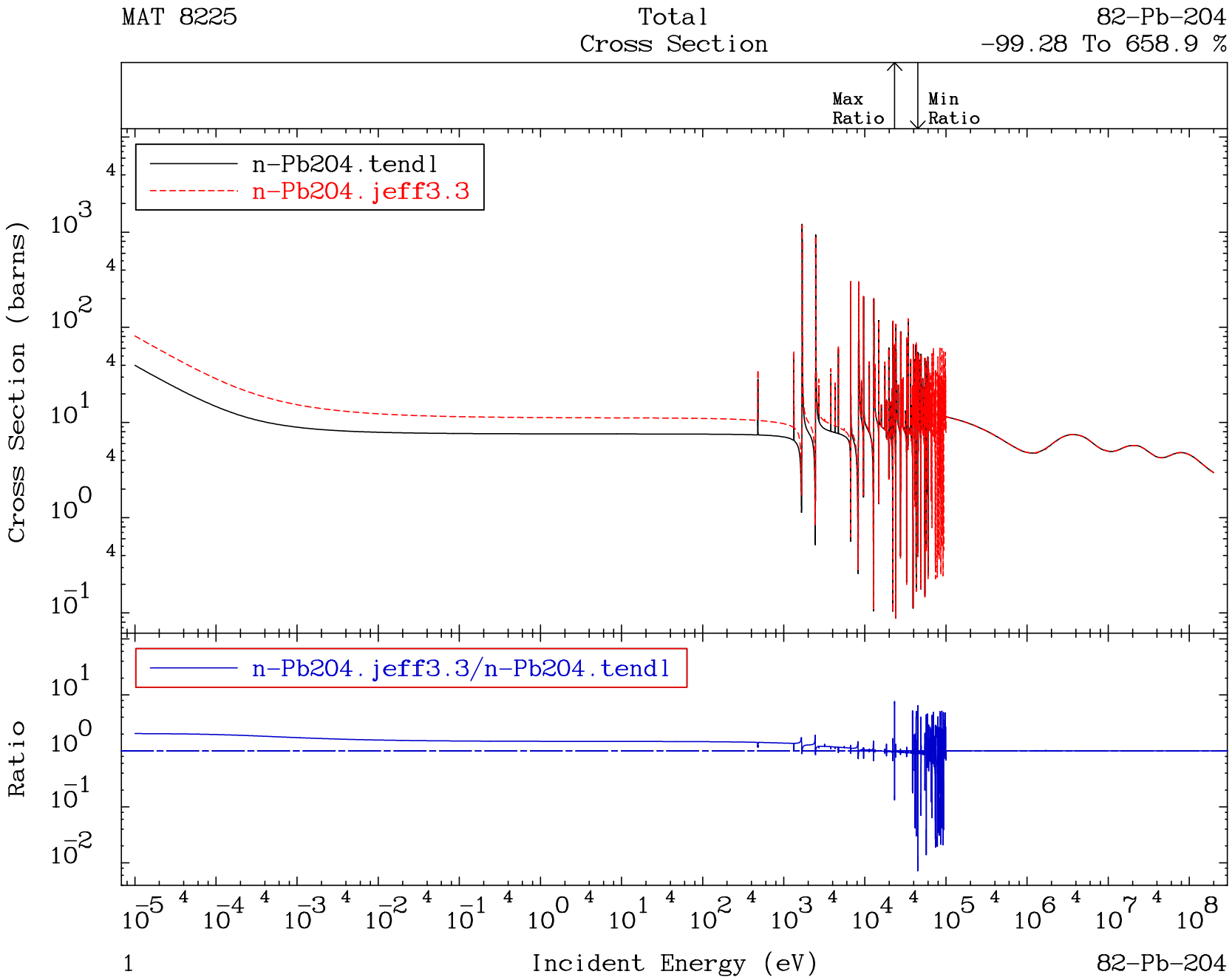
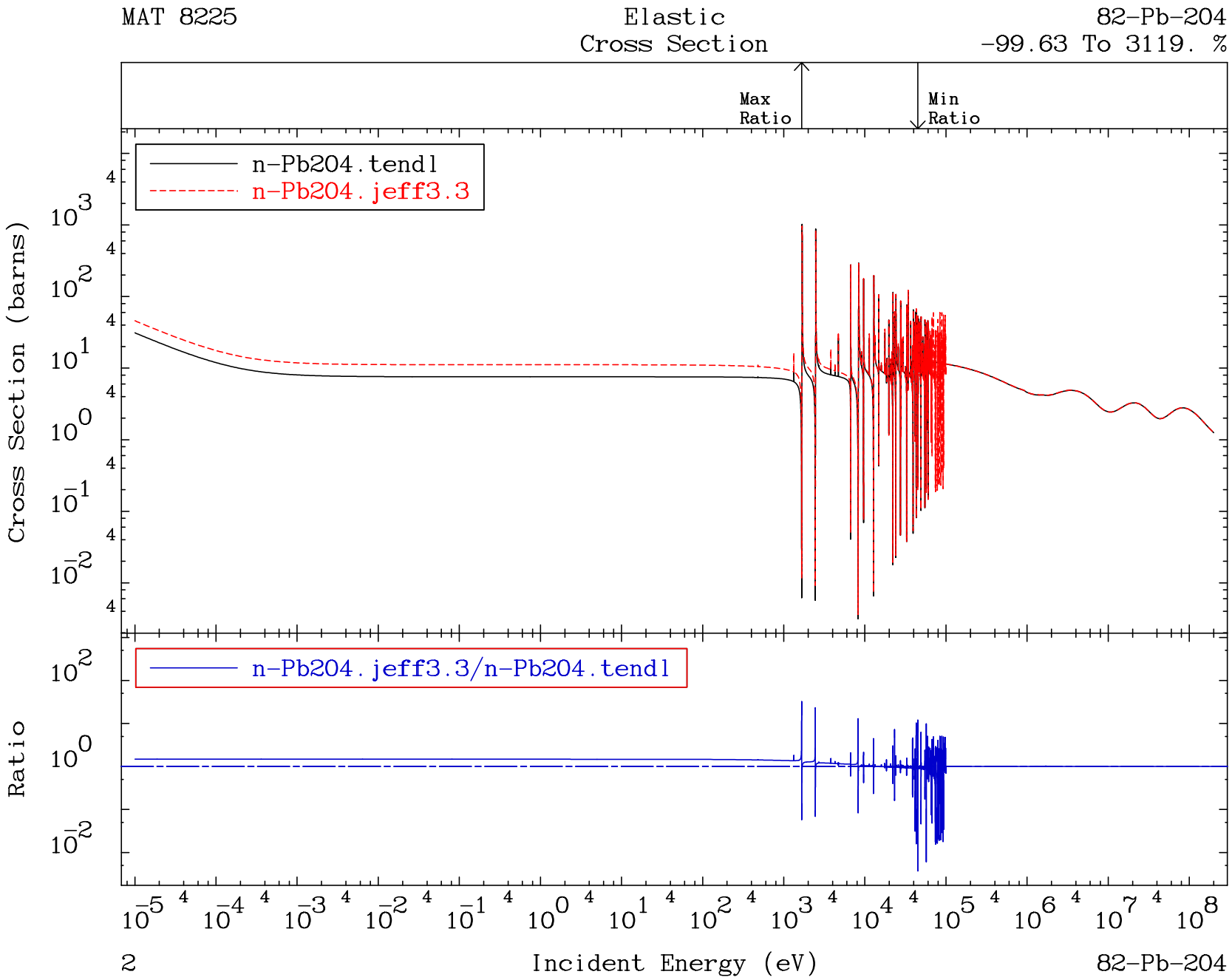
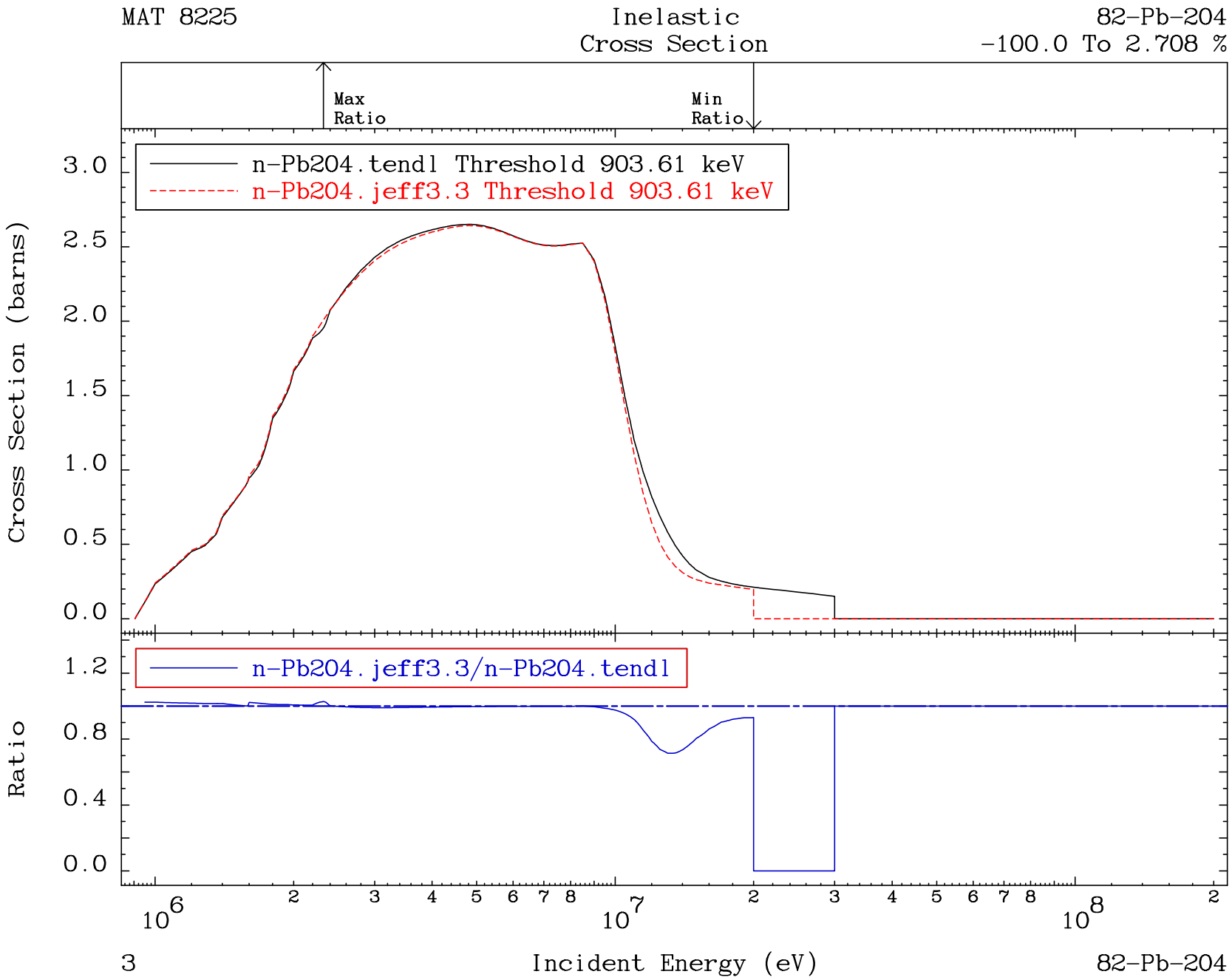
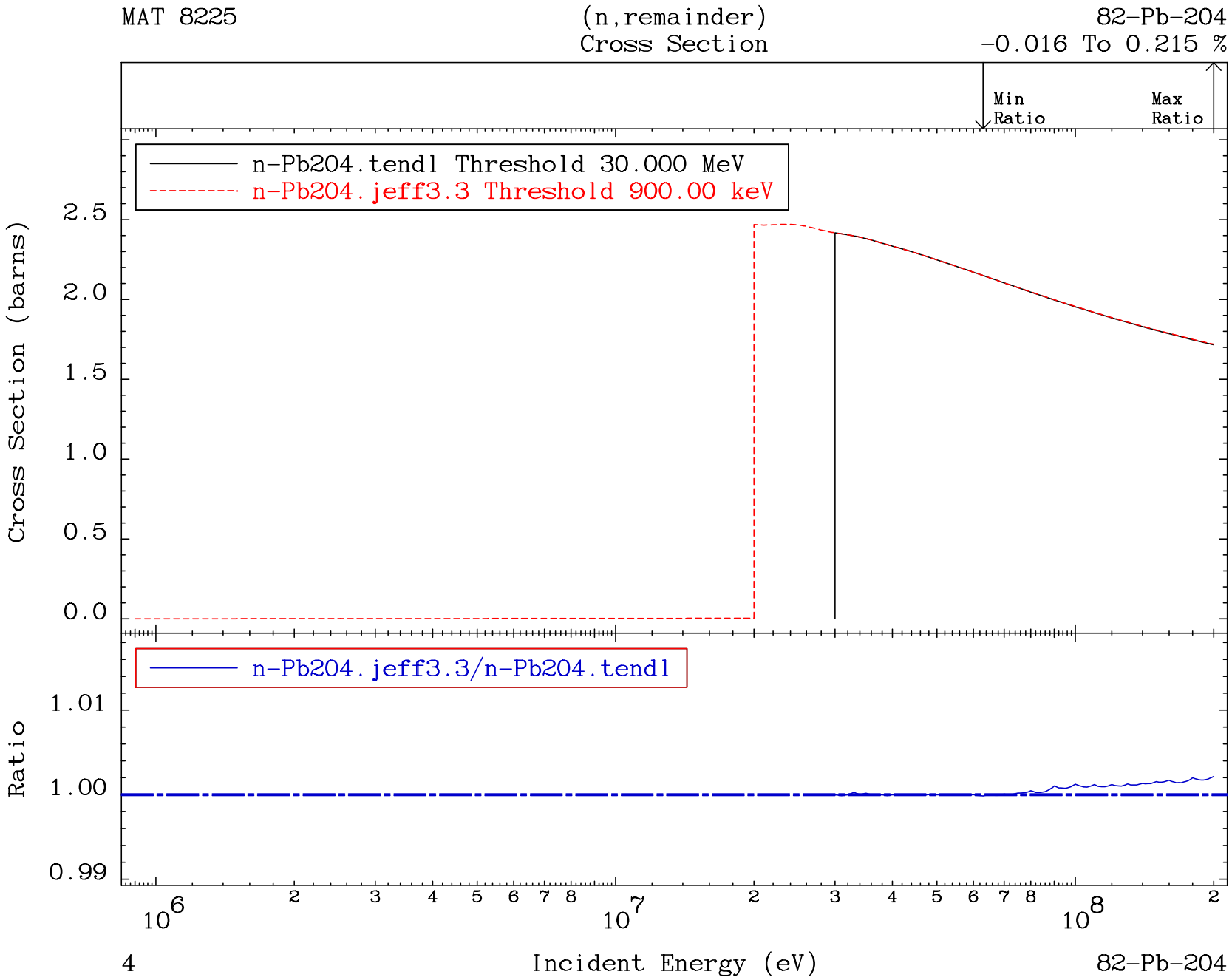
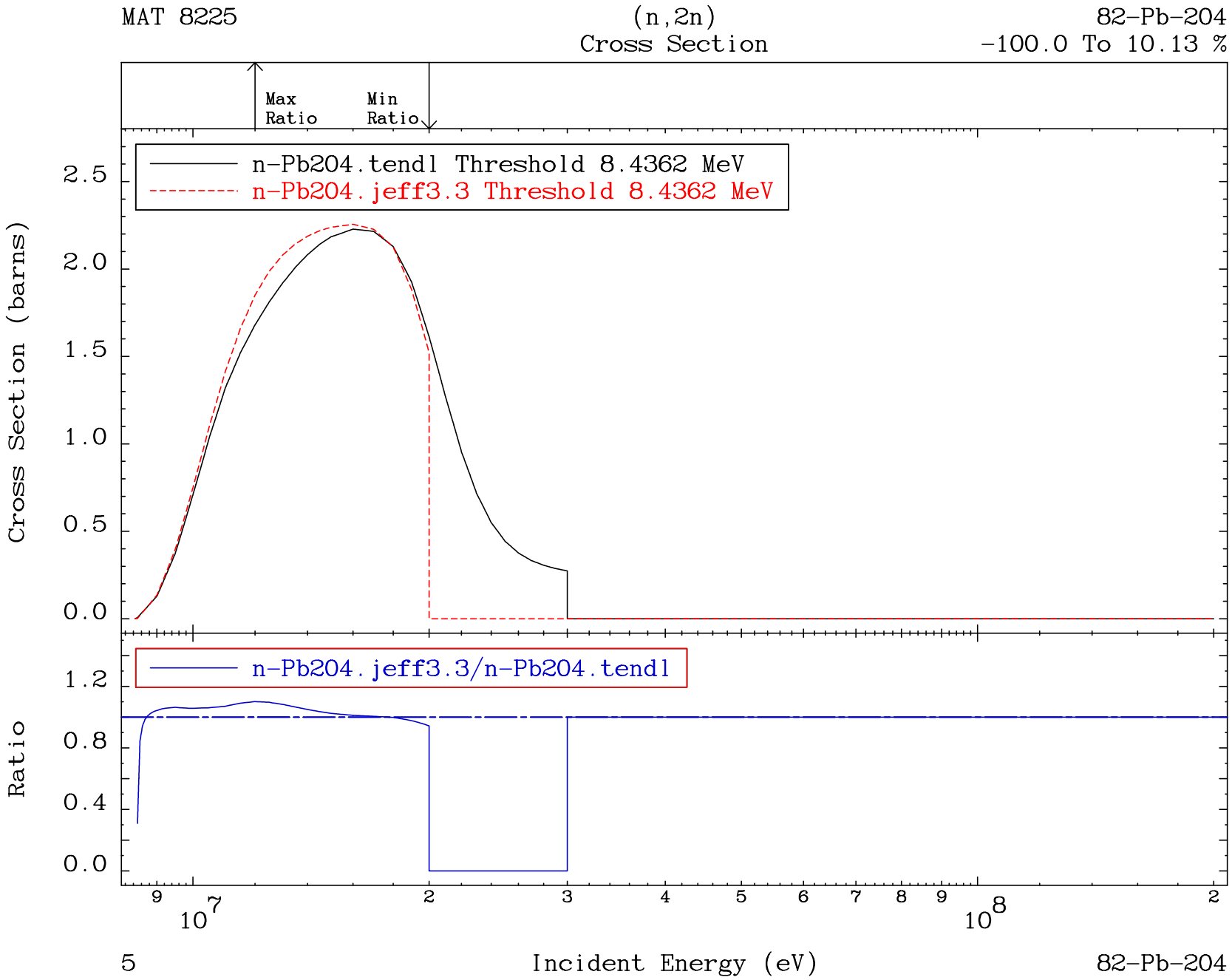
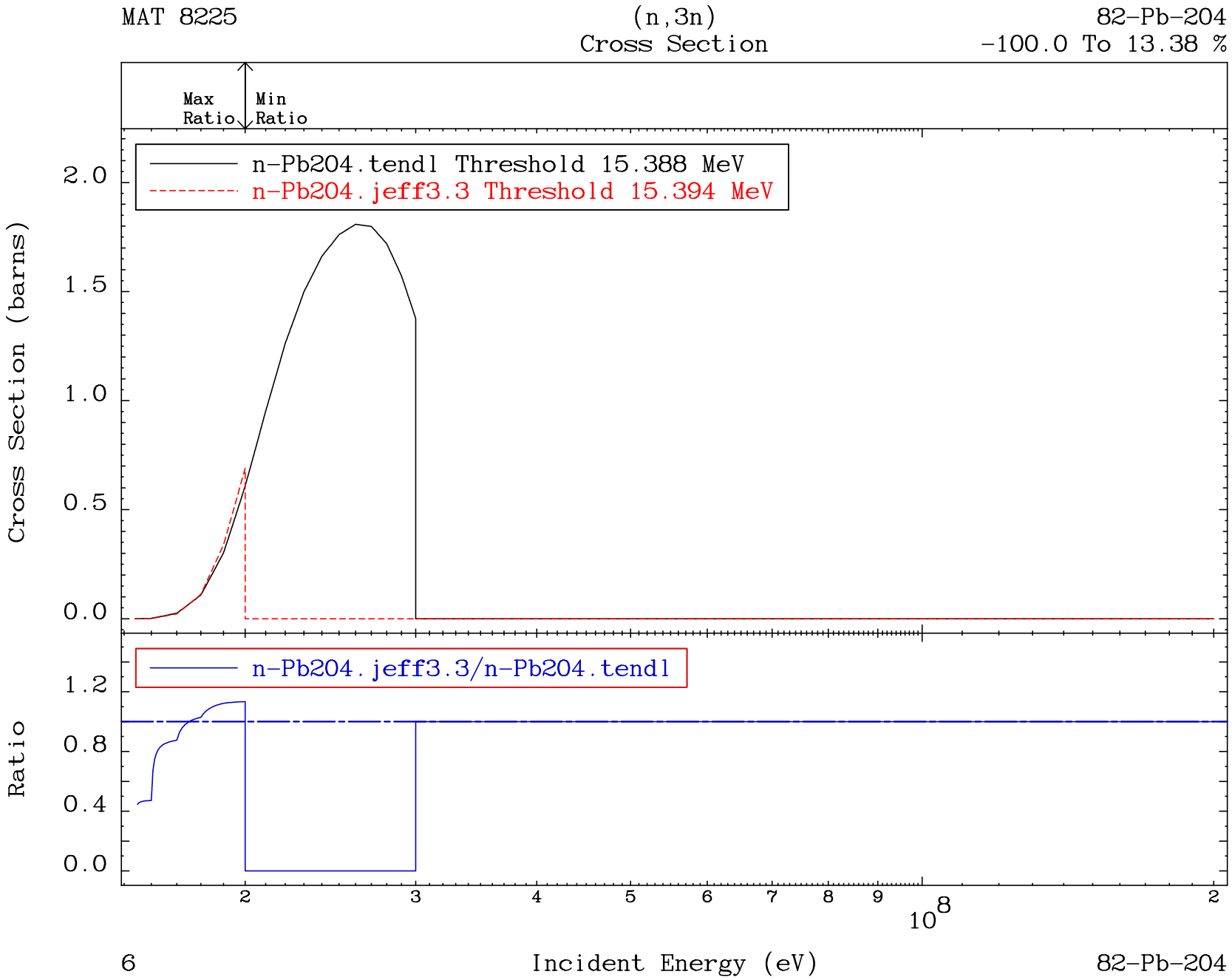

MAT 8225
Total
Cross Section
82-Pb-204
-99.28 To 658.9 %
Max
Ratio
Min
Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
1
82-Pb-204

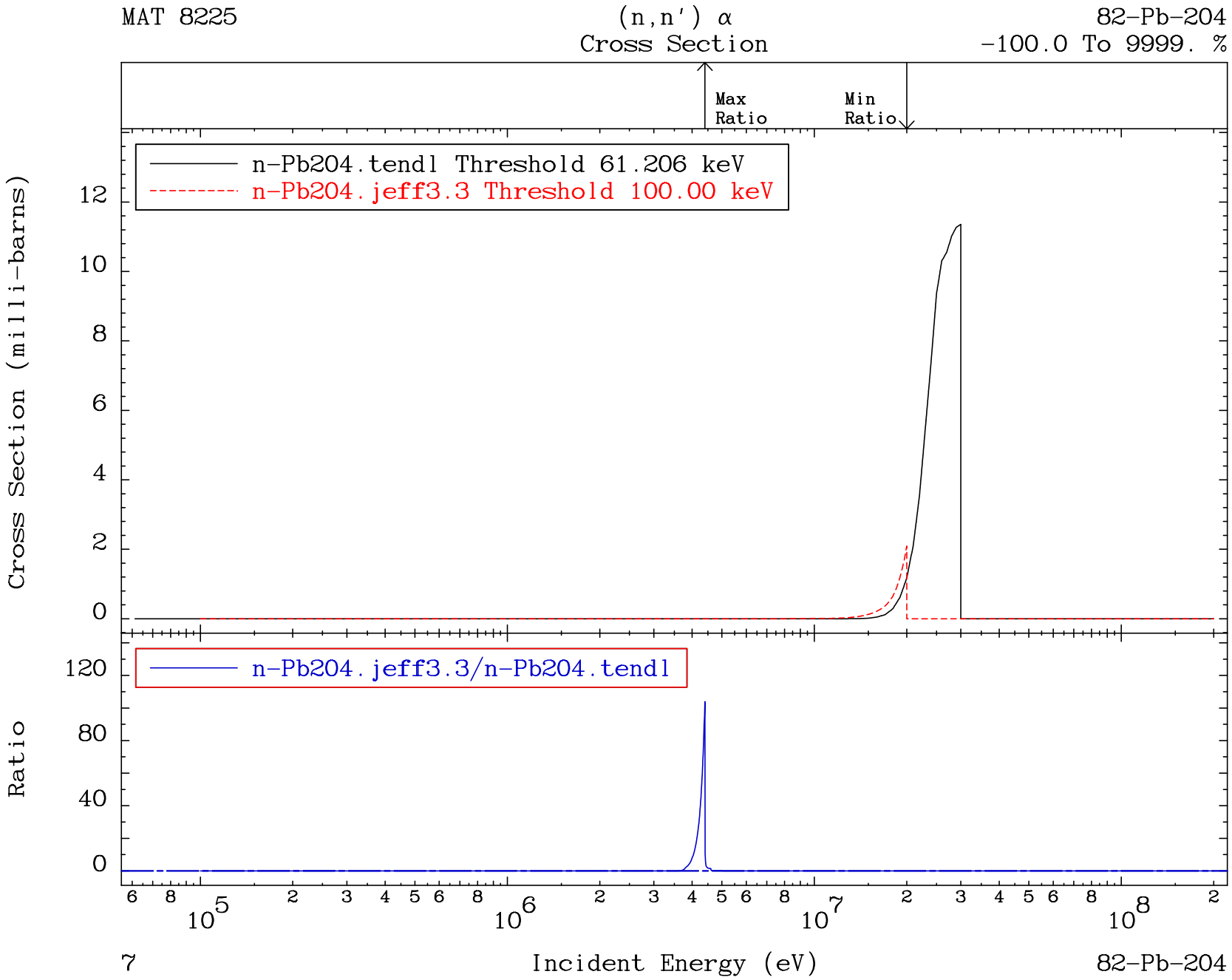

MAT 8225
Elastic
Cross Section
82-Pb-204
-99.63 To 3119. %
Max
Ratio
Min
Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
2
82-Pb-204

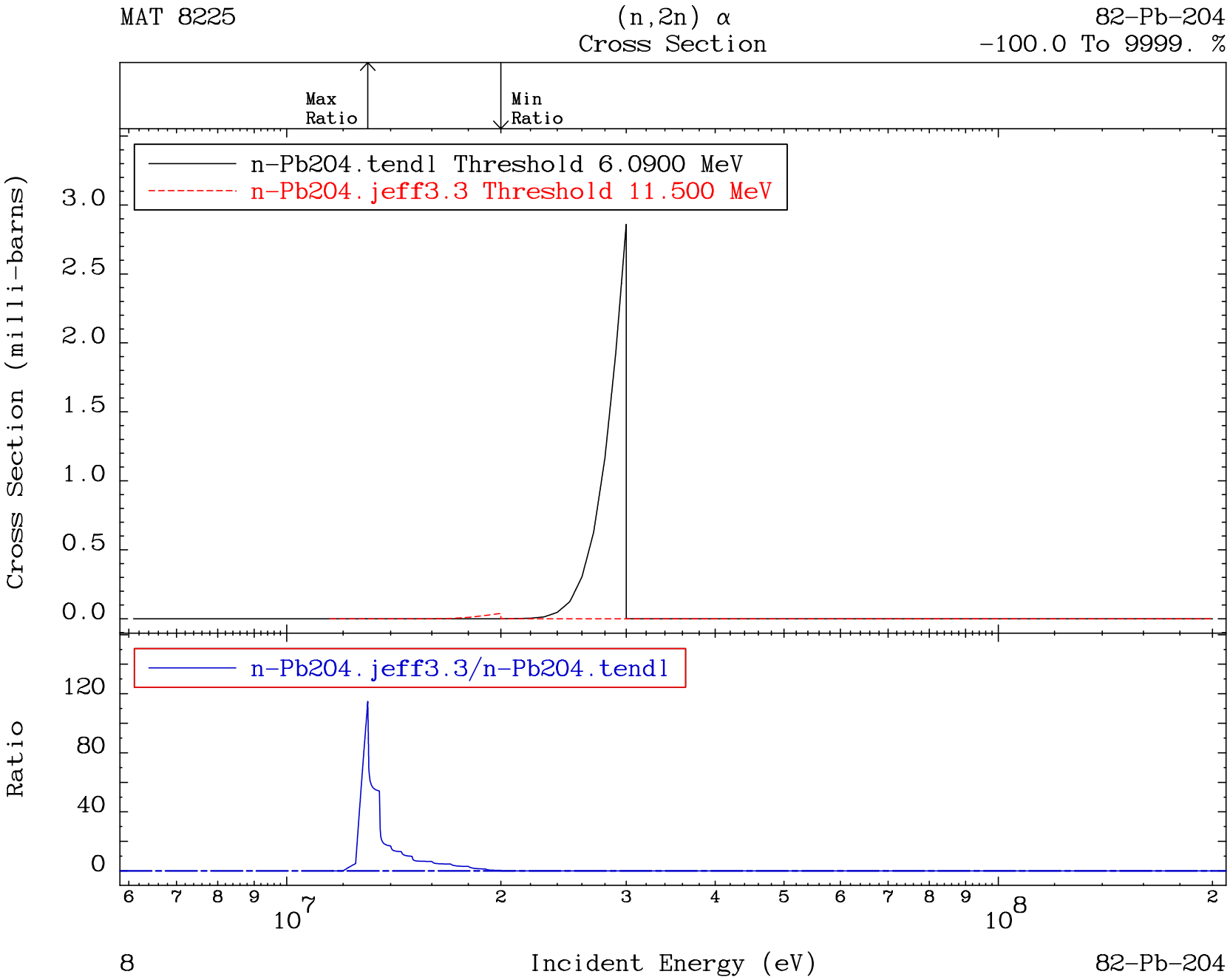

MAT 8225
Inelastic
Cross Section
82-Pb-204
-100.0 To 2.708 %
Max
Ratio
Min
Ratio
n-Pb204.tendl Threshold 903.61 keV
n-Pb204.jeff3.3 Threshold 903.61 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
1.2
0.8
0.4
0.0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
82-Pb-204

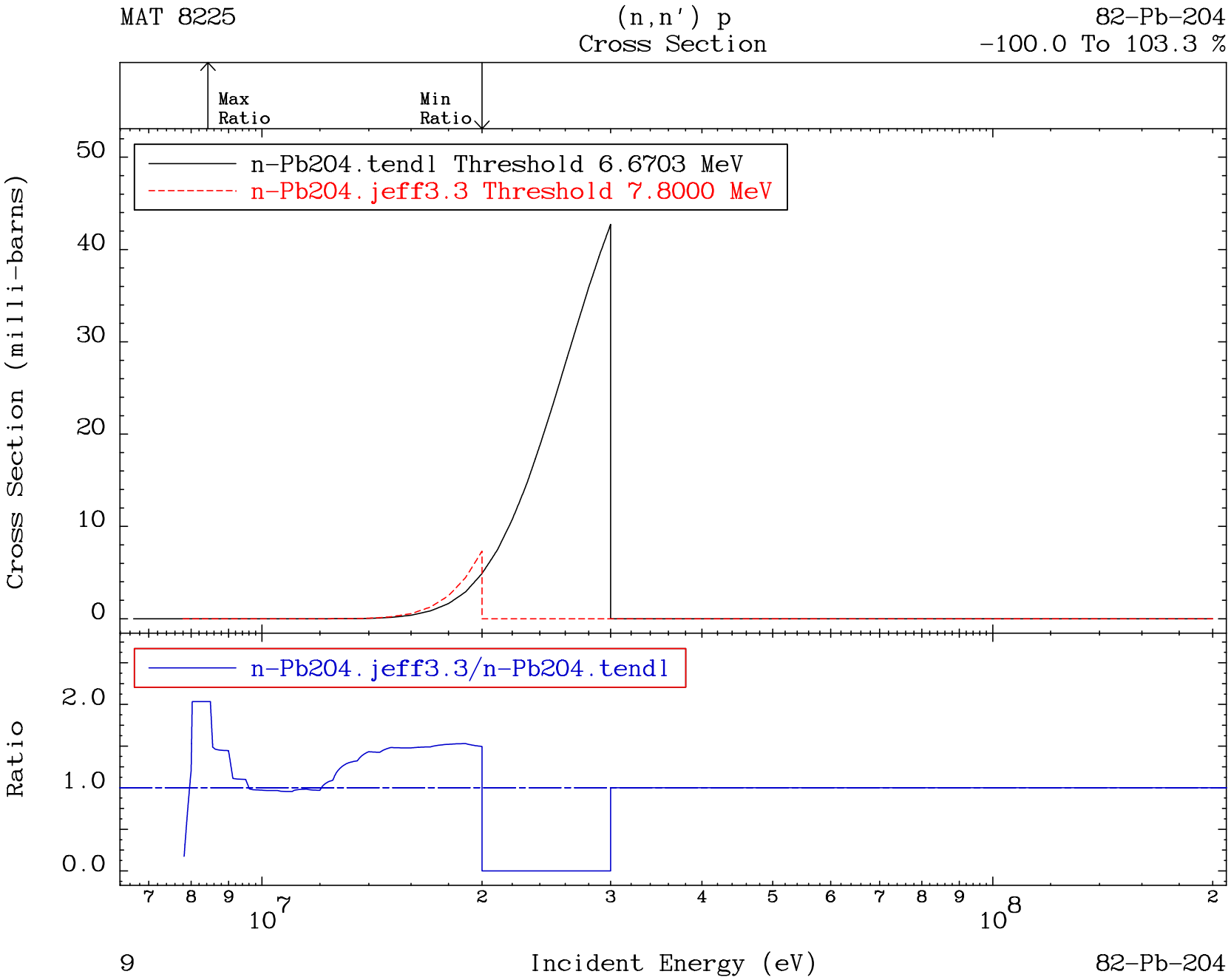

MAT 8225
(n,remainder)
Cross Section
82-Pb-204
-0.016 To 0.215 %
Min Ratio
Max Ratio
n-Pb204.tendl Threshold 30.000 MeV
n-Pb204.jeff3.3 Threshold 900.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
1.01
1.00
0.99
10^6
10^7
10^8
Incident Energy (eV)
4
82-Pb-204

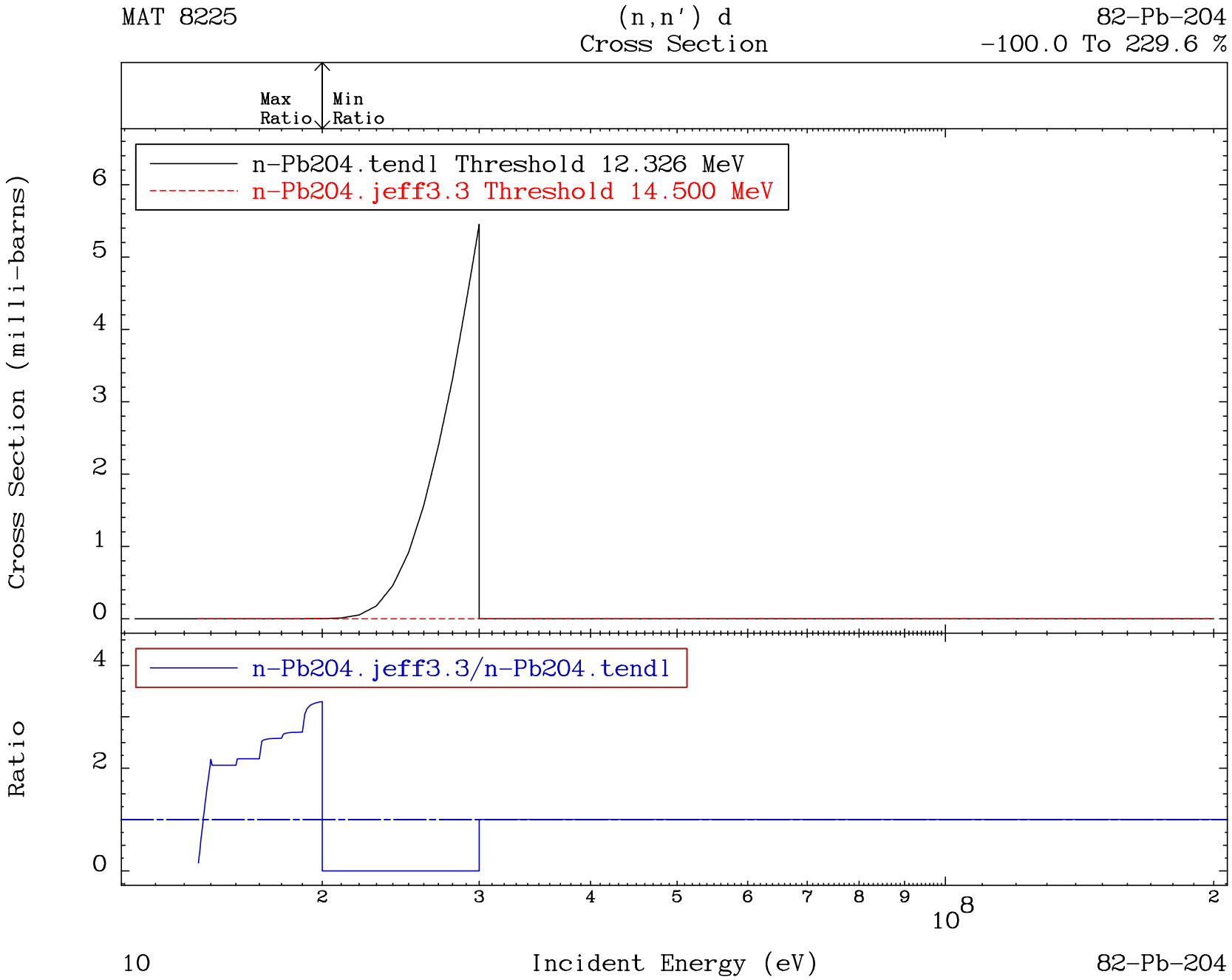

MAT 8225
(n,2n)
Cross Section
82-Pb-204
-100.0 To 10.13 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 8.4362 MeV
n-Pb204.jeff3.3 Threshold 8.4362 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
1.2
0.8
0.4
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
82-Pb-204

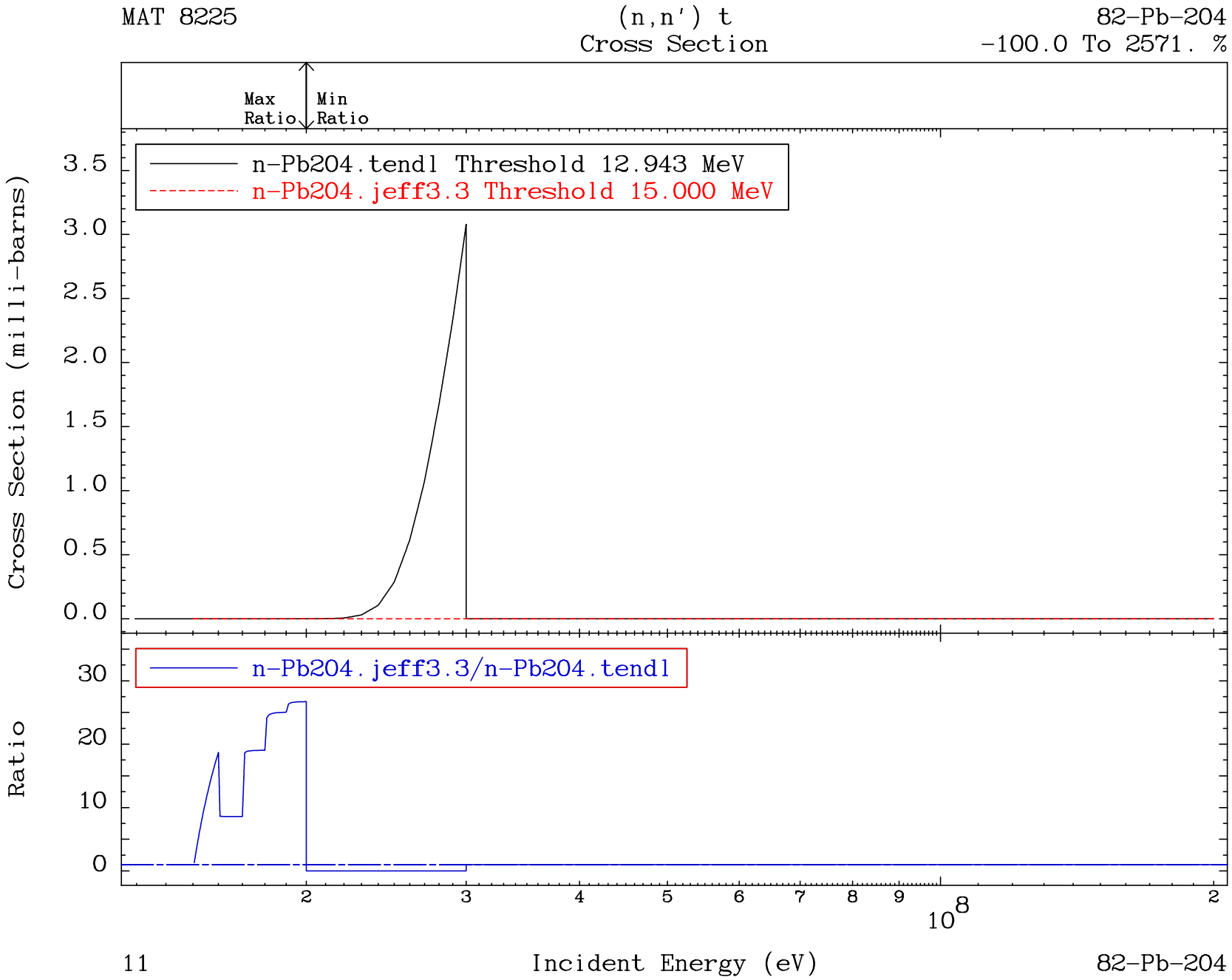

MAT 8225
(n,3n)
Cross Section
82-Pb-204
-100.0 To 13.38 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 15.388 MeV
n-Pb204.jeff3.3 Threshold 15.394 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
82-Pb-204

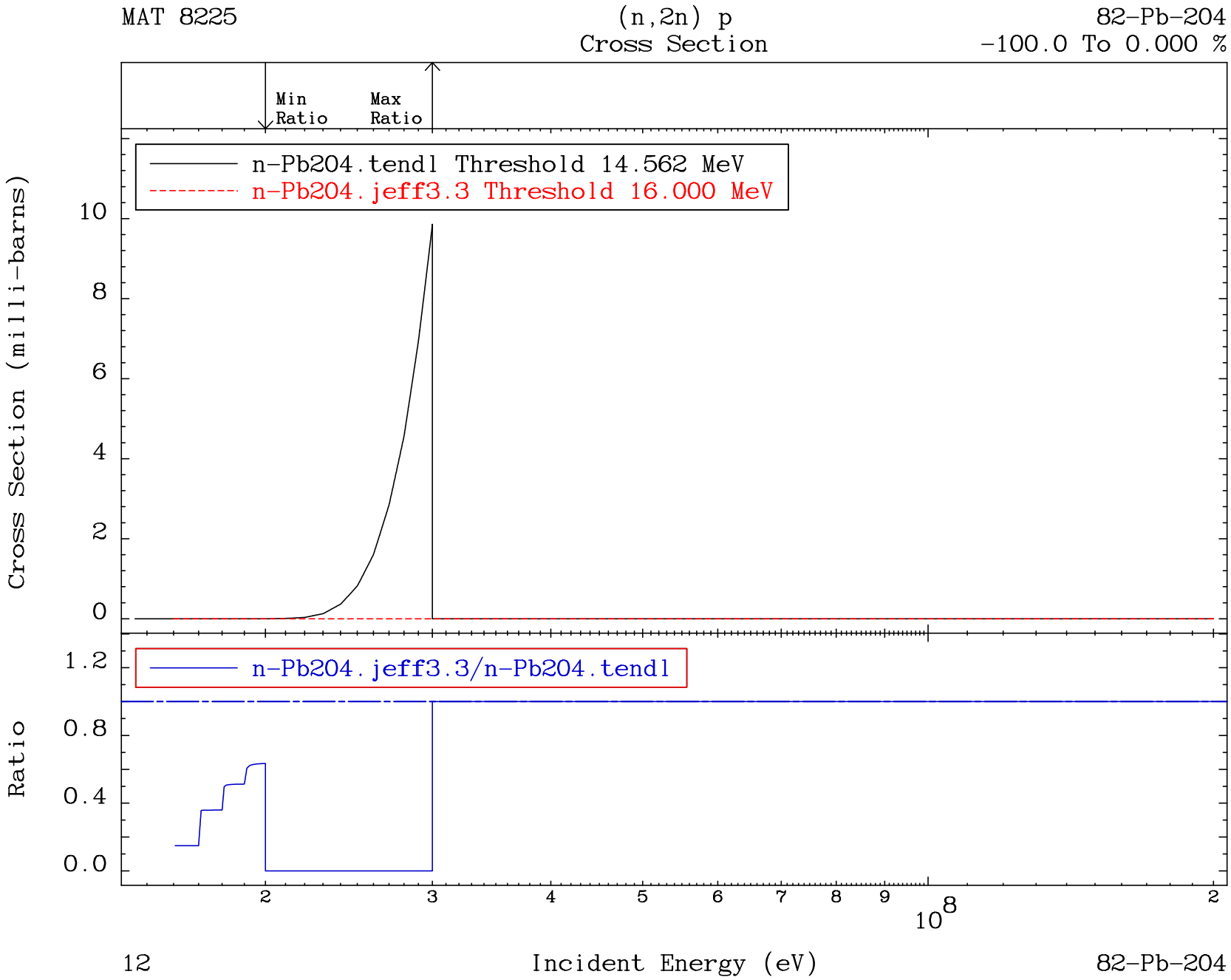

MAT 8225
(n,n') α
Cross Section
82-Pb-204
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 61.206 keV
n-Pb204.jeff3.3 Threshold 100.00 keV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
0
40
80
120
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
7
82-Pb-204

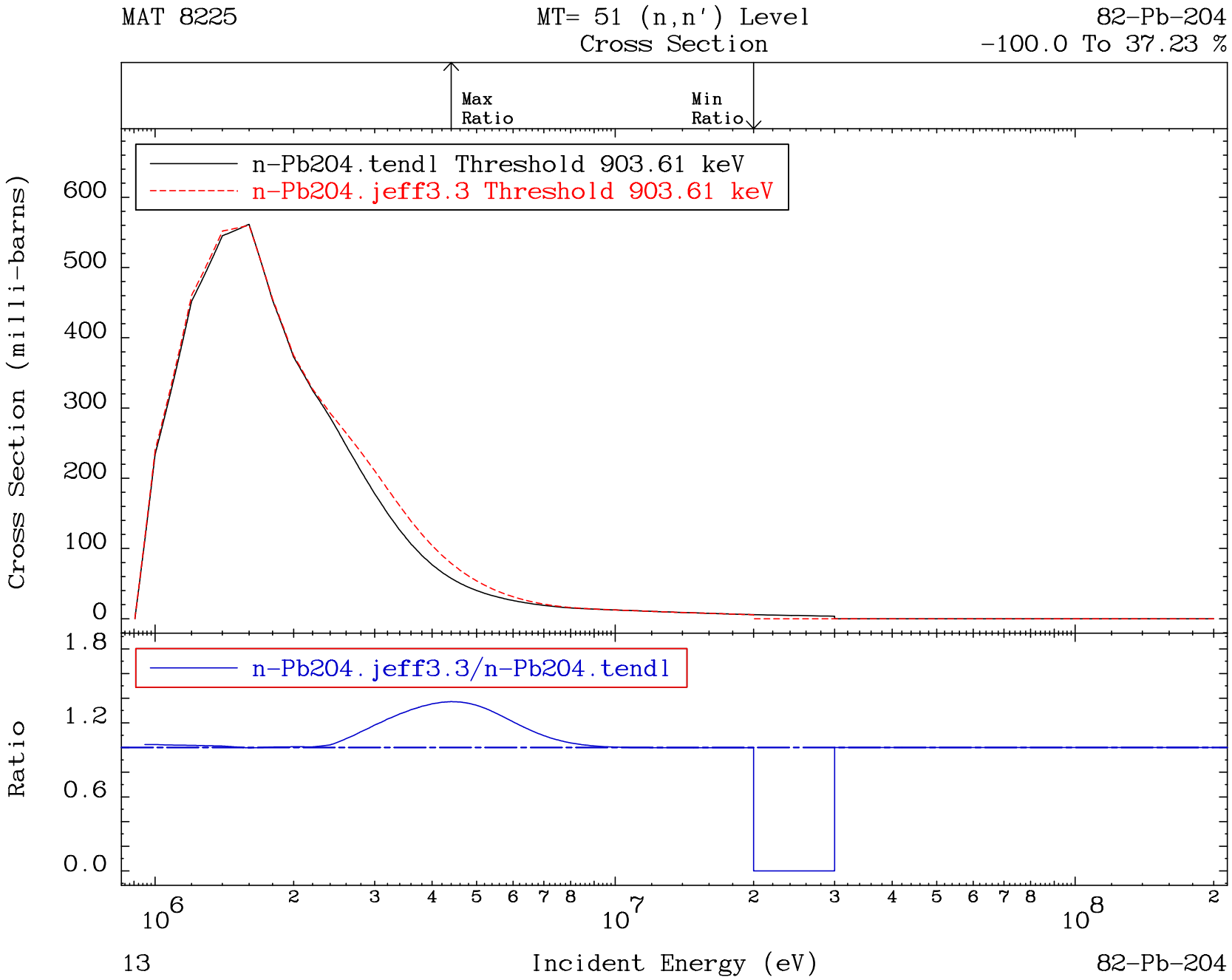

MAT 8225
(n,2n) α
Cross Section
82-Pb-204
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 6.0900 MeV
n-Pb204.jeff3.3 Threshold 11.500 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
120
80
40
0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
82-Pb-204

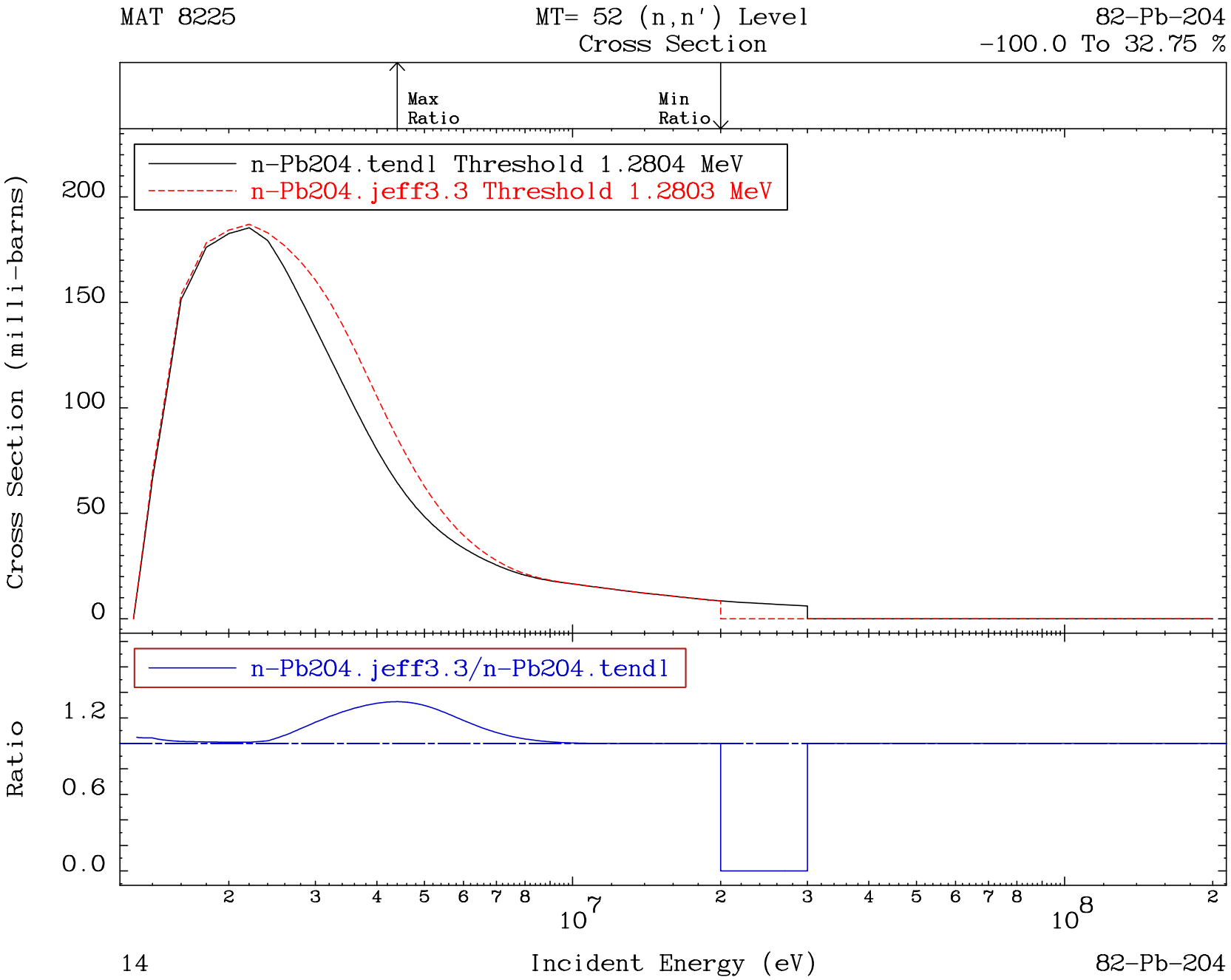

MAT 8225
(n,n') p
Cross Section
82-Pb-204
-100.0 To 103.3 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 6.6703 MeV
n-Pb204.jeff3.3 Threshold 7.8000 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
2.0
1.0
0.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
9
Incident Energy (eV)
82-Pb-204

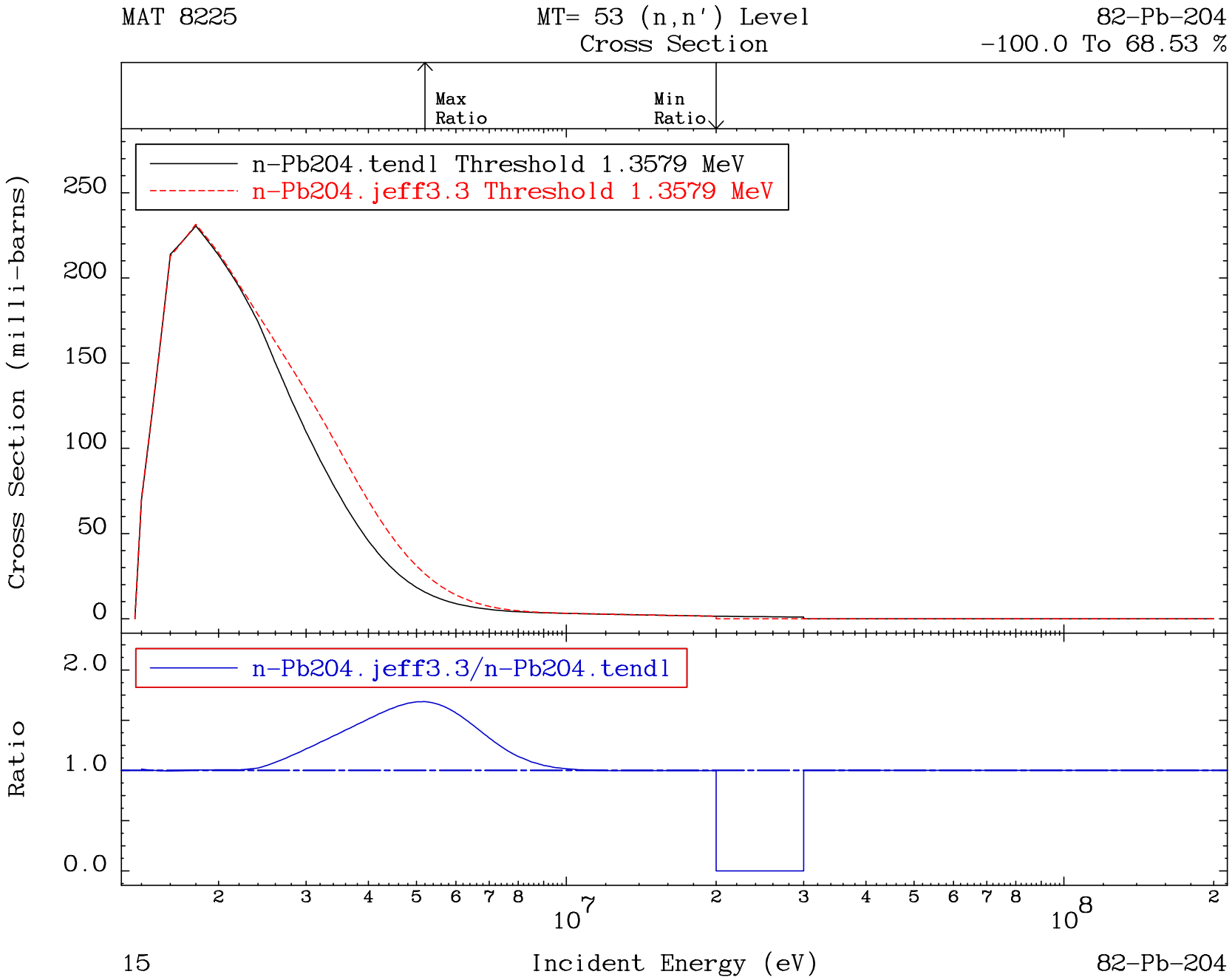

MAT 8225
(n,n') d
Cross Section
82-Pb-204
-100.0 To 229.6 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 12.326 MeV
n-Pb204.jeff3.3 Threshold 14.500 MeV
Cross Section (milli-barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
10
82-Pb-204

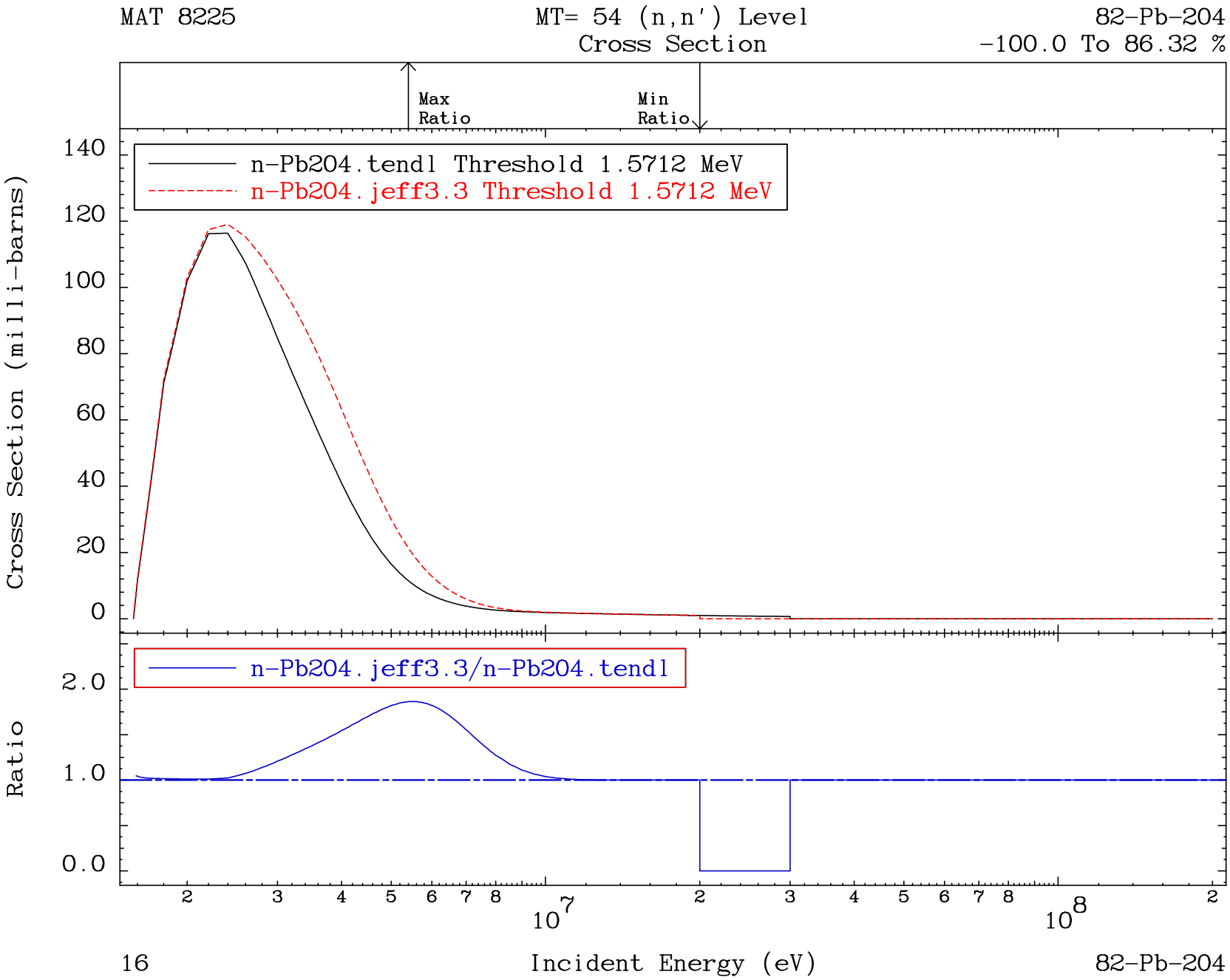

MAT 8225
(n,n') t
Cross Section
82-Pb-204
-100.0 To 2571. %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 12.943 MeV
n-Pb204.jeff3.3 Threshold 15.000 MeV
Cross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
30
20
10
0
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
82-Pb-204

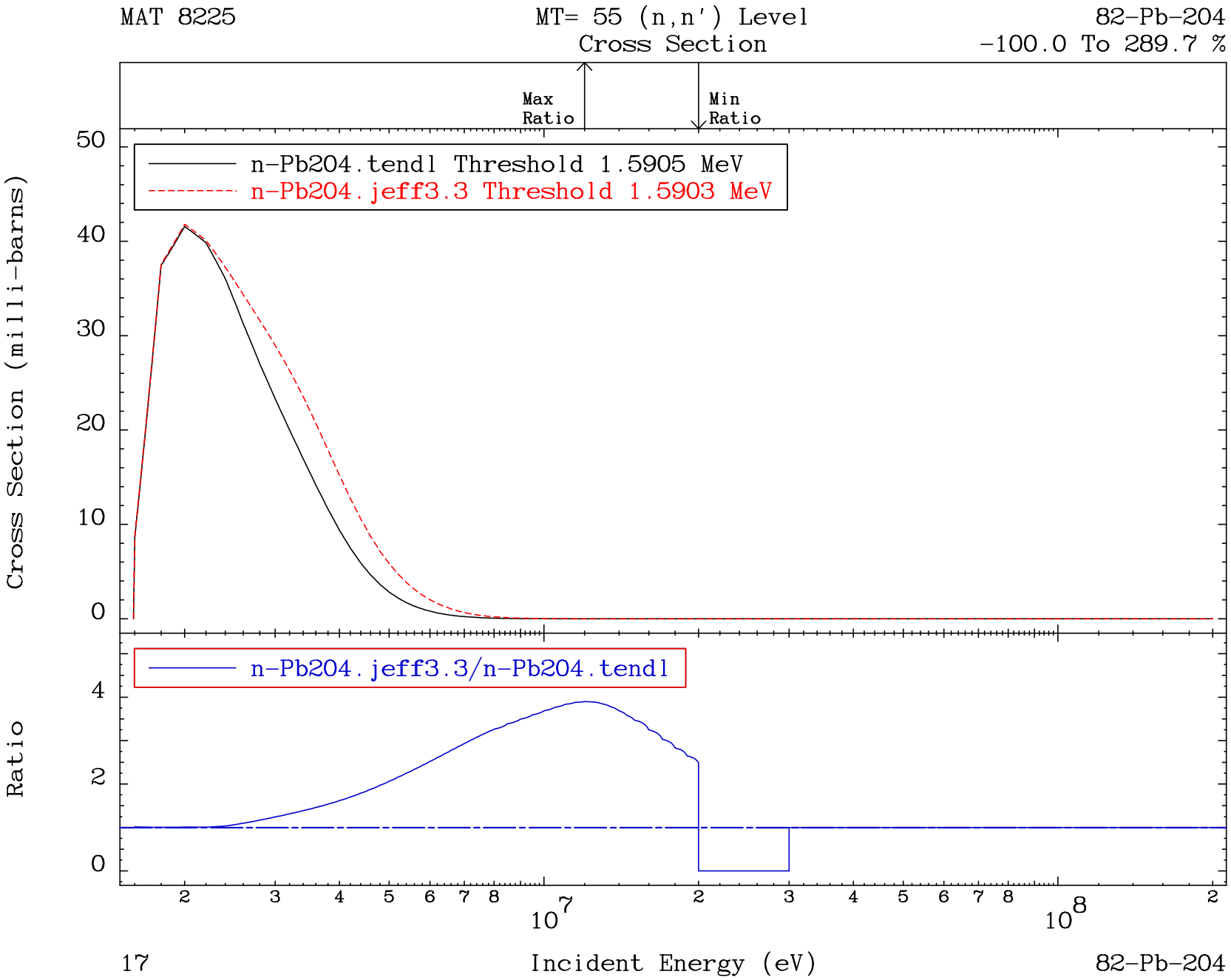

MAT 8225
(n,2n) p
Cross Section
82-Pb-204
-100.0 To 0.000 %
Min Ratio
Max Ratio
n-Pb204.tendl Threshold 14.562 MeV
n-Pb204.jeff3.3 Threshold 16.000 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
82-Pb-204

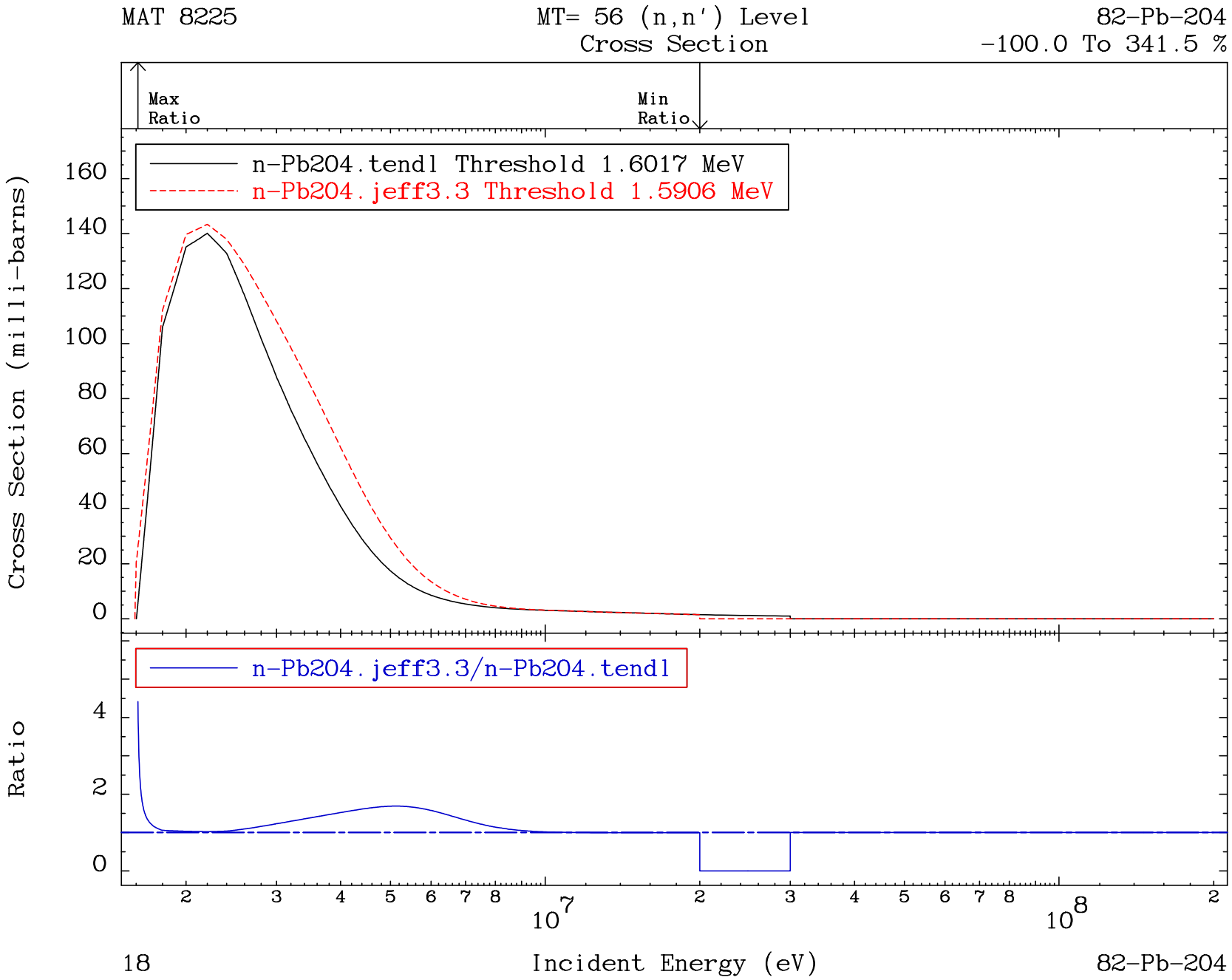

MAT 8225
MT= 51 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 37.23 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 903.61 keV
n-Pb204.jeff3.3 Threshold 903.61 keV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
1.8
1.2
0.6
0.0
10^6
10^7
10^8
13
Incident Energy (eV)
82-Pb-204

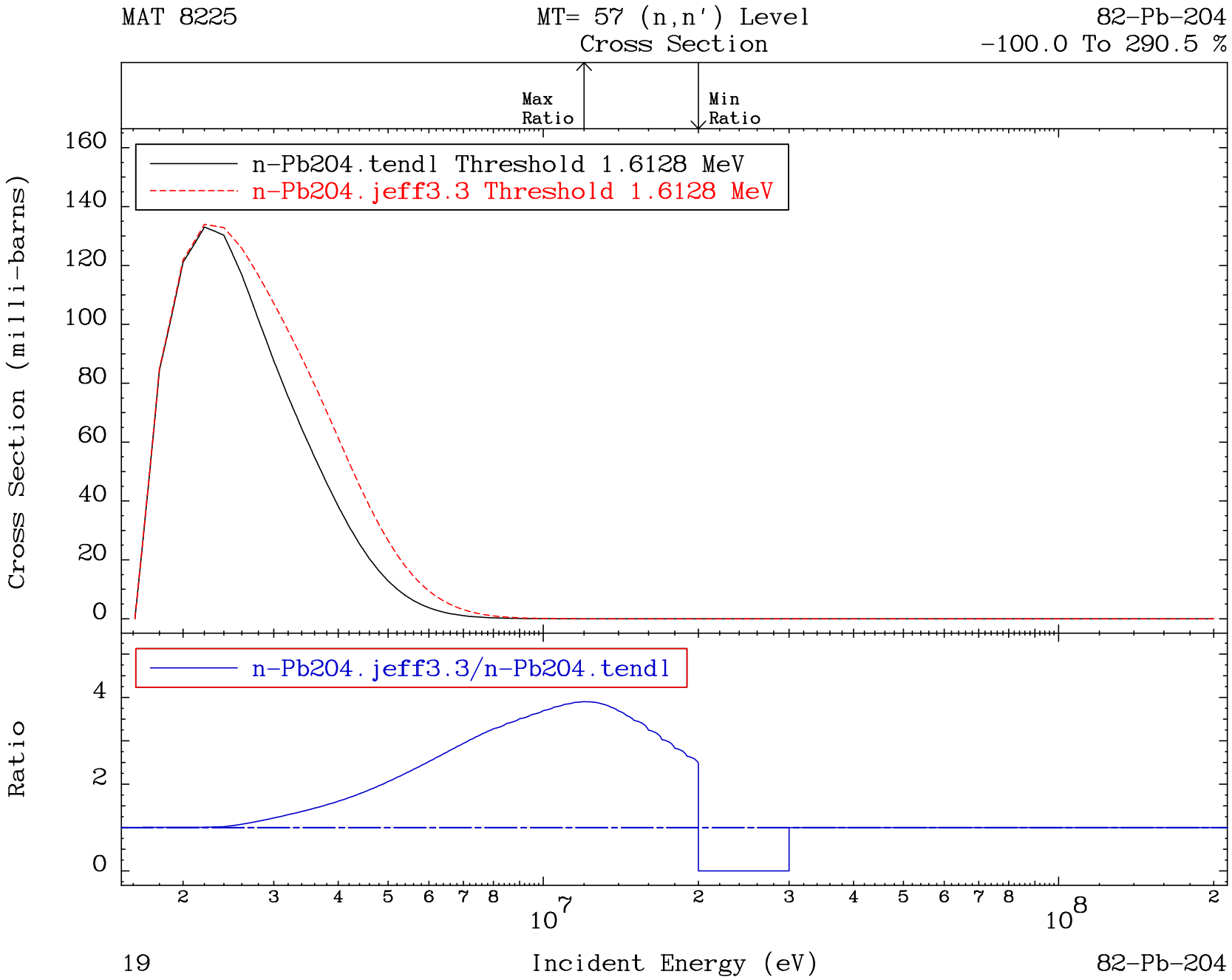

MAT 8225
MT= 52 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 32.75 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.2804 MeV
n-Pb204.jeff3.3 Threshold 1.2803 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
82-Pb-204

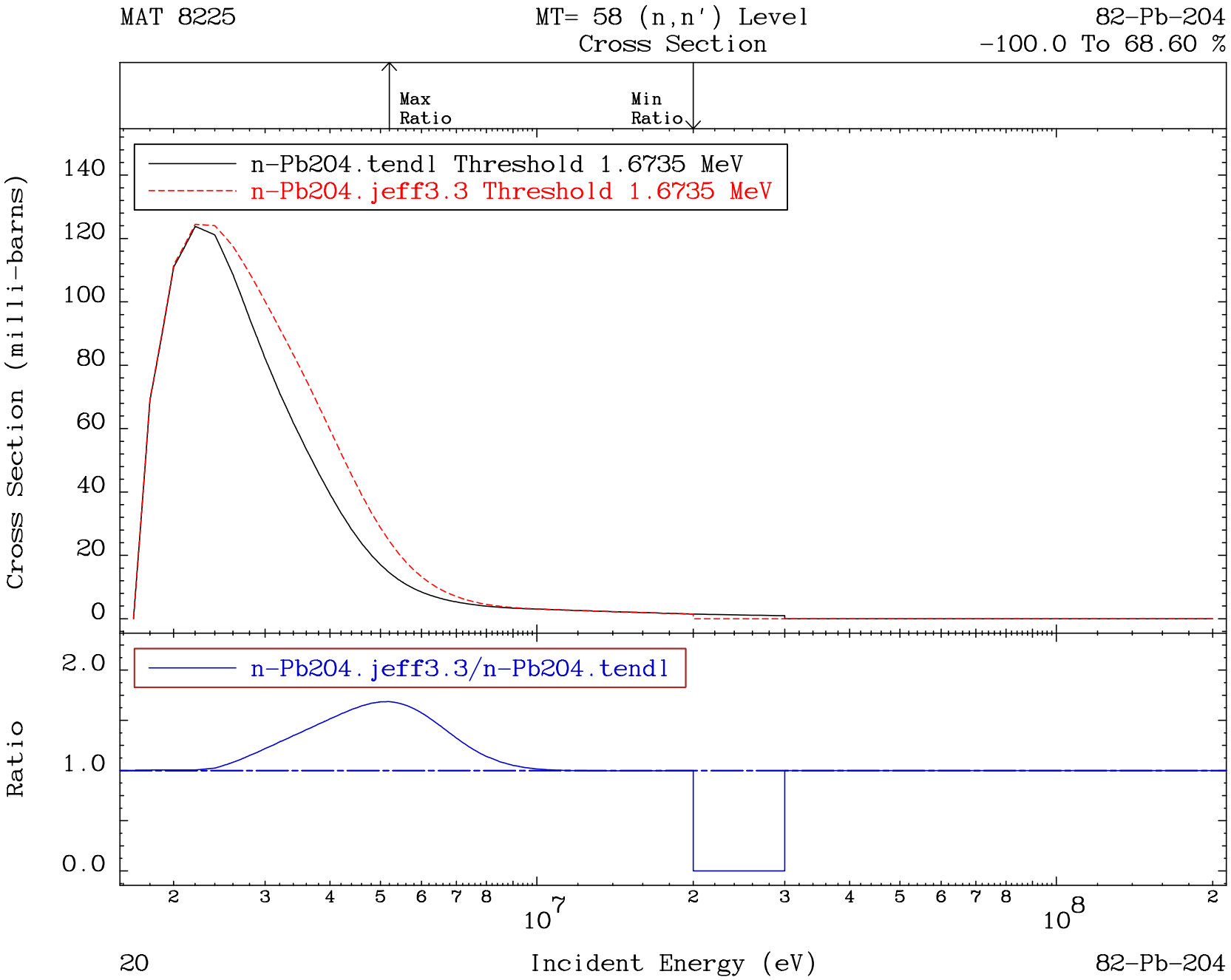

MAT 8225
MT= 53 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 68.53 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.3579 MeV
n-Pb204.jeff3.3 Threshold 1.3579 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
82-Pb-204

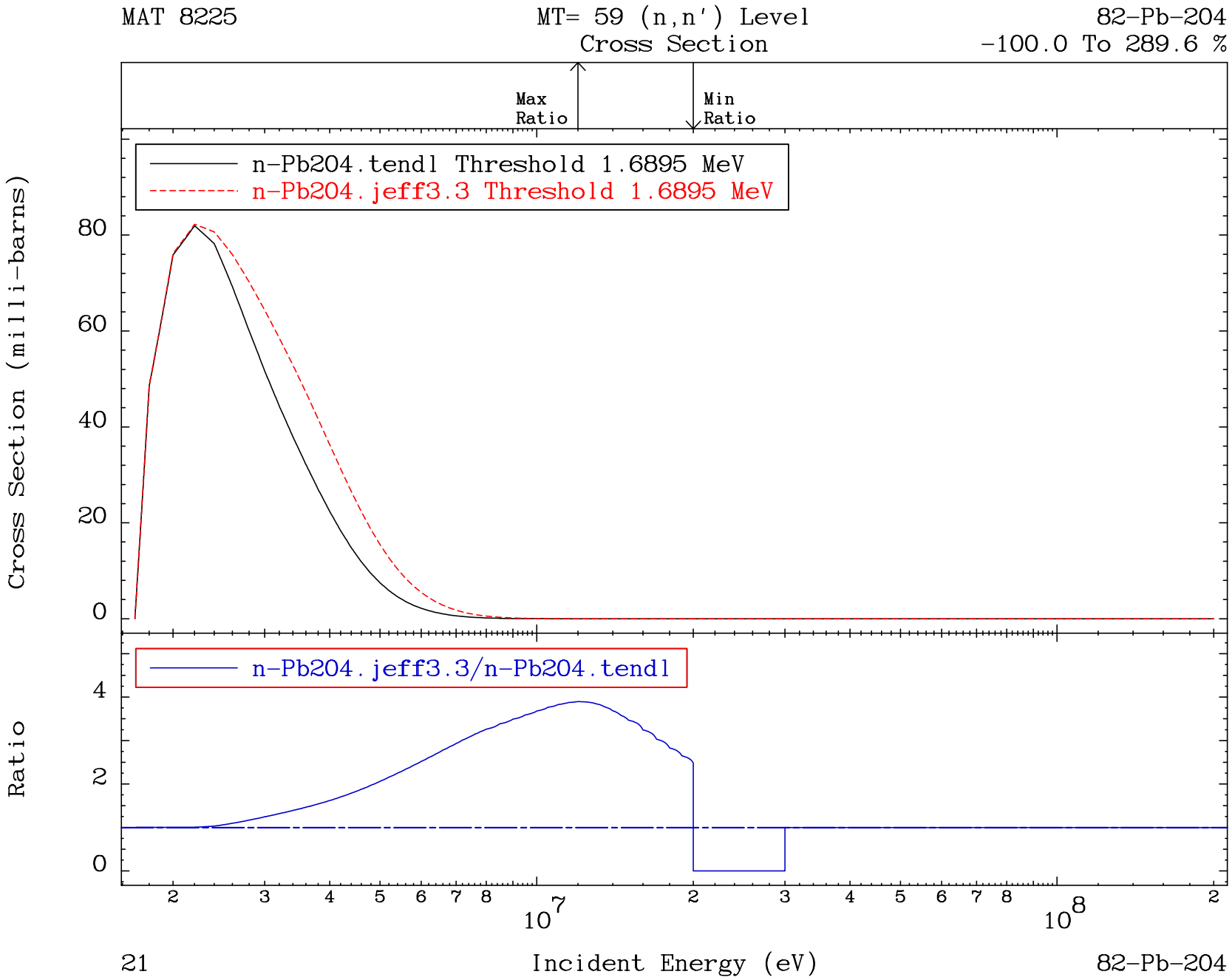

MAT 8225
MT= 54 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 86.32 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.5712 MeV
n-Pb204.jeff3.3 Threshold 1.5712 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
82-Pb-204

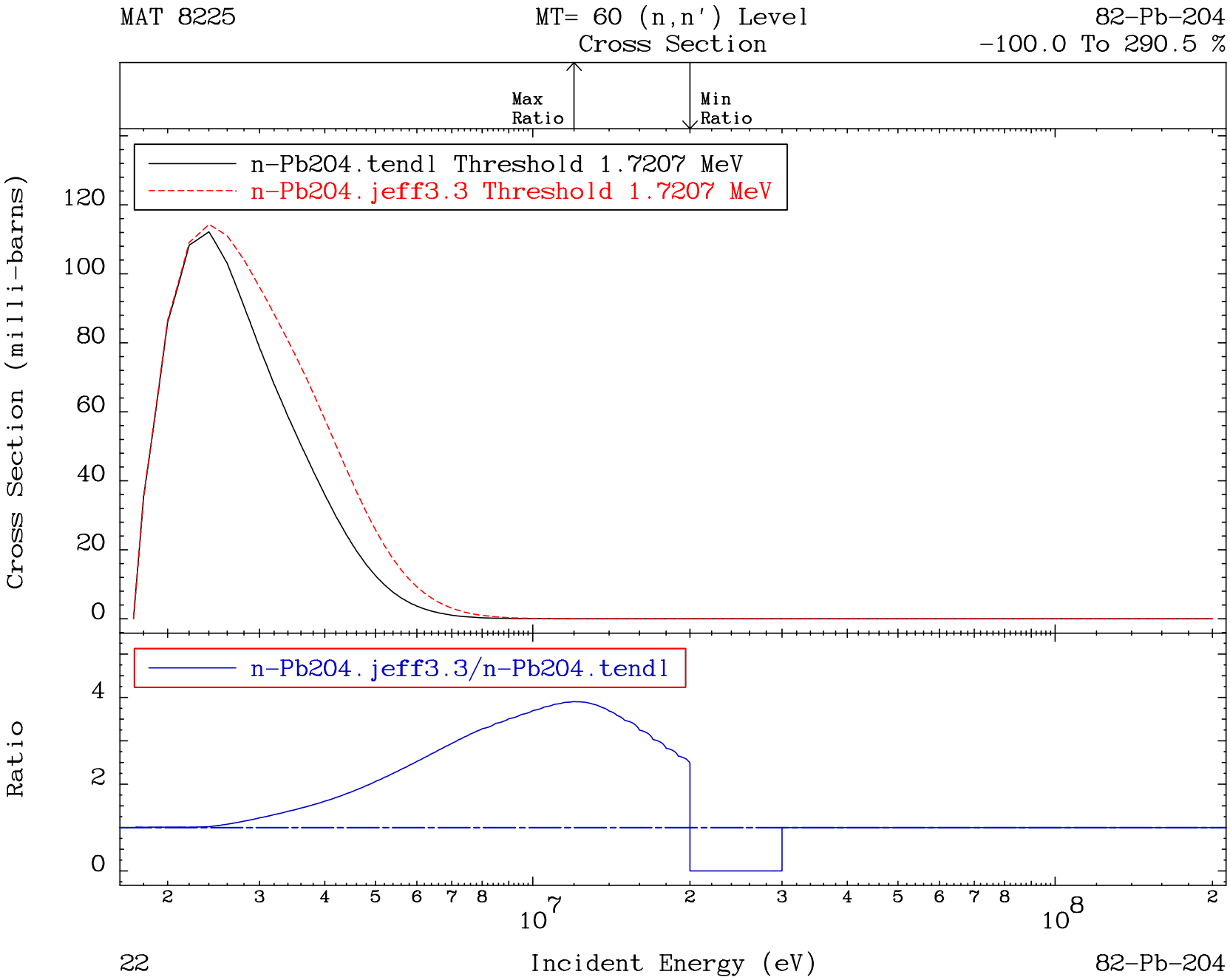

MAT 8225
MT= 55 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 289.7 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.5905 MeV
n-Pb204.jeff3.3 Threshold 1.5903 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
2
0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
17
Incident Energy (eV)
82-Pb-204

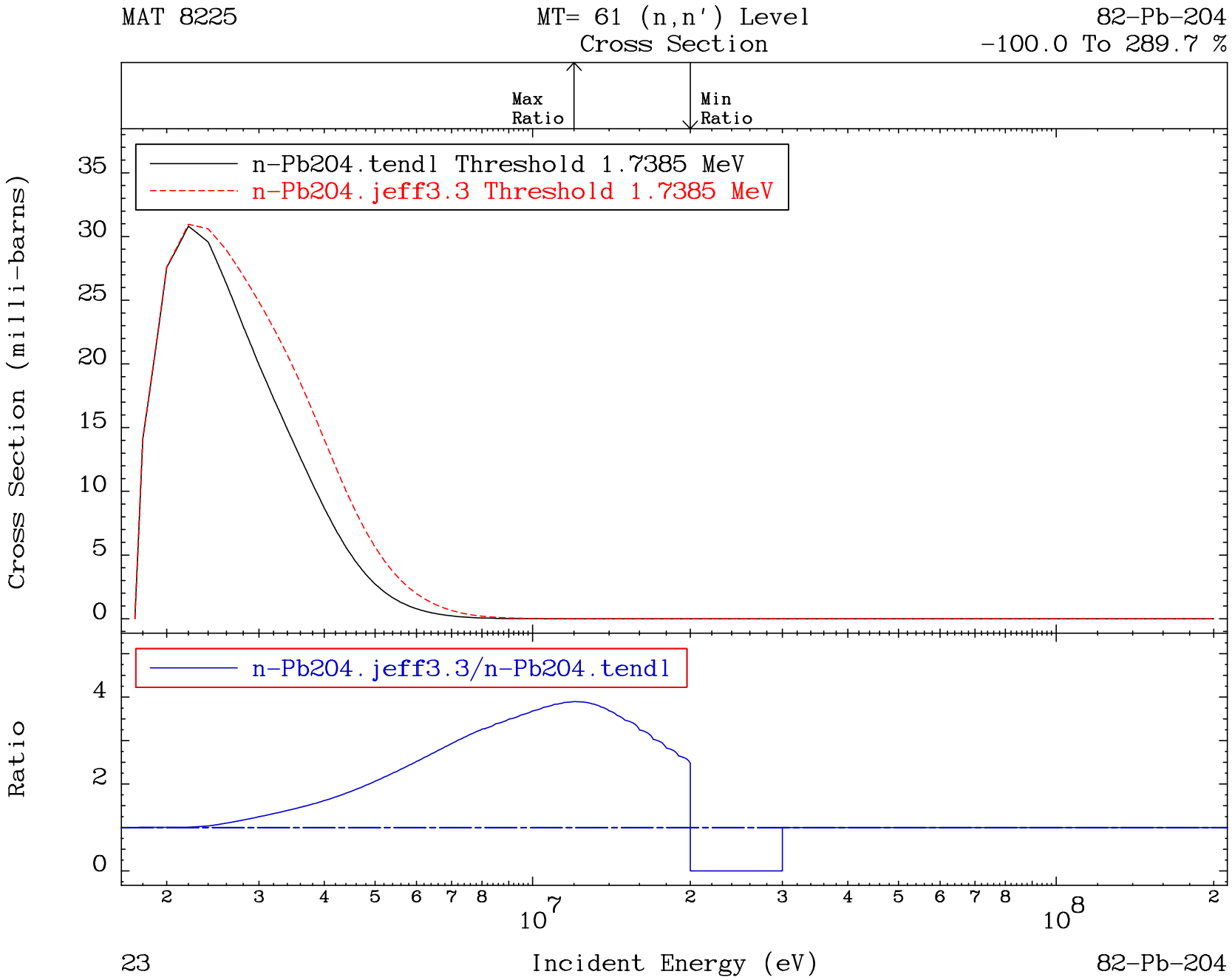

MAT 8225
MT= 56 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 341.5 %
Max
Ratio
Min
Ratio
n-Pb204.tendl Threshold 1.6017 MeV
n-Pb204.jeff3.3 Threshold 1.5906 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
2
0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
18
Incident Energy (eV)
82-Pb-204

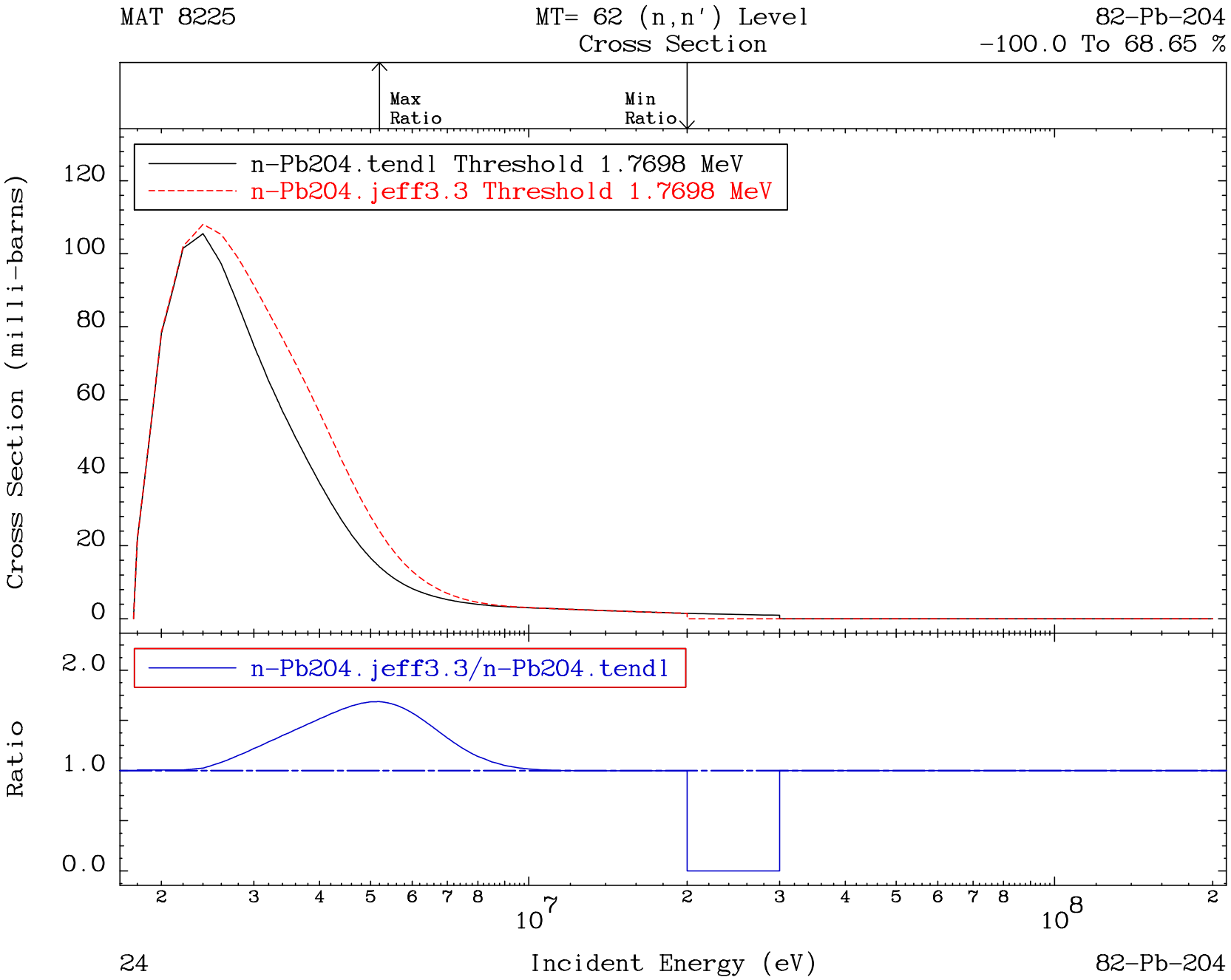

MAT 8225
MT= 57 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 290.5 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.6128 MeV
n-Pb204.jeff3.3 Threshold 1.6128 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
2
0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
19
Incident Energy (eV)
82-Pb-204

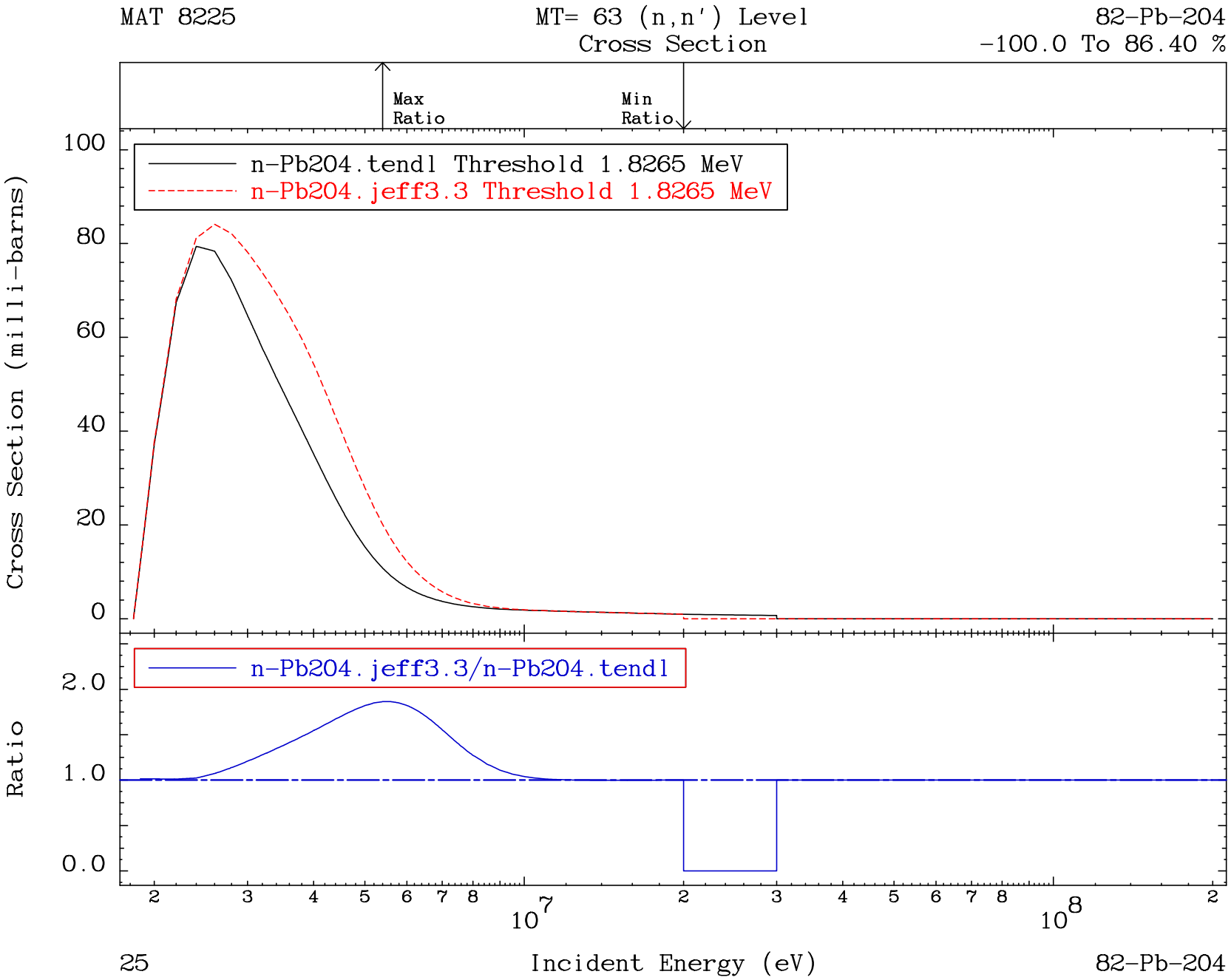

MAT 8225
MT= 58 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 68.60 %
Max
Ratio
Min
Ratio
n-Pb204.tendl Threshold 1.6735 MeV
n-Pb204.jeff3.3 Threshold 1.6735 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
2.0
1.0
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
20
Incident Energy (eV)
82-Pb-204

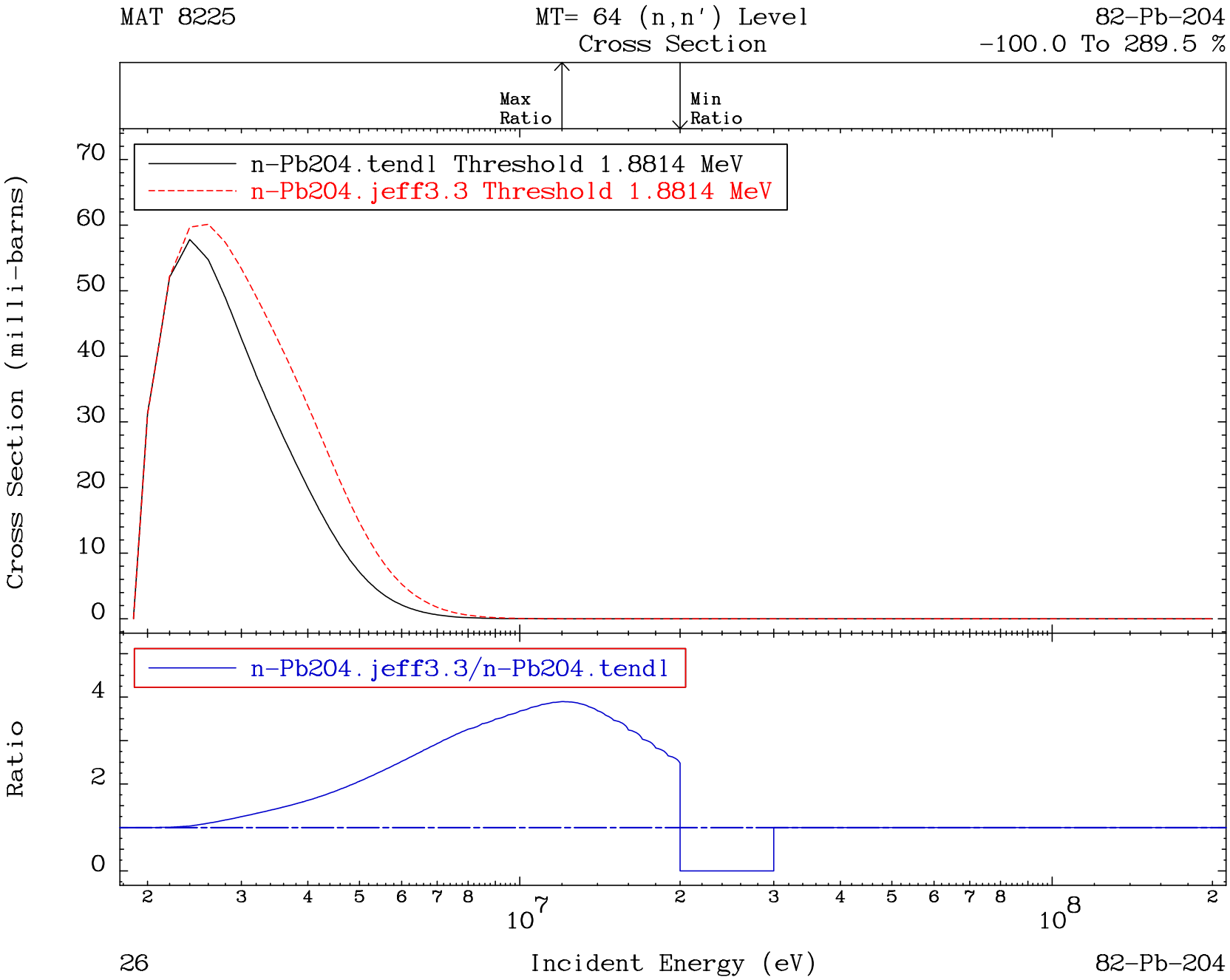

MAT 8225
MT= 59 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 289.6 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.6895 MeV
n-Pb204.jeff3.3 Threshold 1.6895 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
82-Pb-204

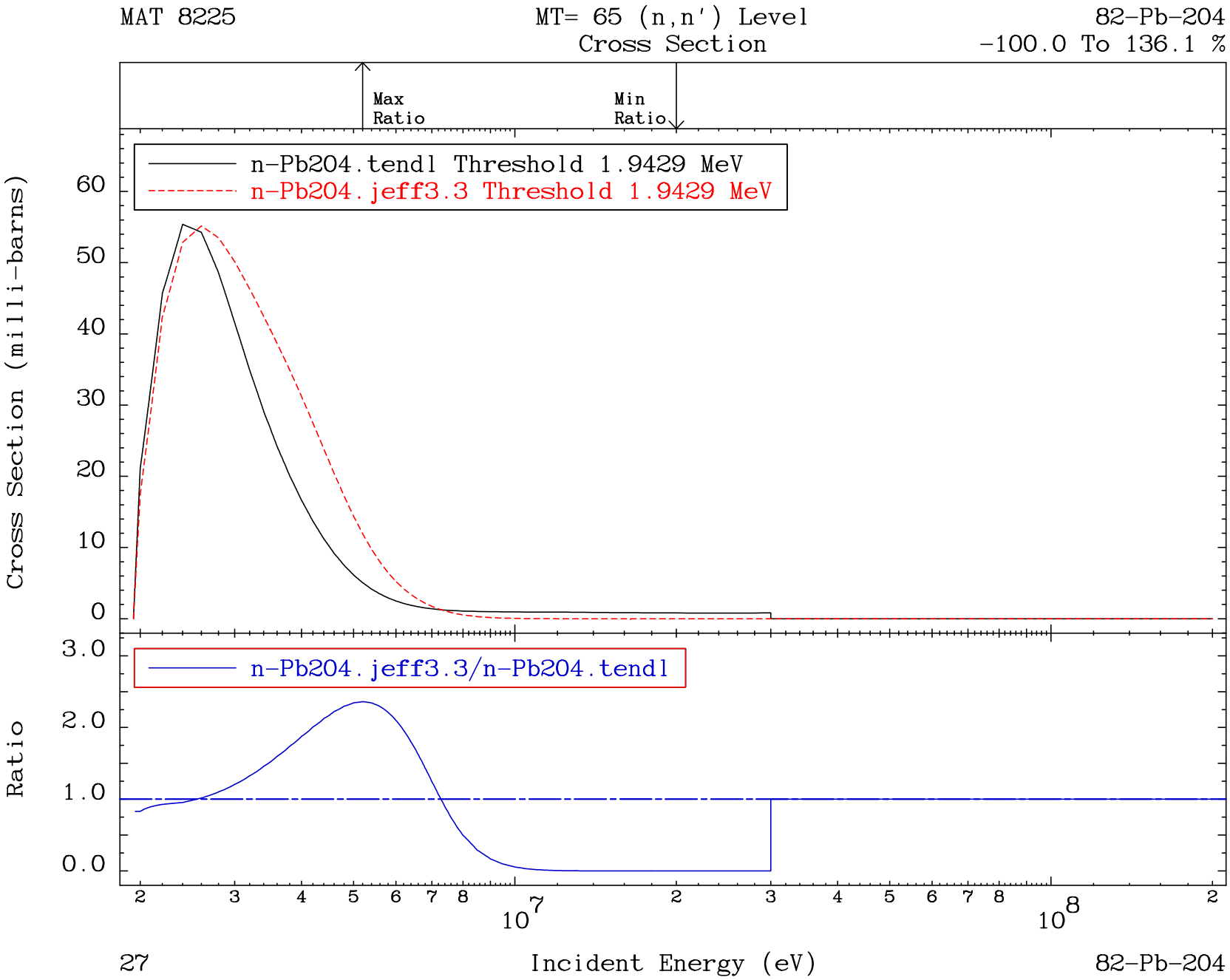

MAT 8225
MT= 60 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 290.5 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.7207 MeV
n-Pb204.jeff3.3 Threshold 1.7207 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
2
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
82-Pb-204

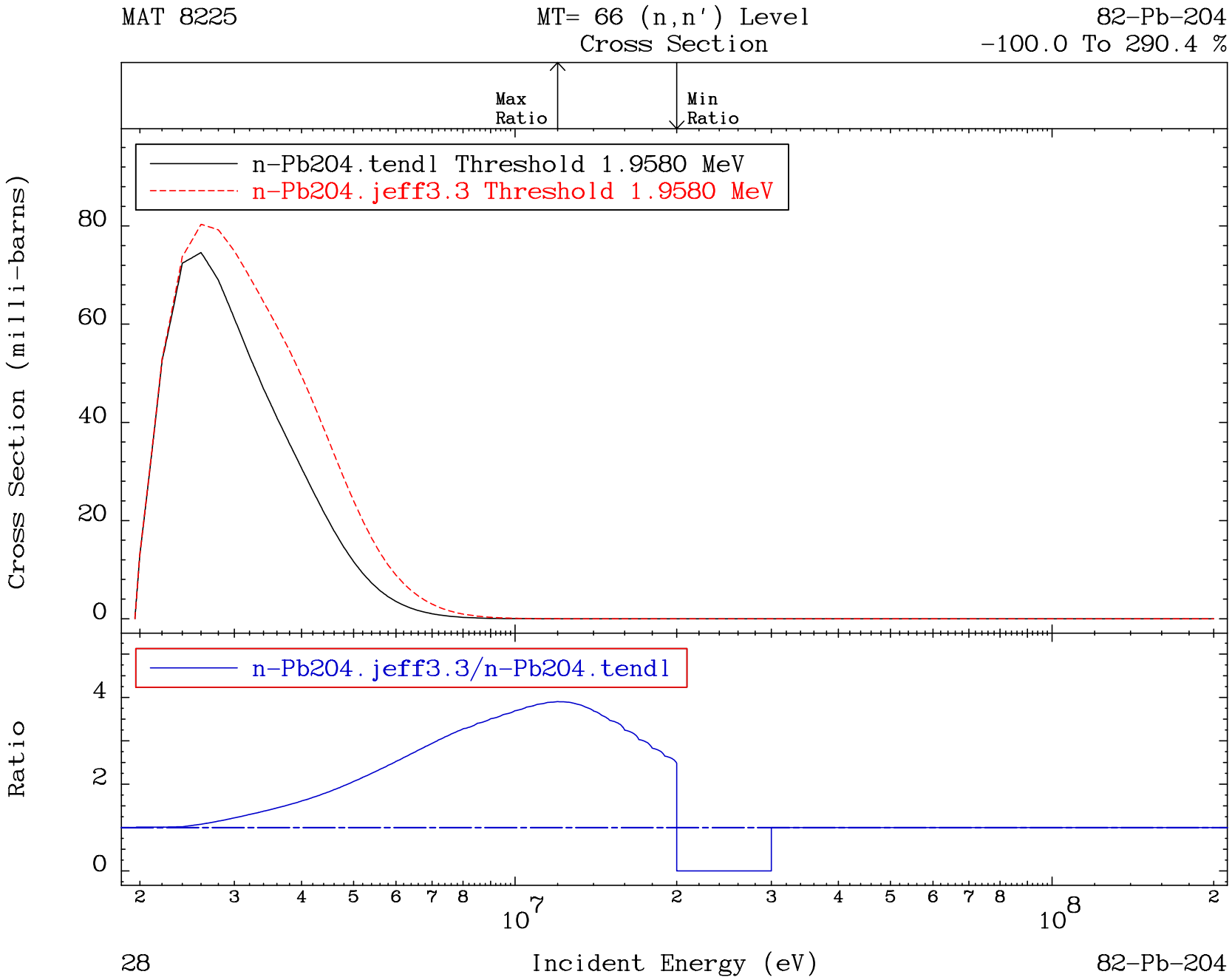

MAT 8225
MT= 61 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 289.7 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.7385 MeV
n-Pb204.jeff3.3 Threshold 1.7385 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
2
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
82-Pb-204

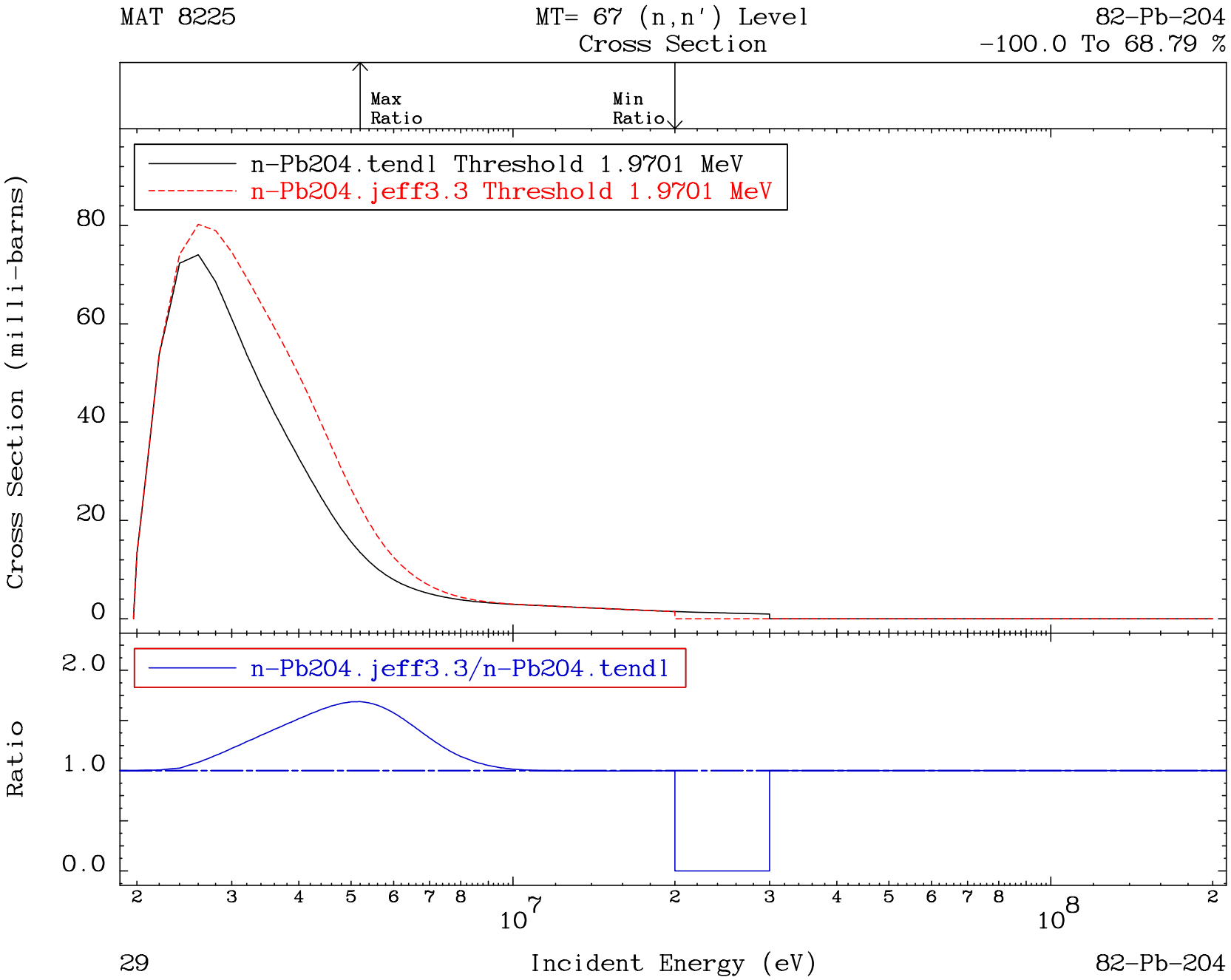

MAT 8225
MT= 62 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 68.65 %
Max
Ratio
Min
Ratio
n-Pb204.tendl Threshold 1.7698 MeV
n-Pb204.jeff3.3 Threshold 1.7698 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
2.0
1.0
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
82-Pb-204

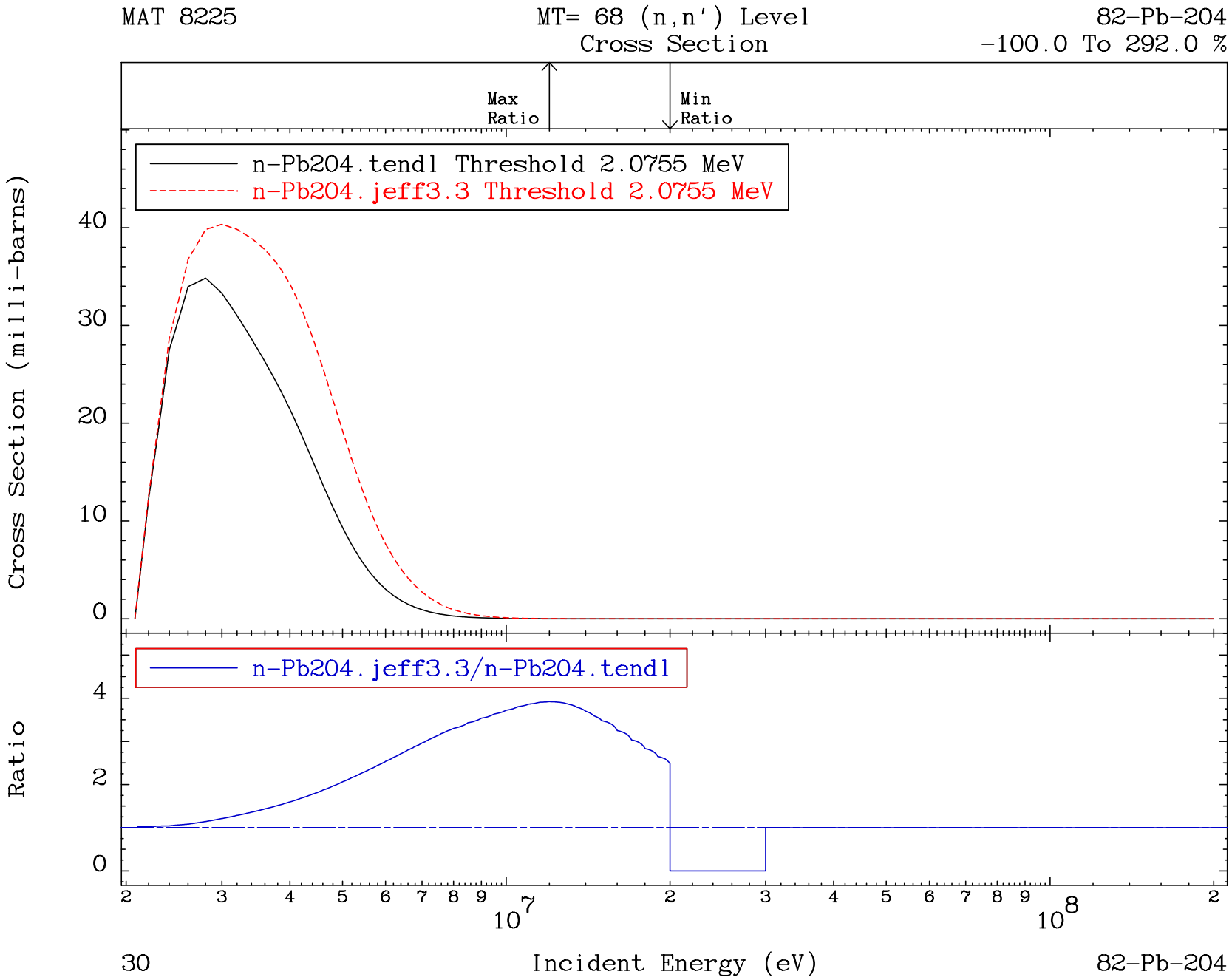

MAT 8225
MT= 63 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 86.40 %
Max
Ratio
Min
Ratio
n-Pb204.tendl Threshold 1.8265 MeV
n-Pb204.jeff3.3 Threshold 1.8265 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
2.0
1.0
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
25
Incident Energy (eV)
82-Pb-204

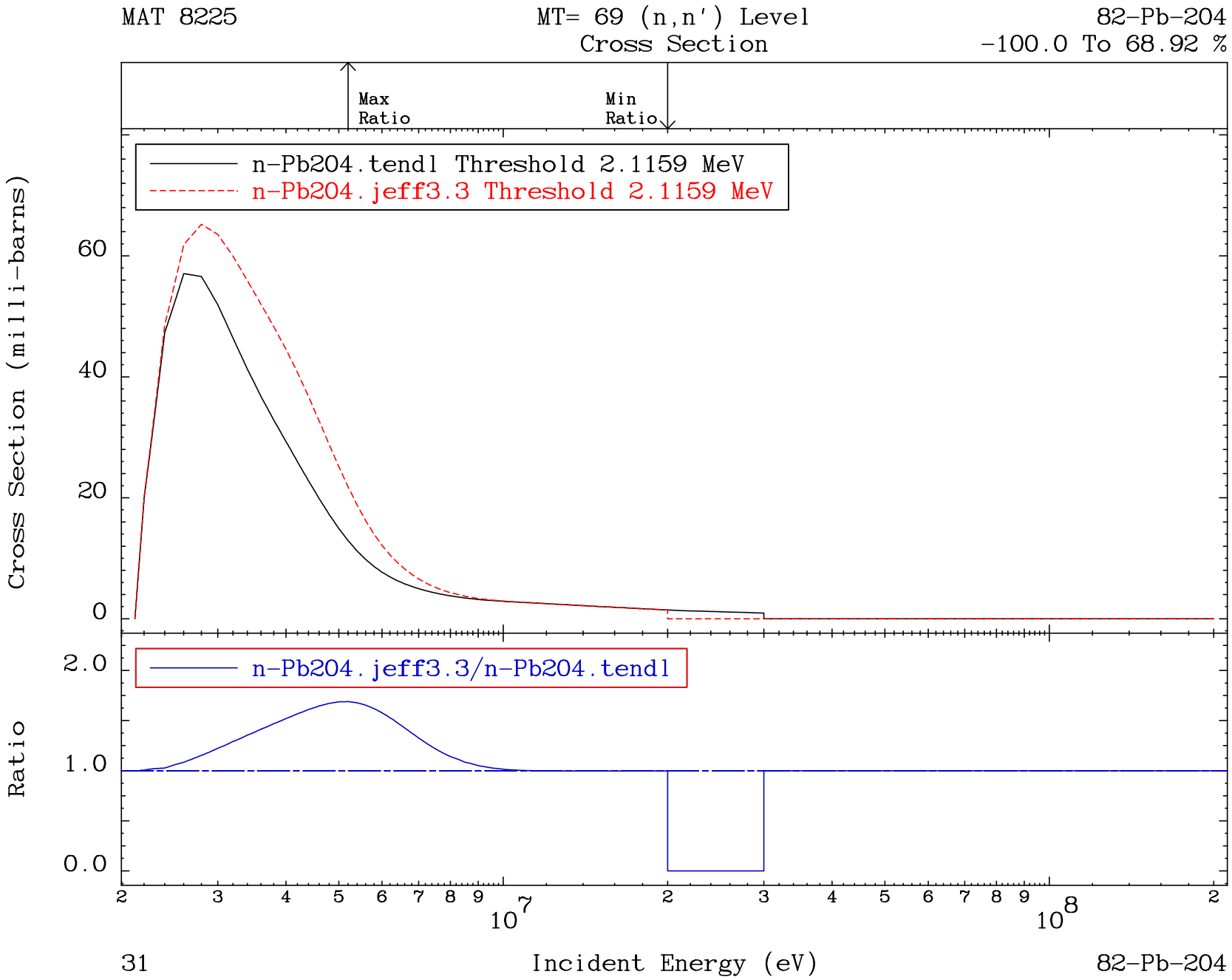

MAT 8225
MT= 64 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 289.5 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.8814 MeV
n-Pb204.jeff3.3 Threshold 1.8814 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
2
0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
26
Incident Energy (eV)
82-Pb-204

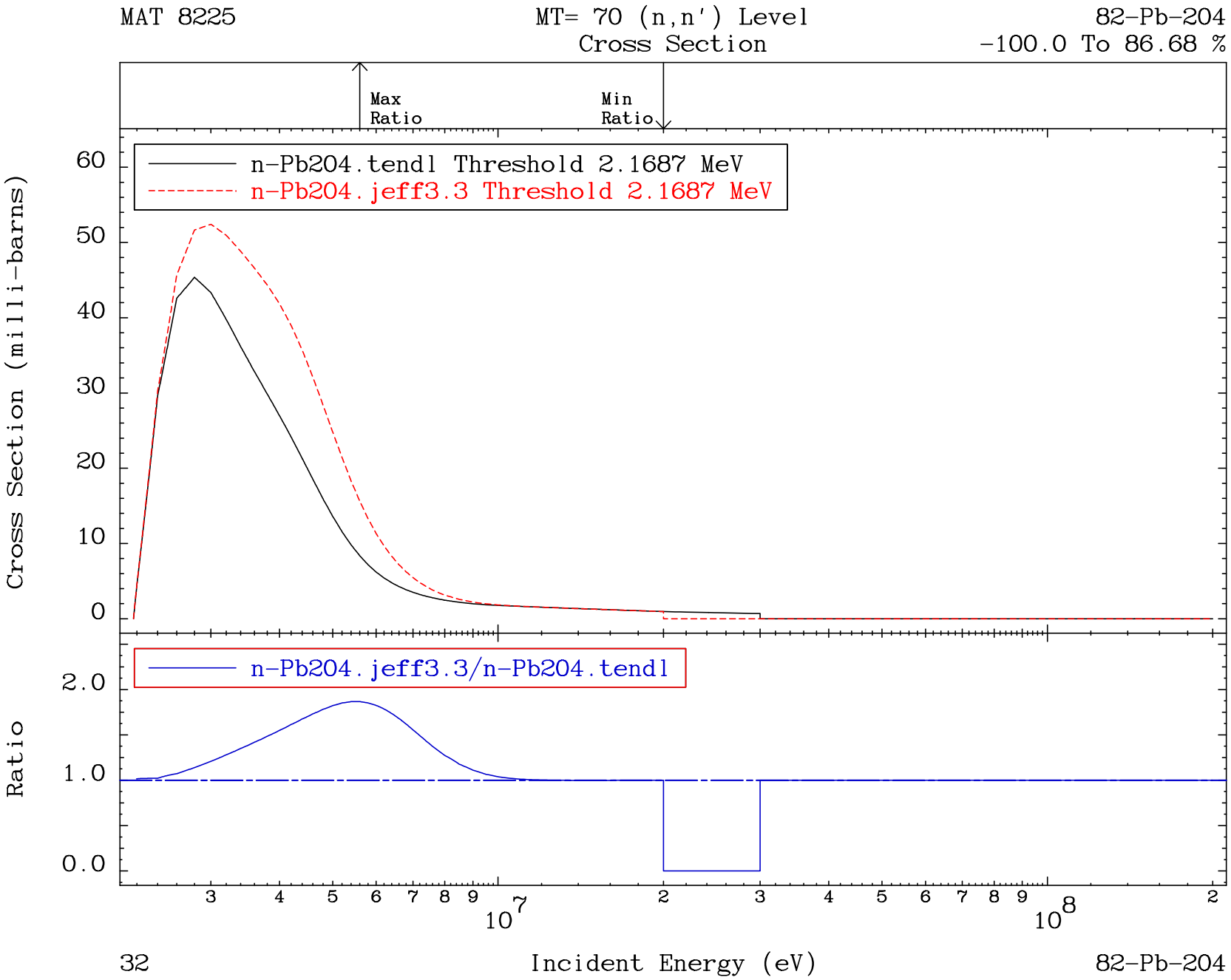

MAT 8225
MT= 65 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 136.1 %
Max
Ratio
Min
Ratio
n-Pb204.tendl Threshold 1.9429 MeV
n-Pb204.jeff3.3 Threshold 1.9429 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
3.0
2.0
1.0
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
27
Incident Energy (eV)
82-Pb-204

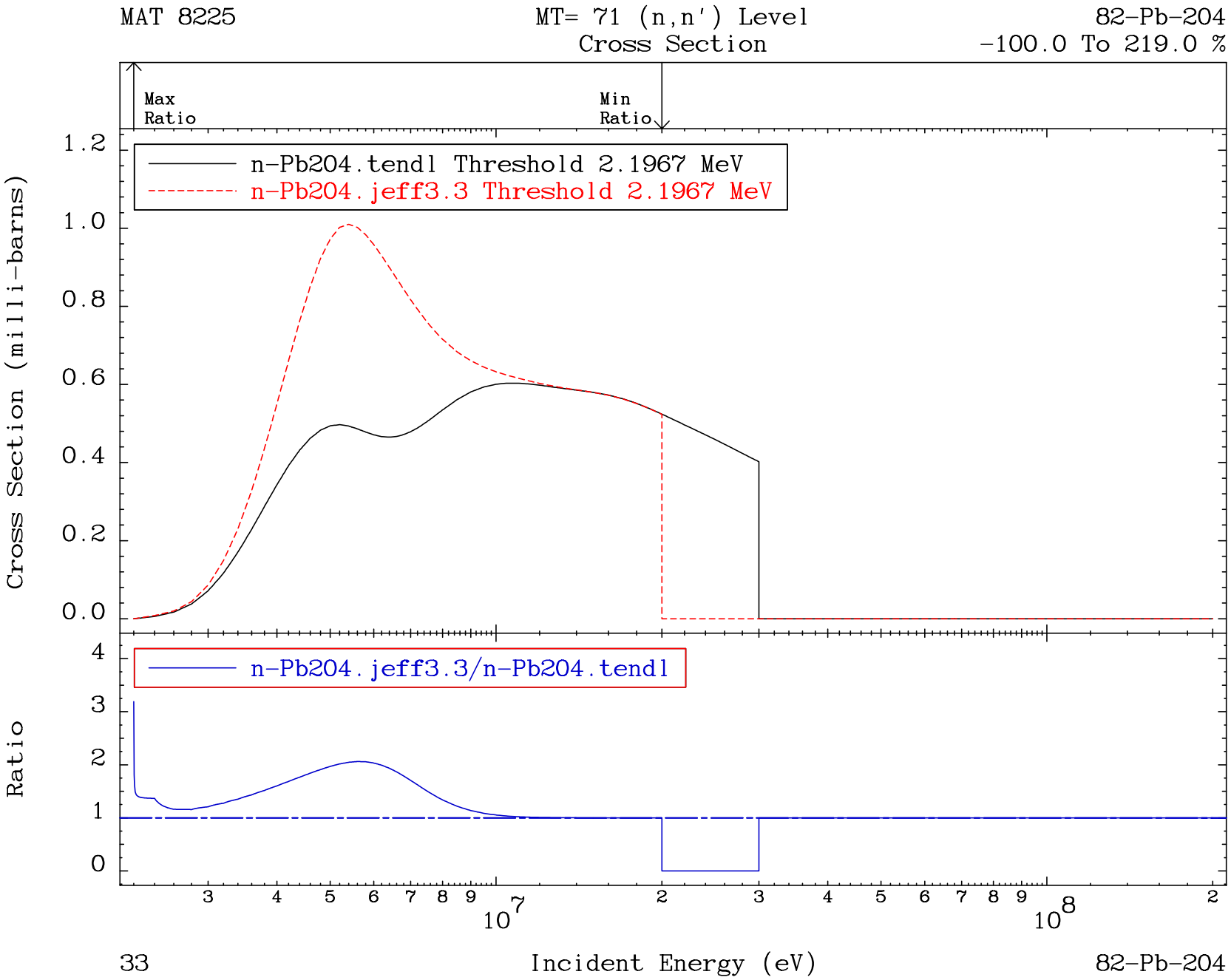

MAT 8225
MT= 66 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 290.4 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.9580 MeV
n-Pb204.jeff3.3 Threshold 1.9580 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
2
0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
28
Incident Energy (eV)
82-Pb-204

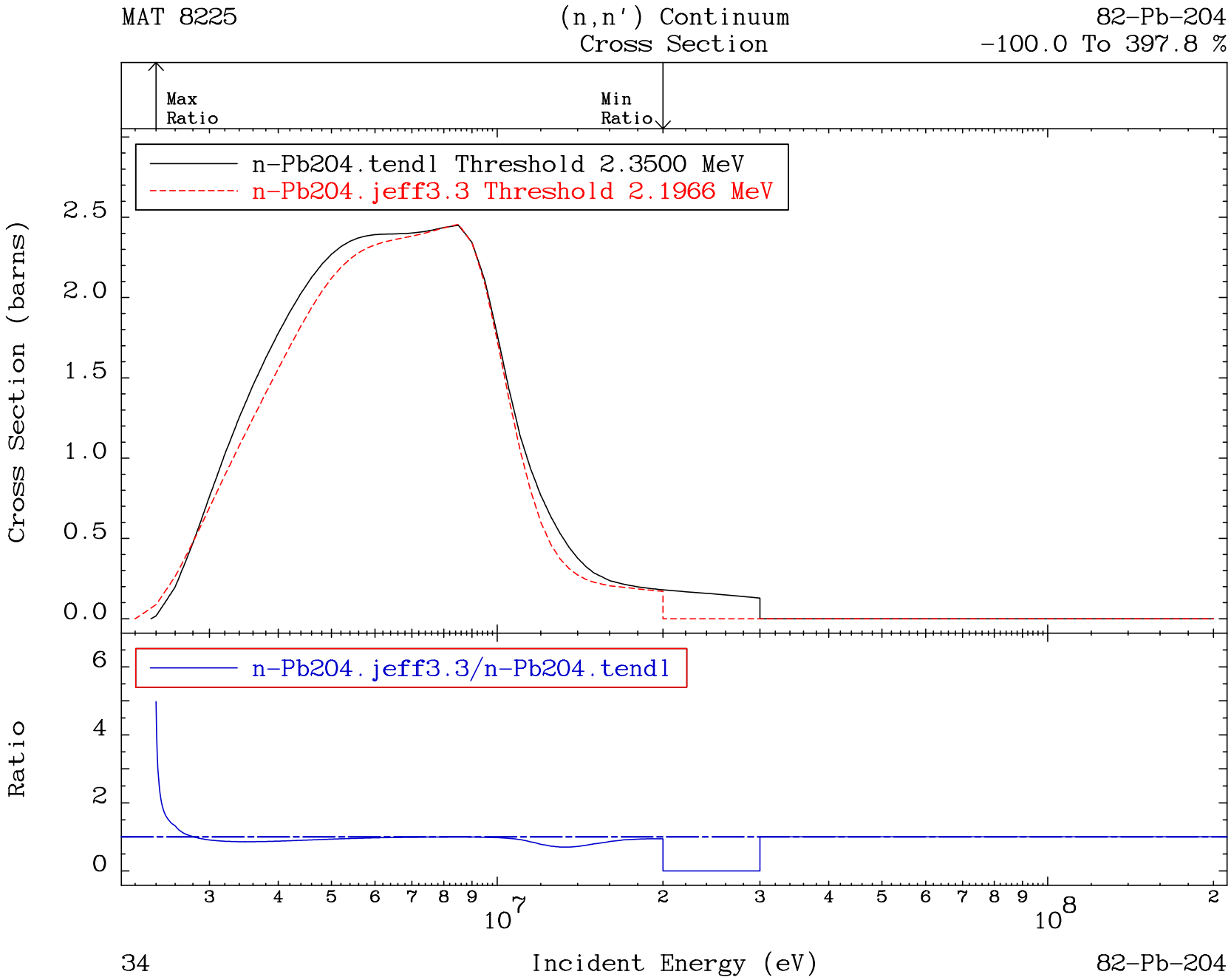

MAT 8225
MT= 67 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 68.79 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.9701 MeV
n-Pb204.jeff3.3 Threshold 1.9701 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
82-Pb-204

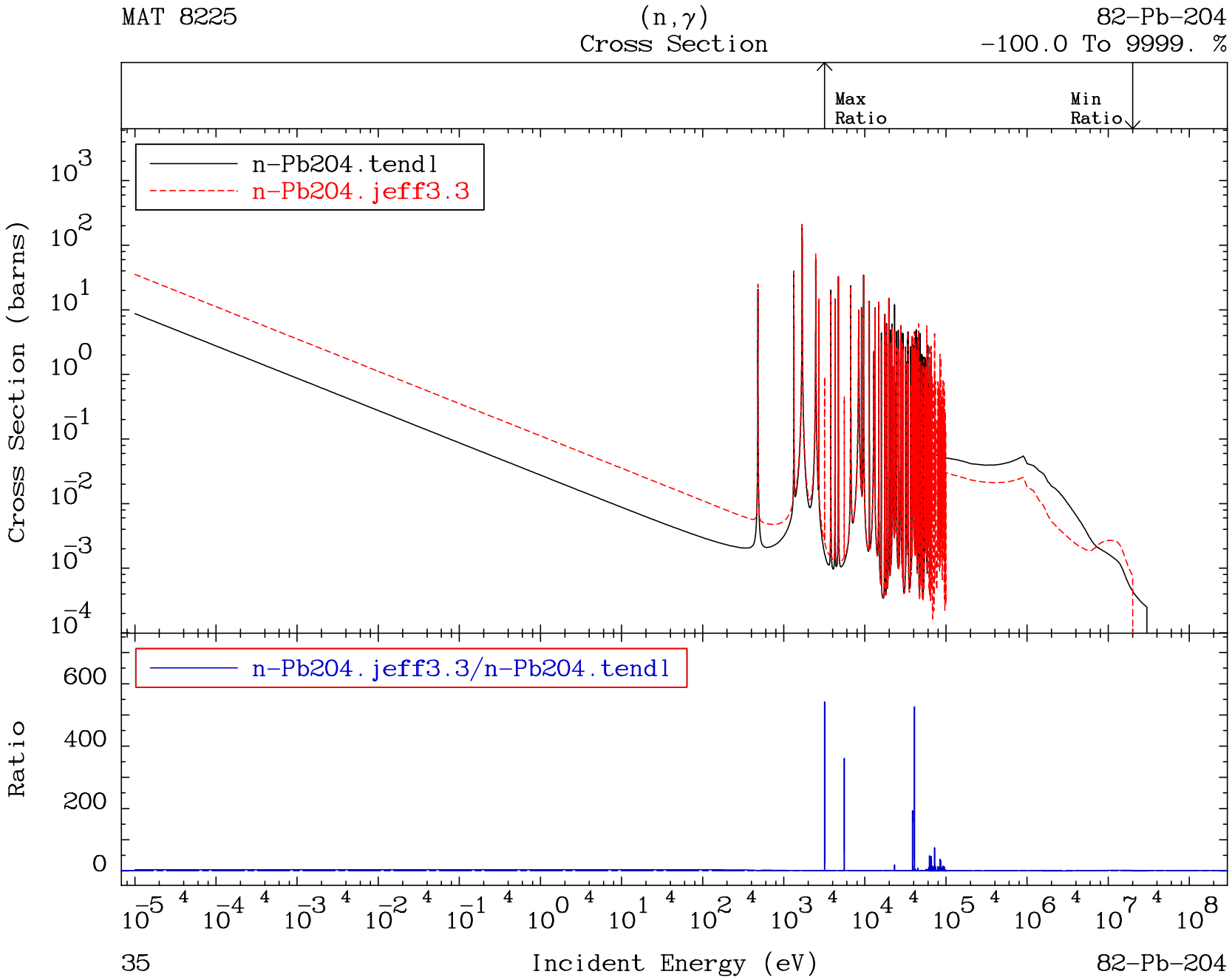

MAT 8225
MT= 68 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 292.0 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 2.0755 MeV
n-Pb204.jeff3.3 Threshold 2.0755 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
2
0
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
82-Pb-204

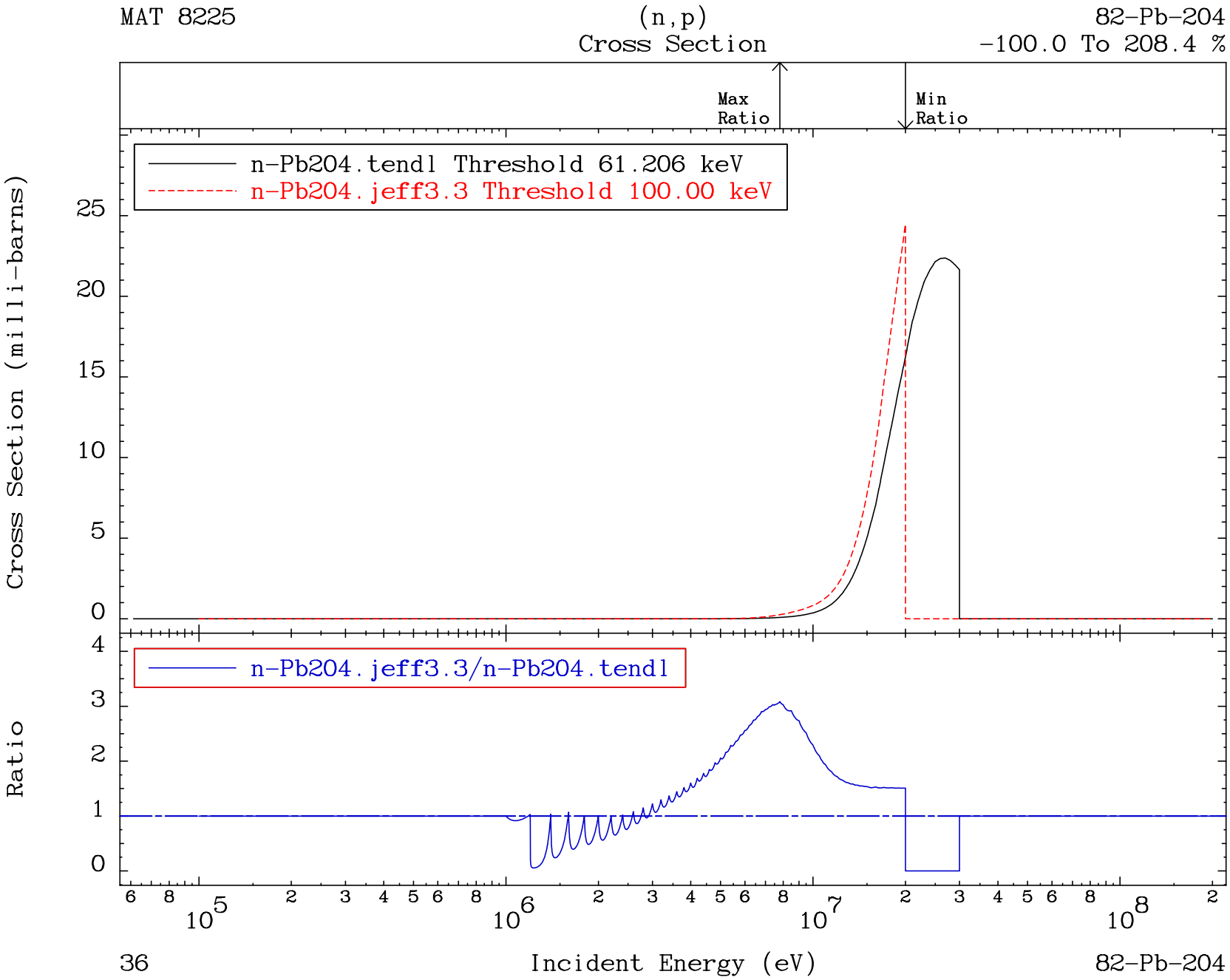

MAT 8225
MT= 69 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 68.92 %
Max
Ratio
Min
Ratio
n-Pb204.tendl Threshold 2.1159 MeV
n-Pb204.jeff3.3 Threshold 2.1159 MeV
Cross Section (milli-barns)
60
40
20
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
31
Incident Energy (eV)
82-Pb-204

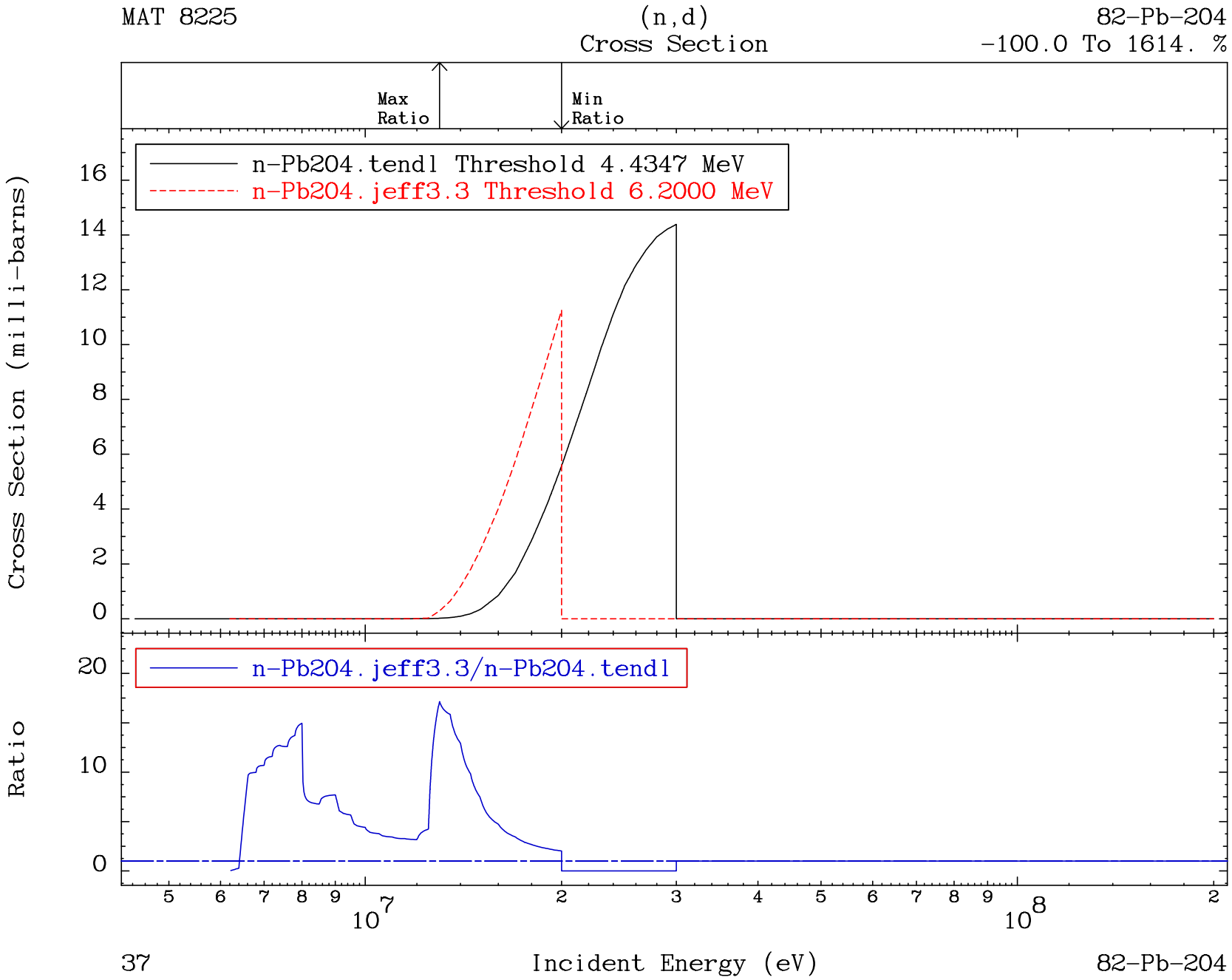

MAT 8225
MT= 70 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 86.68 %
Max
Ratio
Min
Ratio
n-Pb204.tendl Threshold 2.1687 MeV
n-Pb204.jeff3.3 Threshold 2.1687 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
2.0
1.0
0.0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
32
Incident Energy (eV)
82-Pb-204

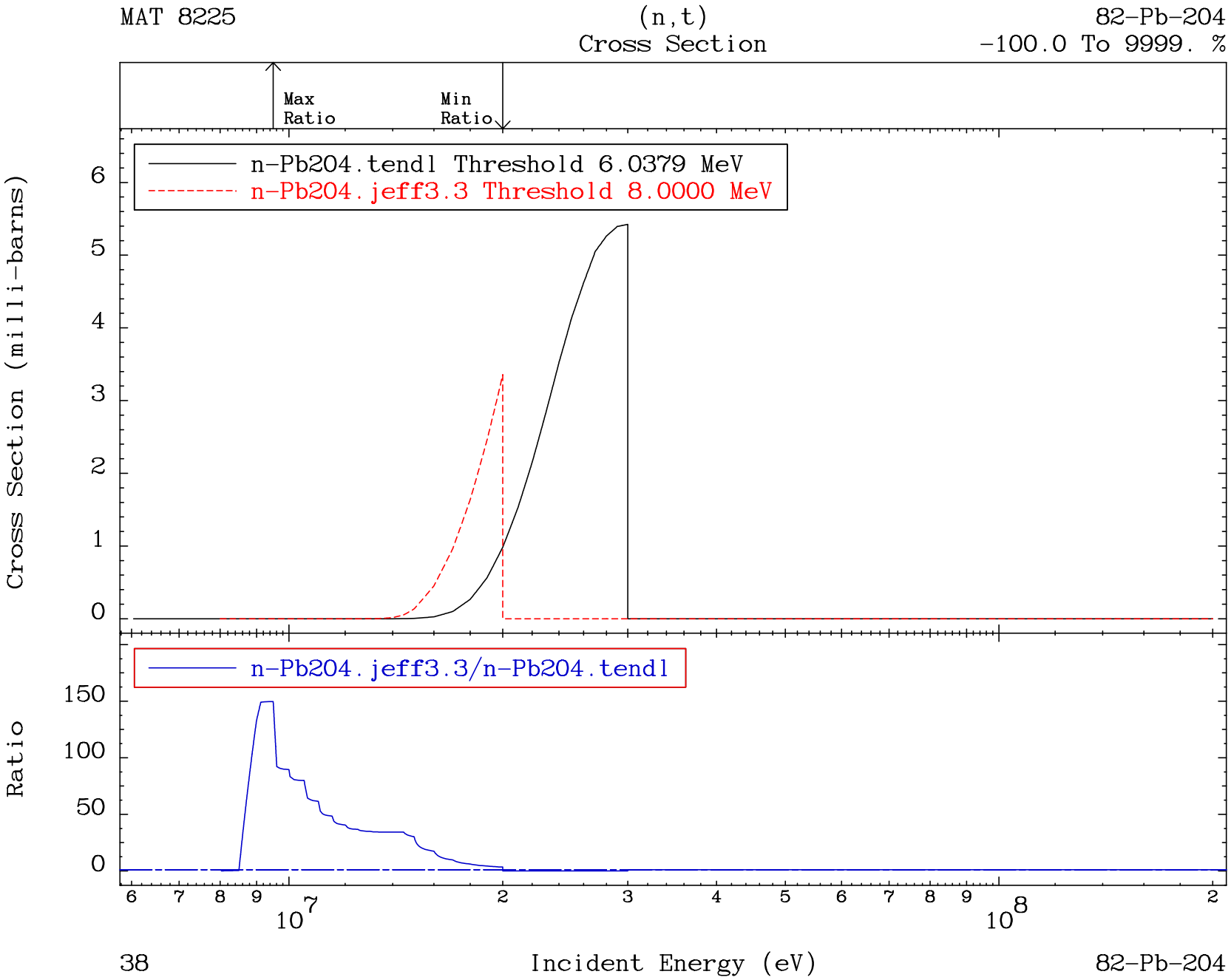

MAT 8225
MT= 71 (n,n') Level
Cross Section
82-Pb-204
-100.0 To 219.0 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 2.1967 MeV
n-Pb204.jeff3.3 Threshold 2.1967 MeV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
3
2
1
0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
82-Pb-204

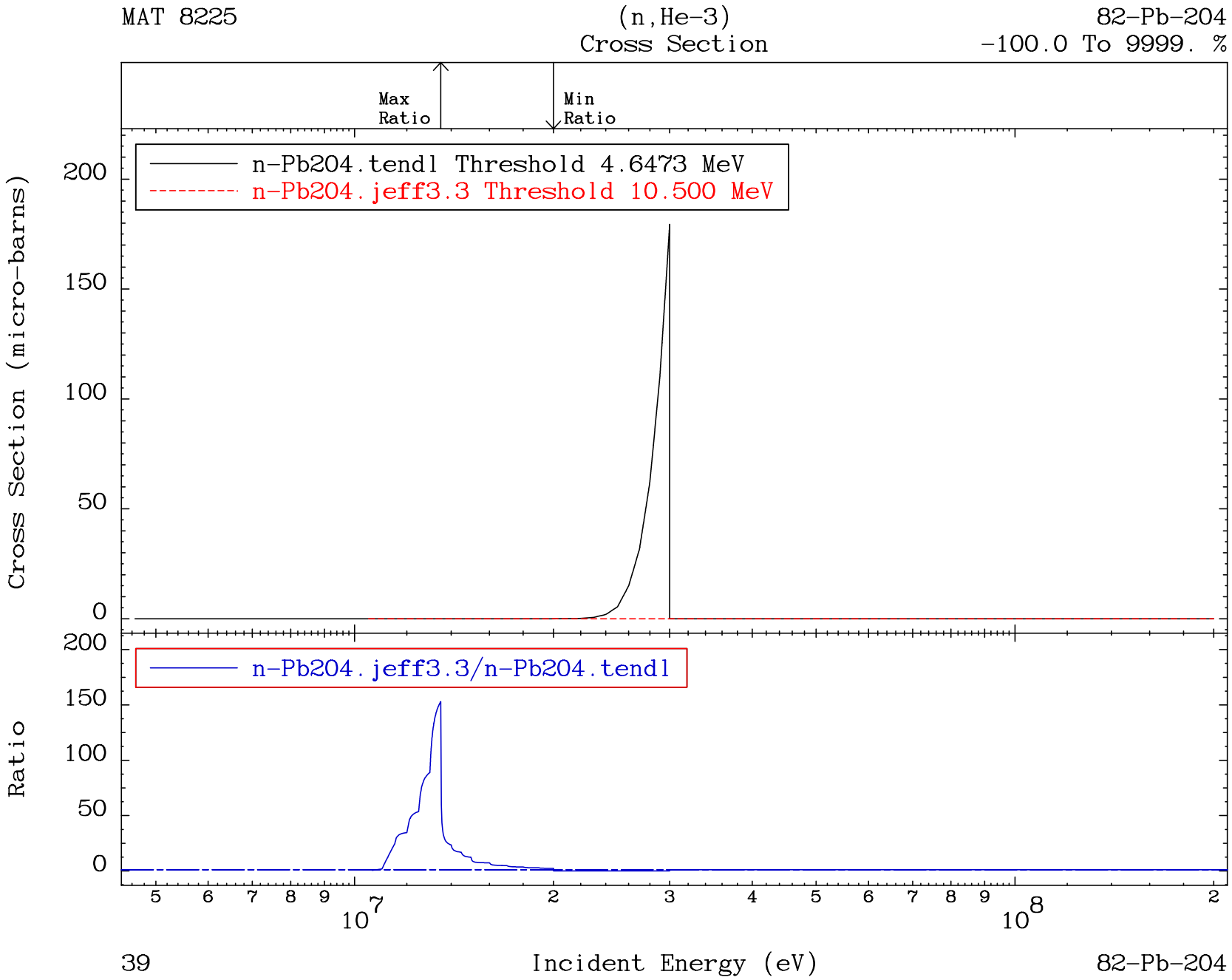

MAT 8225
(n,n') Continuum
Cross Section
82-Pb-204
-100.0 To 397.8 %
Max
Ratio
Min
Ratio
n-Pb204.tendl Threshold 2.3500 MeV
n-Pb204.jeff3.3 Threshold 2.1966 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
6
4
2
0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
34
Incident Energy (eV)
82-Pb-204

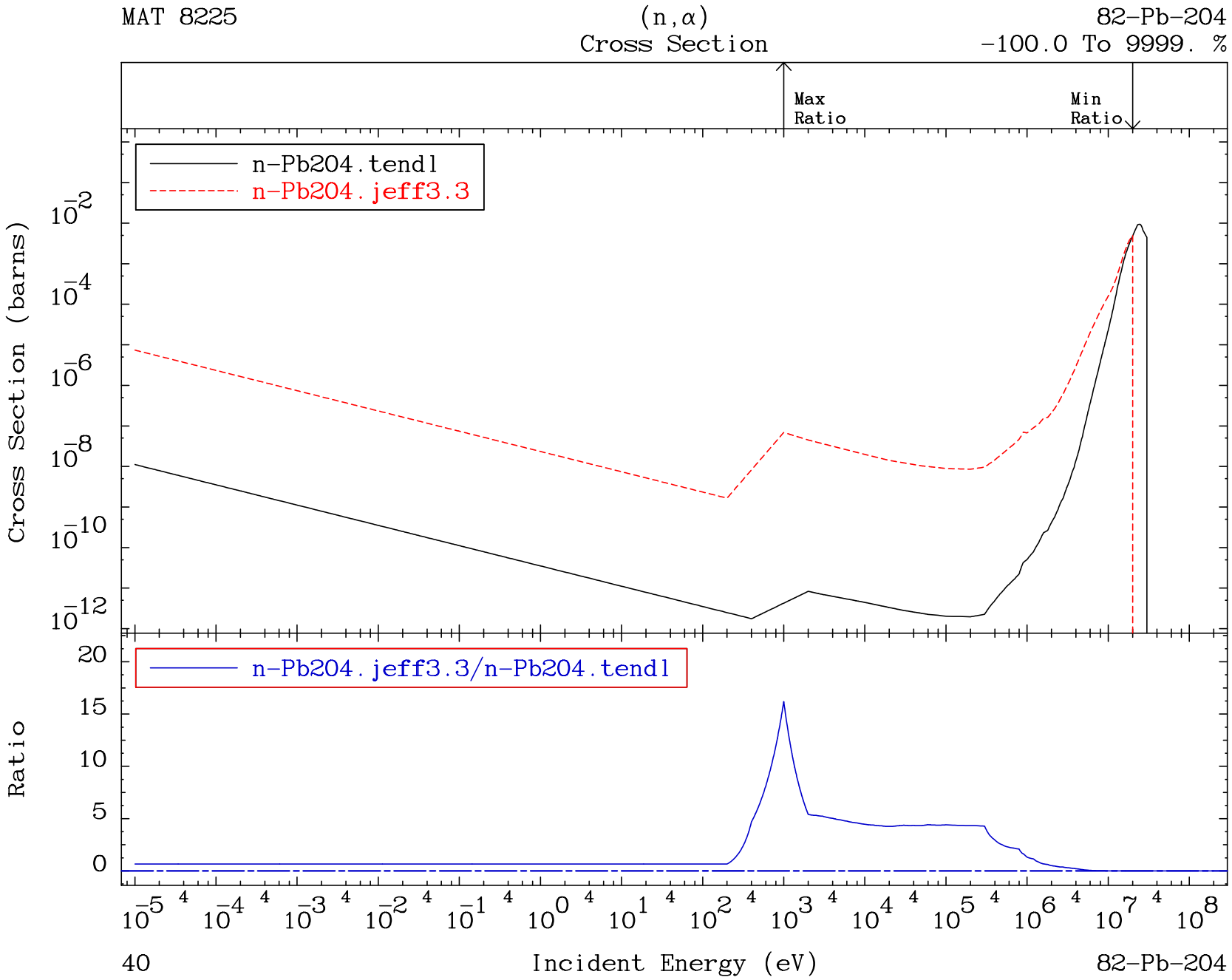

MAT 8225
(n,γ)
Cross Section
82-Pb-204
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
35
82-Pb-204

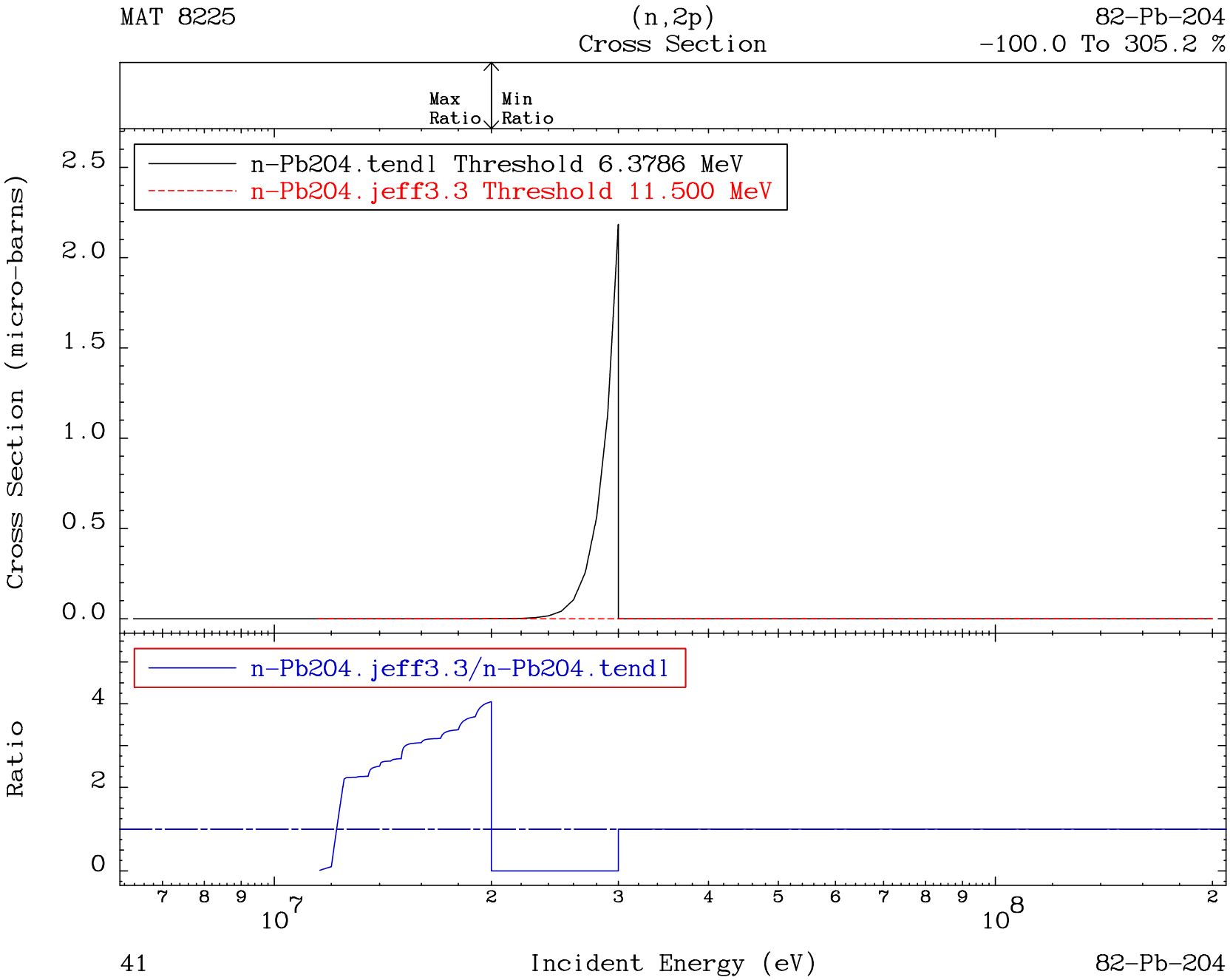

MAT 8225
(n,p)
Cross Section
82-Pb-204
-100.0 To 208.4 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 61.206 keV
n-Pb204.jeff3.3 Threshold 100.00 keV
Cross Section (milli-barns)
0
5
10
15
20
25
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
0
1
2
3
4
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
36
82-Pb-204

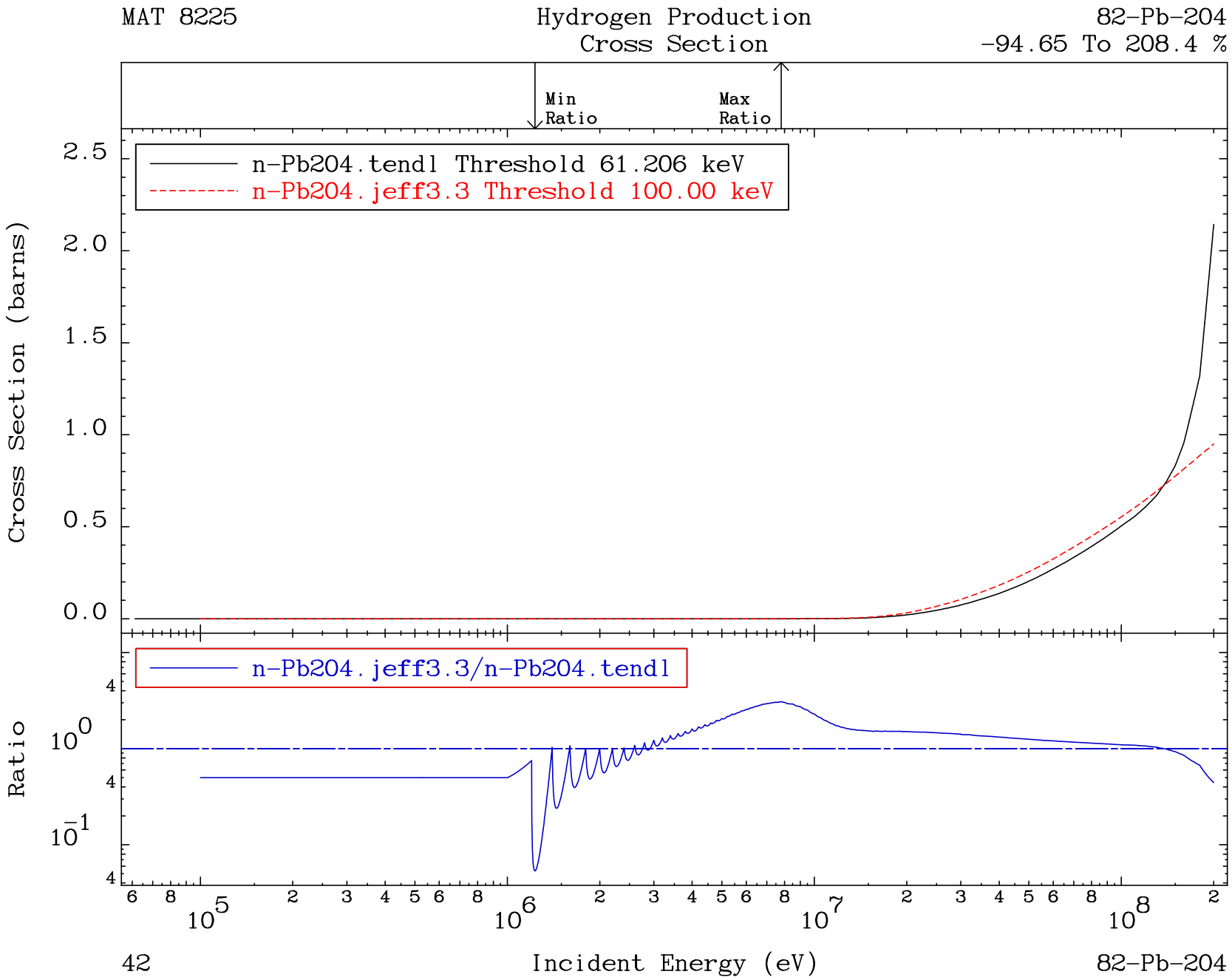

MAT 8225
(n,d)
Cross Section
82-Pb-204
-100.0 To 1614. %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 4.4347 MeV
n-Pb204.jeff3.3 Threshold 6.2000 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
20
10
0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
82-Pb-204

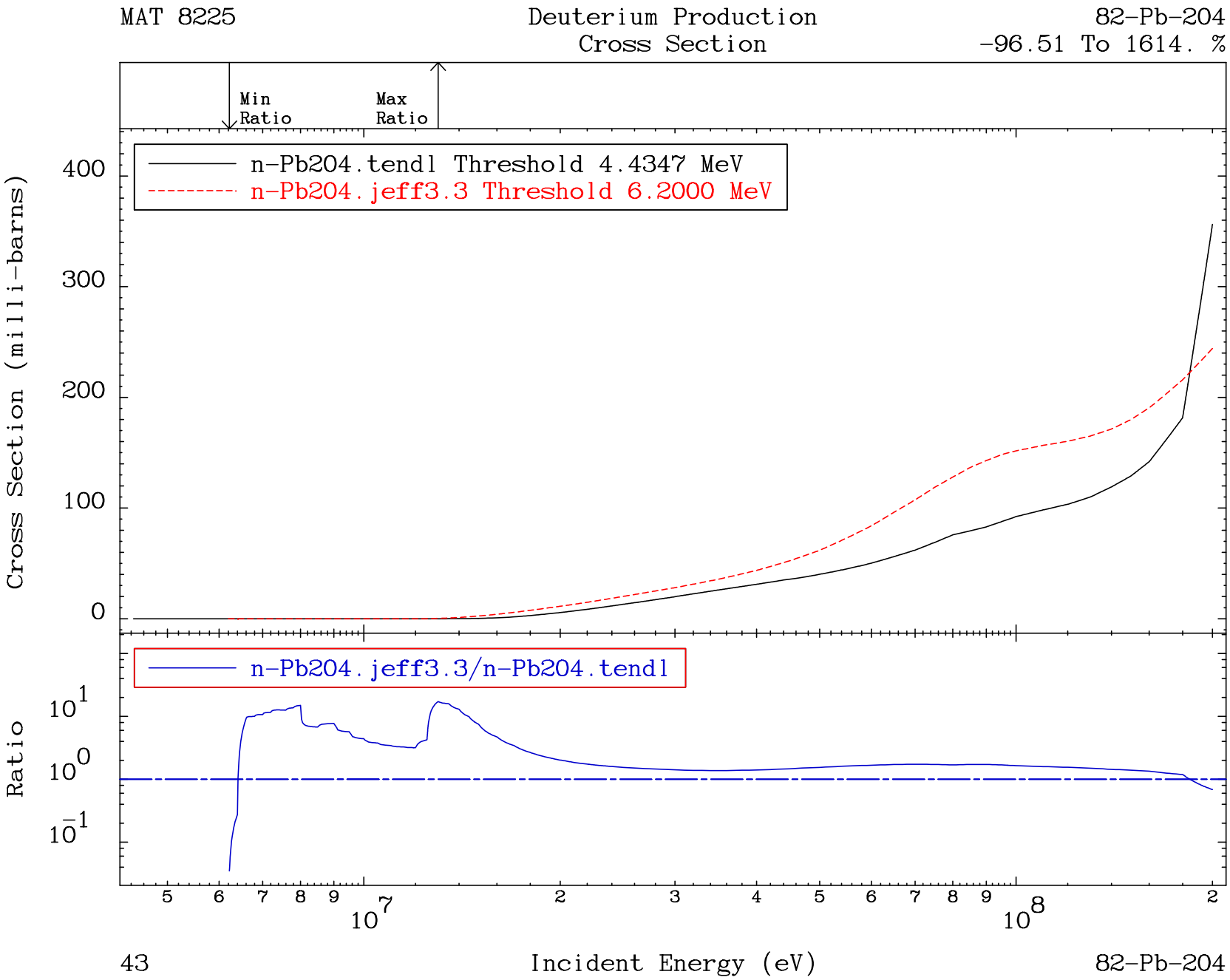

MAT 8225
(n,t)
Cross Section
82-Pb-204
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 6.0379 MeV
n-Pb204.jeff3.3 Threshold 8.0000 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
0
50
100
150
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
38
Incident Energy (eV)
82-Pb-204

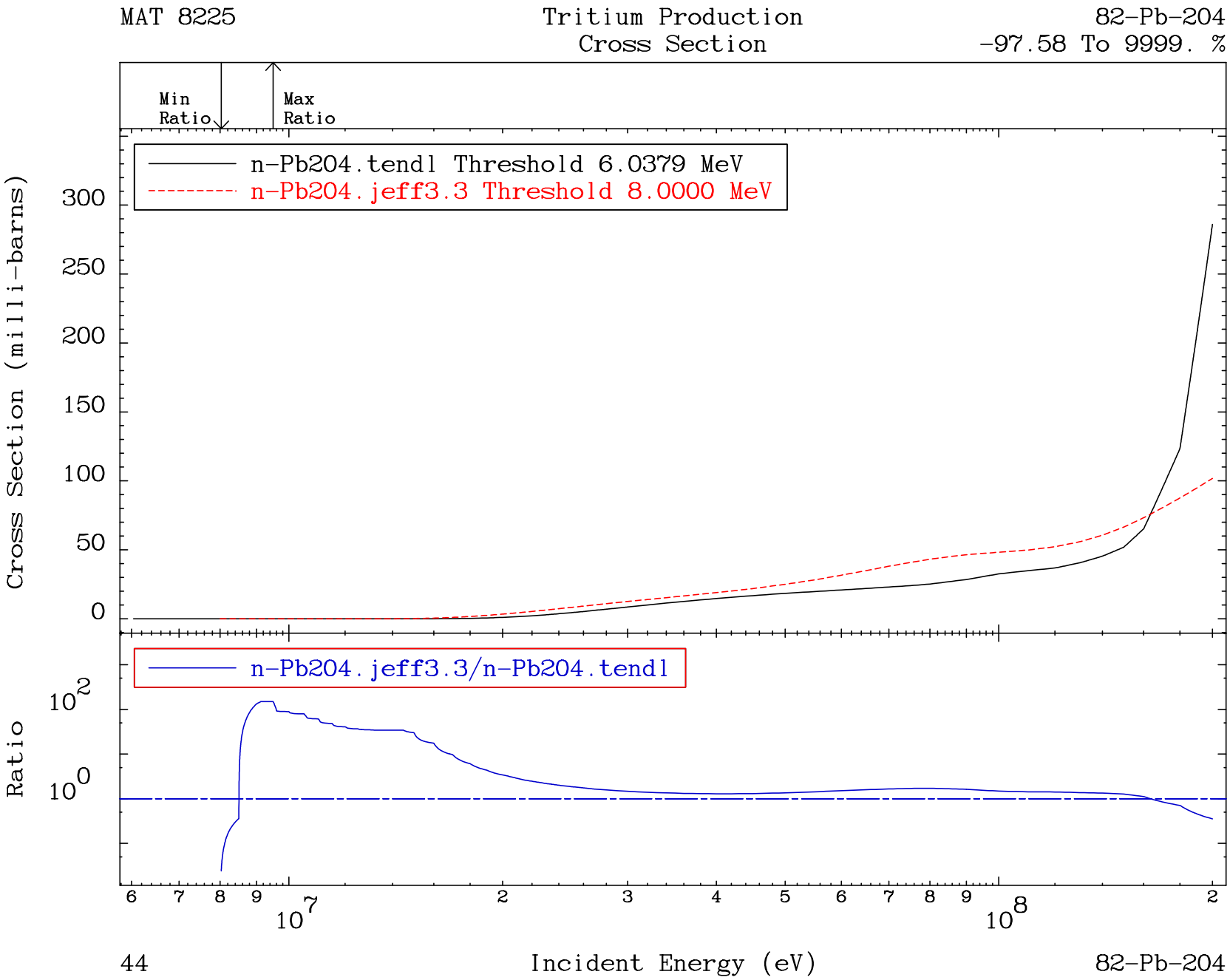

MAT 8225
(n,He-3)
Cross Section
82-Pb-204
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 4.6473 MeV
n-Pb204.jeff3.3 Threshold 10.500 MeV
Cross Section (micro-barns)
200
150
100
50
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
200
150
100
50
0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
82-Pb-204

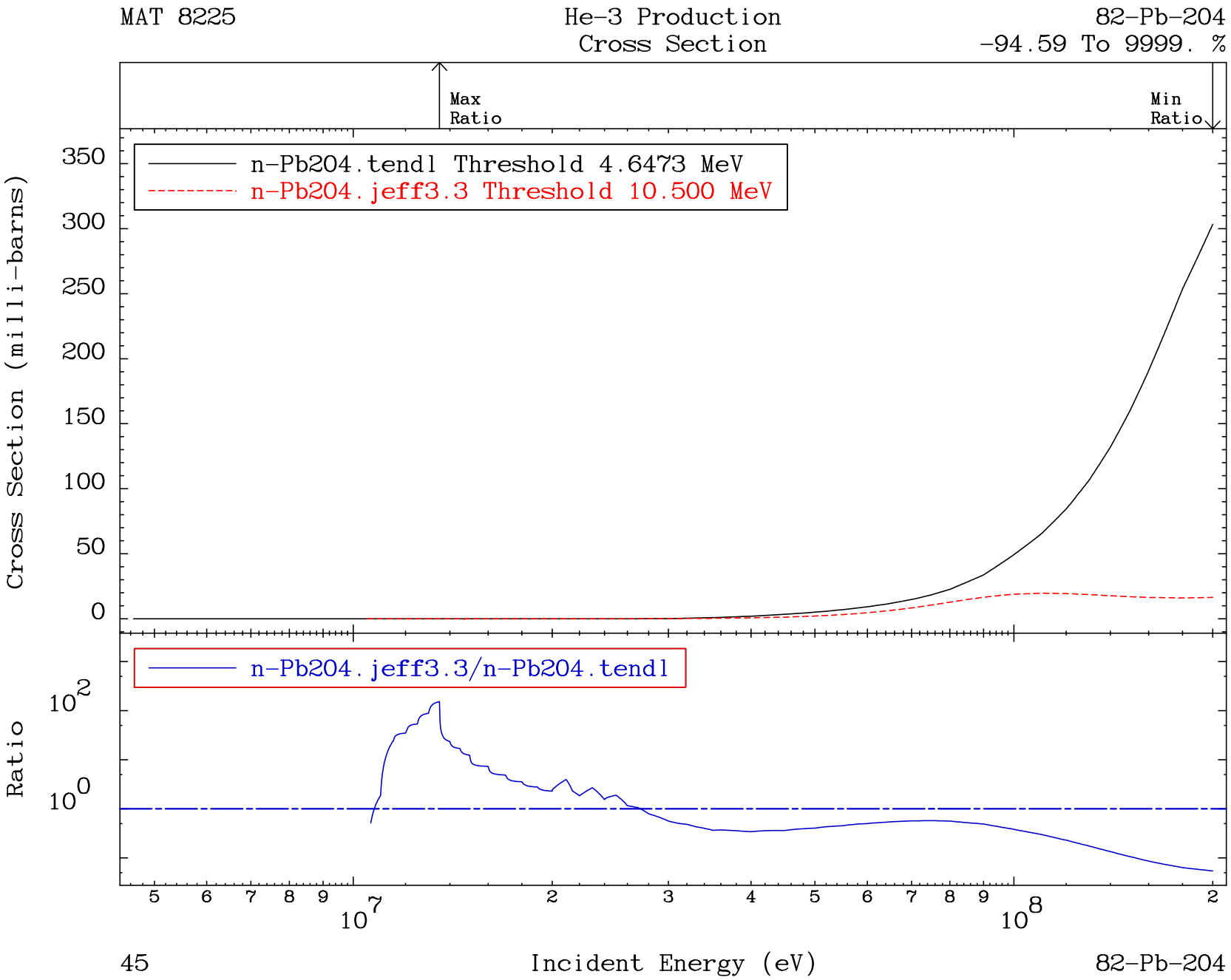

MAT 8225
(n,α)
Cross Section
82-Pb-204
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
40
82-Pb-204

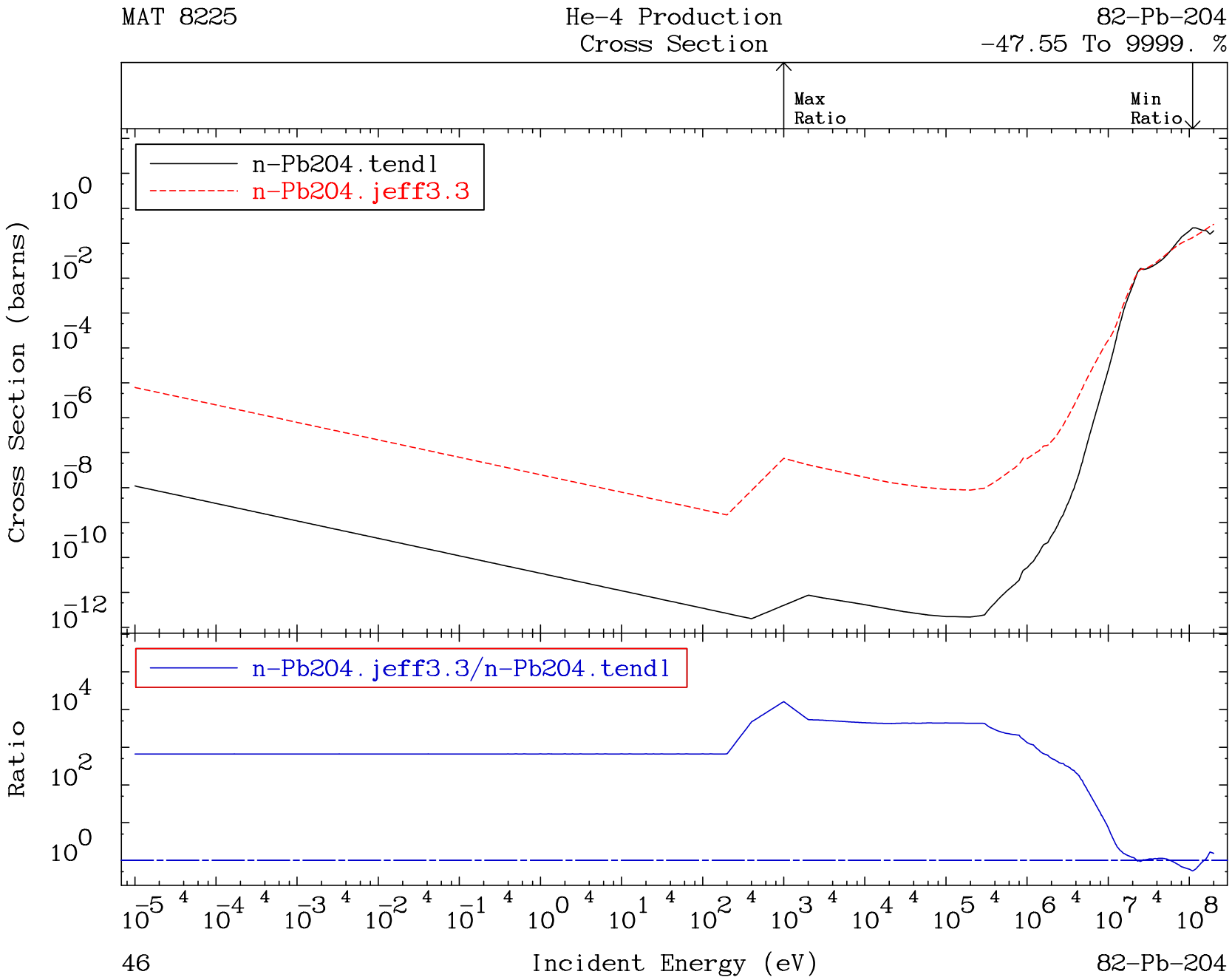

MAT 8225
(n,2p)
Cross Section
82-Pb-204
-100.0 To 305.2 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 6.3786 MeV
n-Pb204.jeff3.3 Threshold 11.500 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
2
0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
82-Pb-204

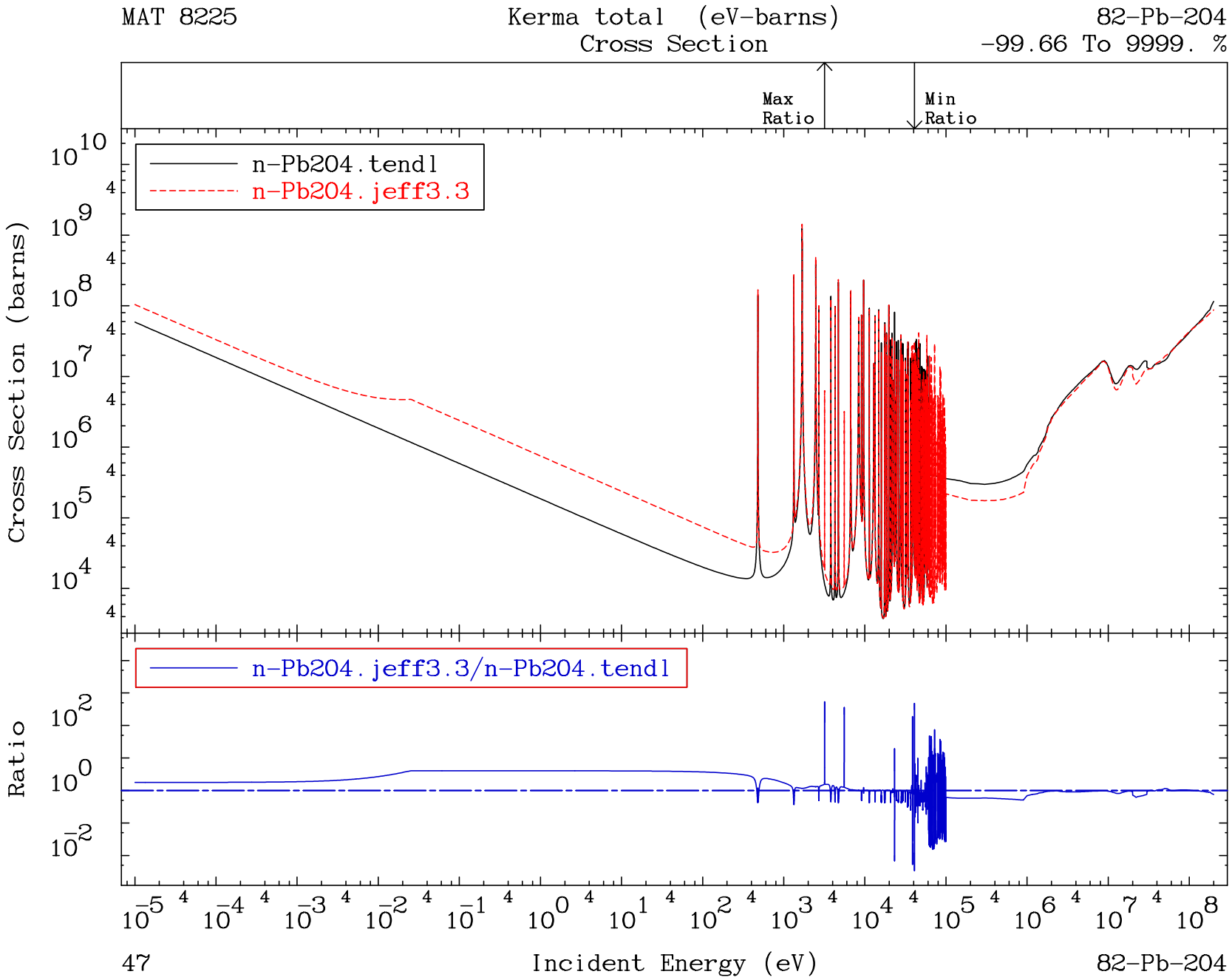

MAT 8225
Hydrogen Production
Cross Section
82-Pb-204
-94.65 To 208.4 %
Min Ratio
Max Ratio
n-Pb204.tendl Threshold 61.206 keV
n-Pb204.jeff3.3 Threshold 100.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
10^0
4
10^-1
4
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
42
Incident Energy (eV)
82-Pb-204

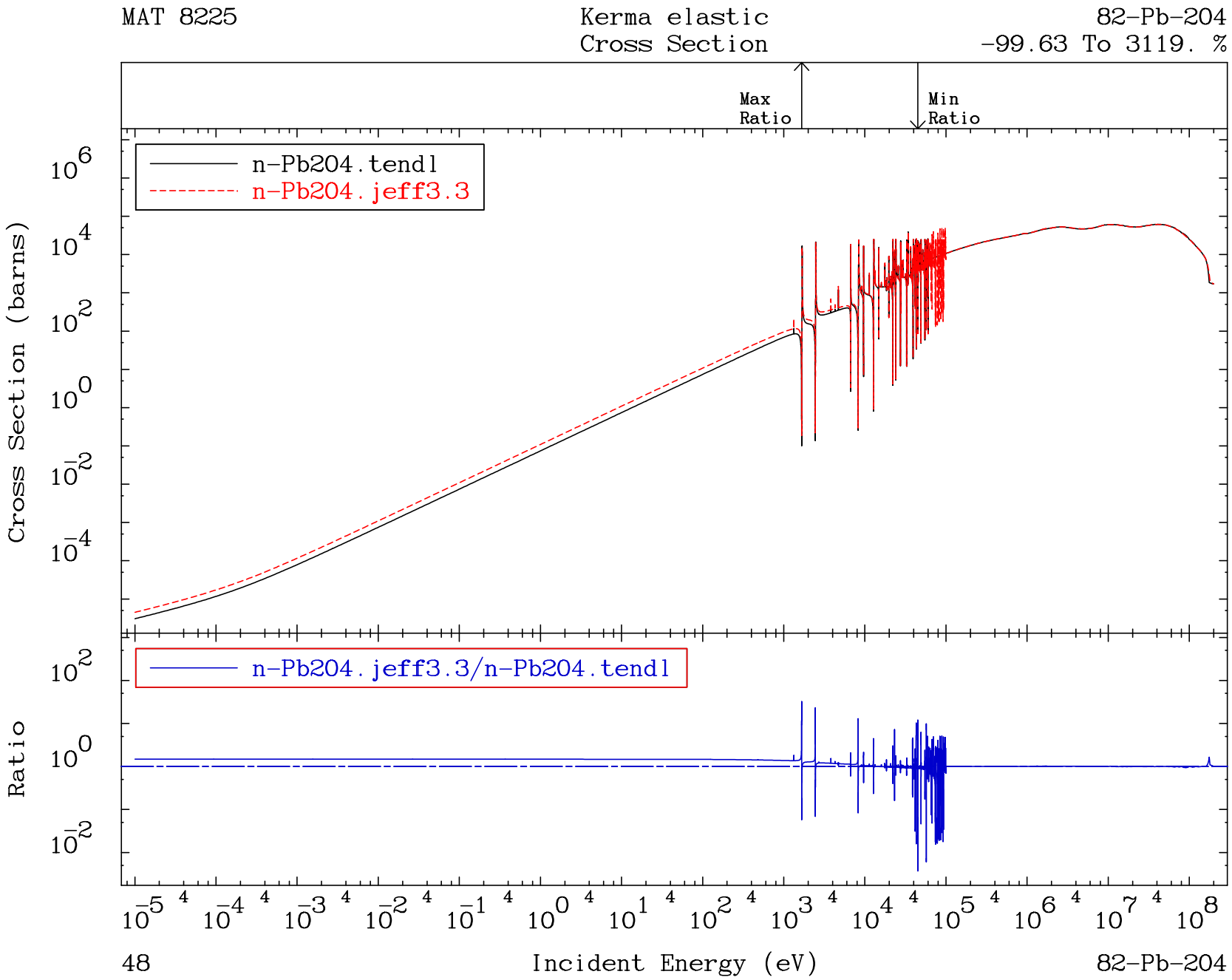

MAT 8225
Deuterium Production
Cross Section
82-Pb-204
-96.51 To 1614. %
Min Ratio
Max Ratio
n-Pb204.tendl Threshold 4.4347 MeV
n-Pb204.jeff3.3 Threshold 6.2000 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
10^1
10^0
10^-1
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
82-Pb-204

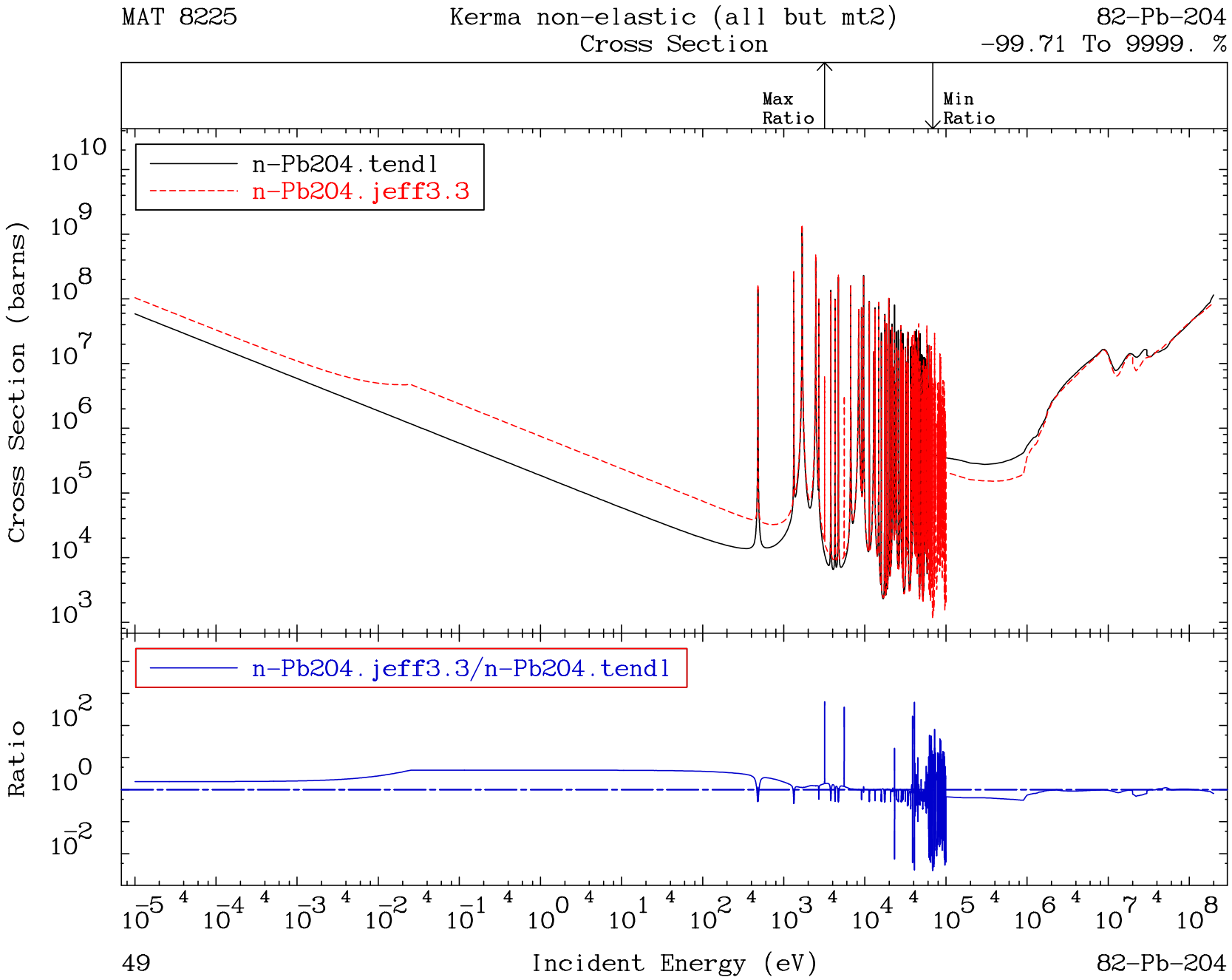

MAT 8225
Tritium Production
Cross Section
82-Pb-204
-97.58 To 9999. %
Min Ratio
Max Ratio
n-Pb204.tendl Threshold 6.0379 MeV
n-Pb204.jeff3.3 Threshold 8.0000 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
10^2
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
82-Pb-204

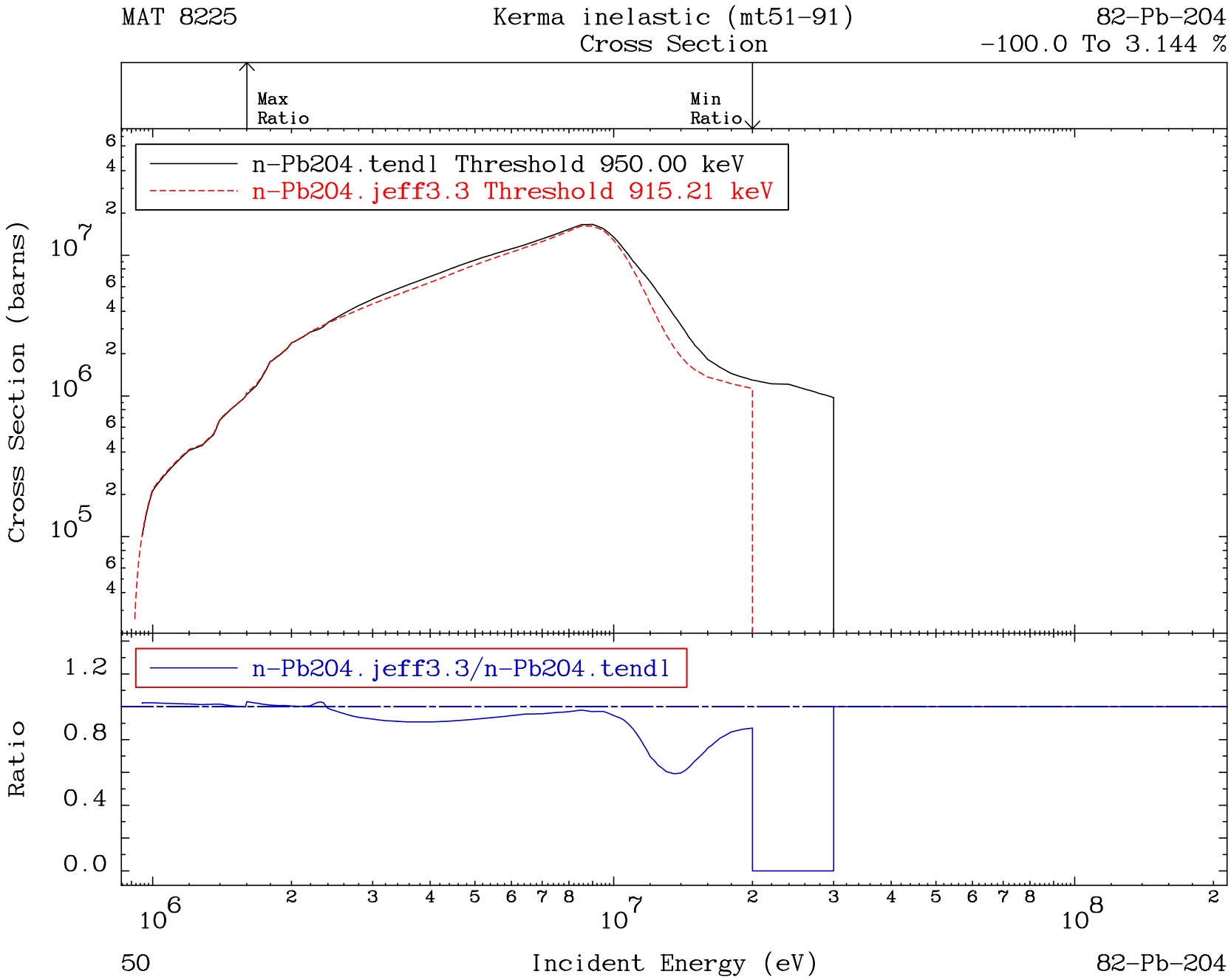

MAT 8225
He-3 Production
Cross Section
82-Pb-204
-94.59 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 4.6473 MeV
n-Pb204.jeff3.3 Threshold 10.500 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
82-Pb-204

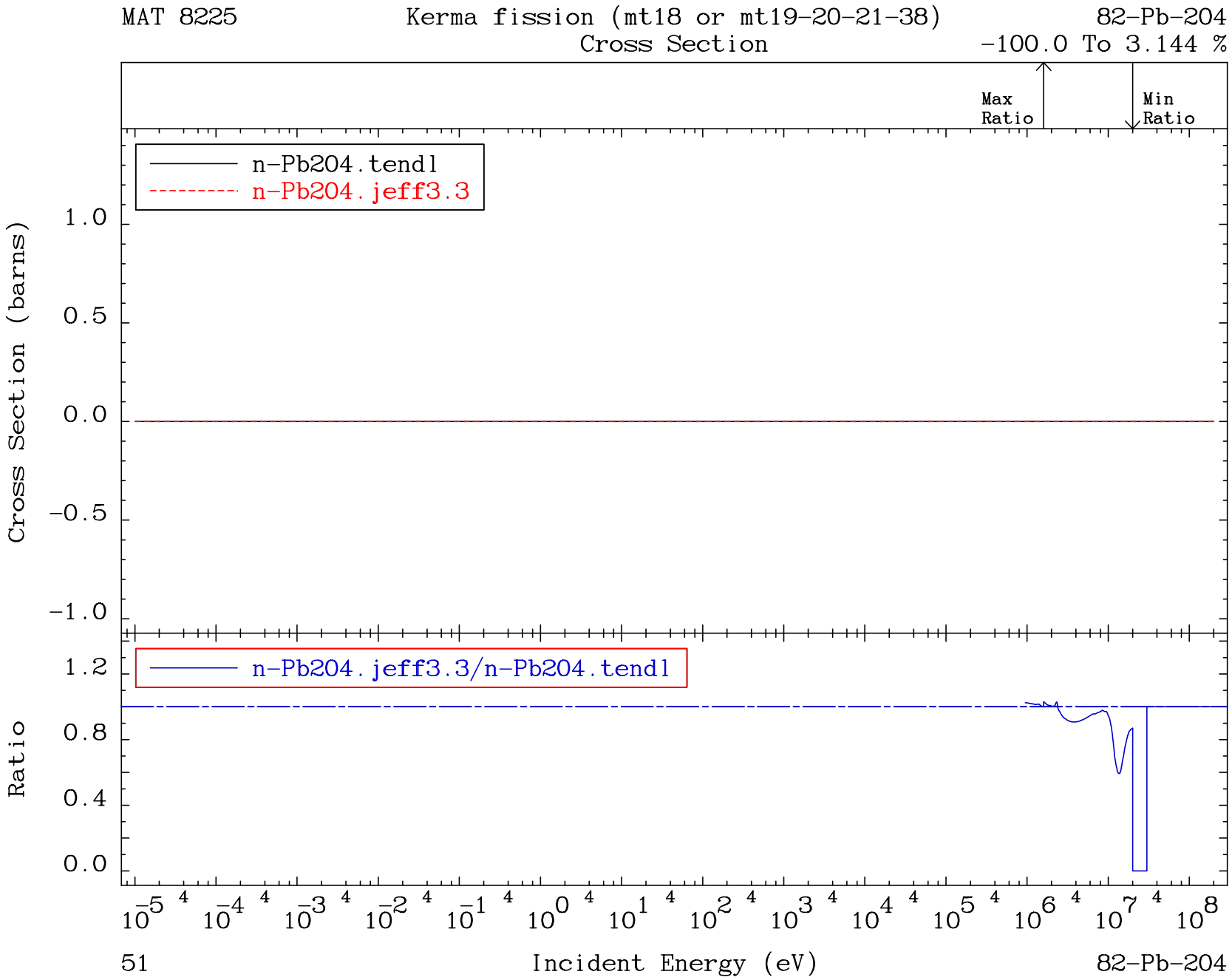

MAT 8225
He-4 Production
Cross Section
82-Pb-204
-47.55 To 9999. %
Max
Ratio
Min
Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
46
82-Pb-204

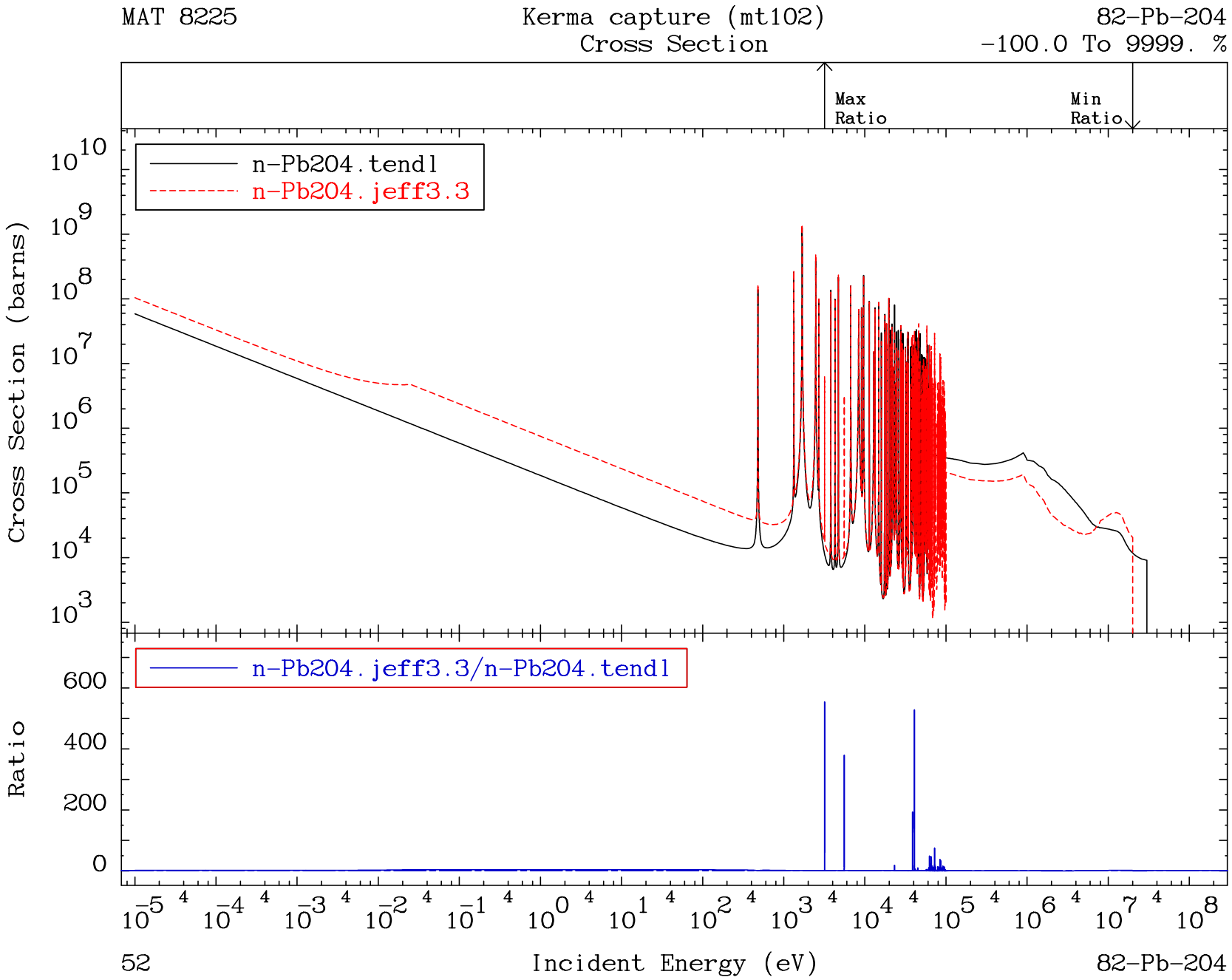

MAT 8225
Kerma total (eV-barns)
Cross Section
82-Pb-204
-99.66 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
47
82-Pb-204

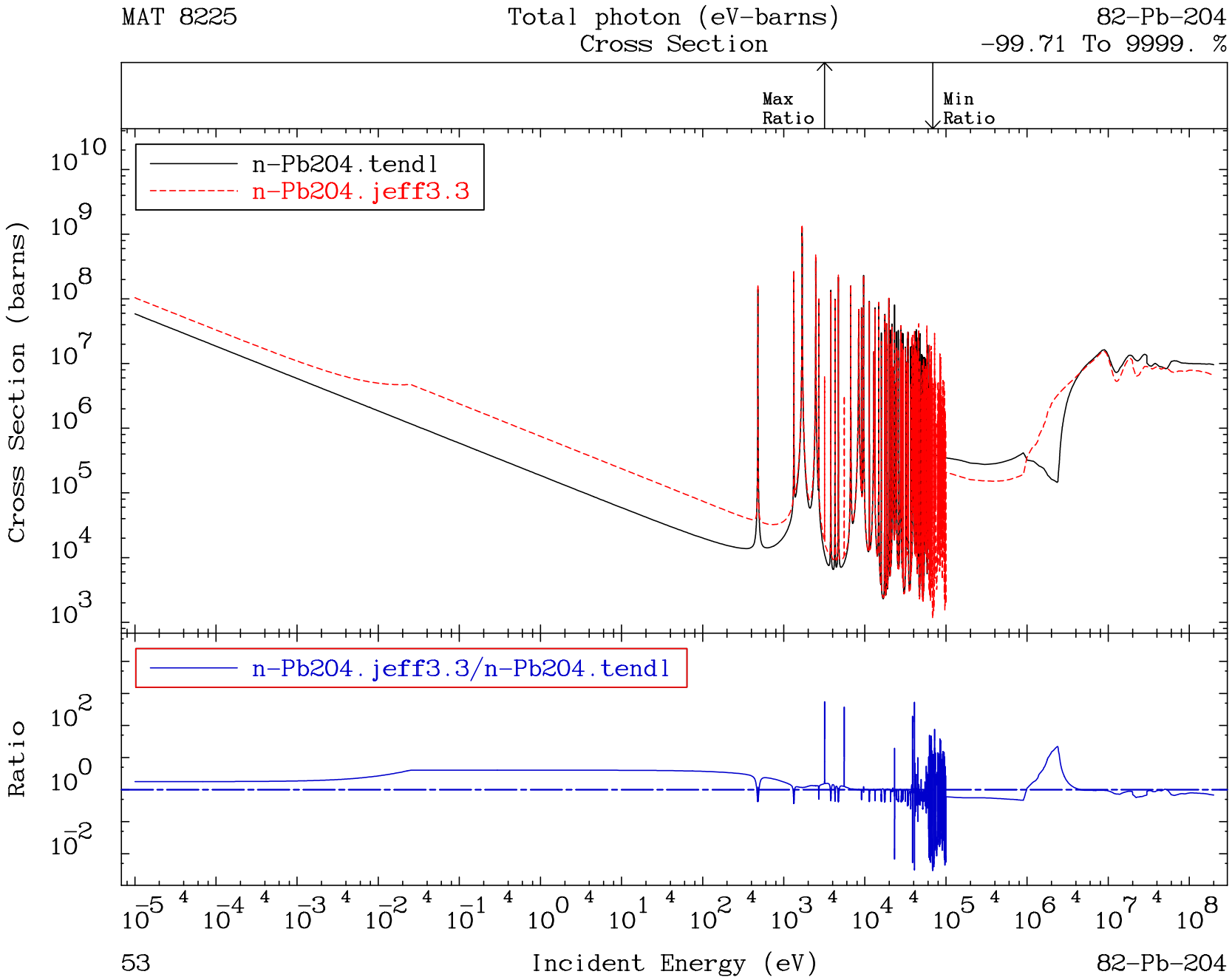

MAT 8225
Kerma elastic
Cross Section
82-Pb-204
-99.63 To 3119. %
Max
Ratio
Min
Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
48
82-Pb-204

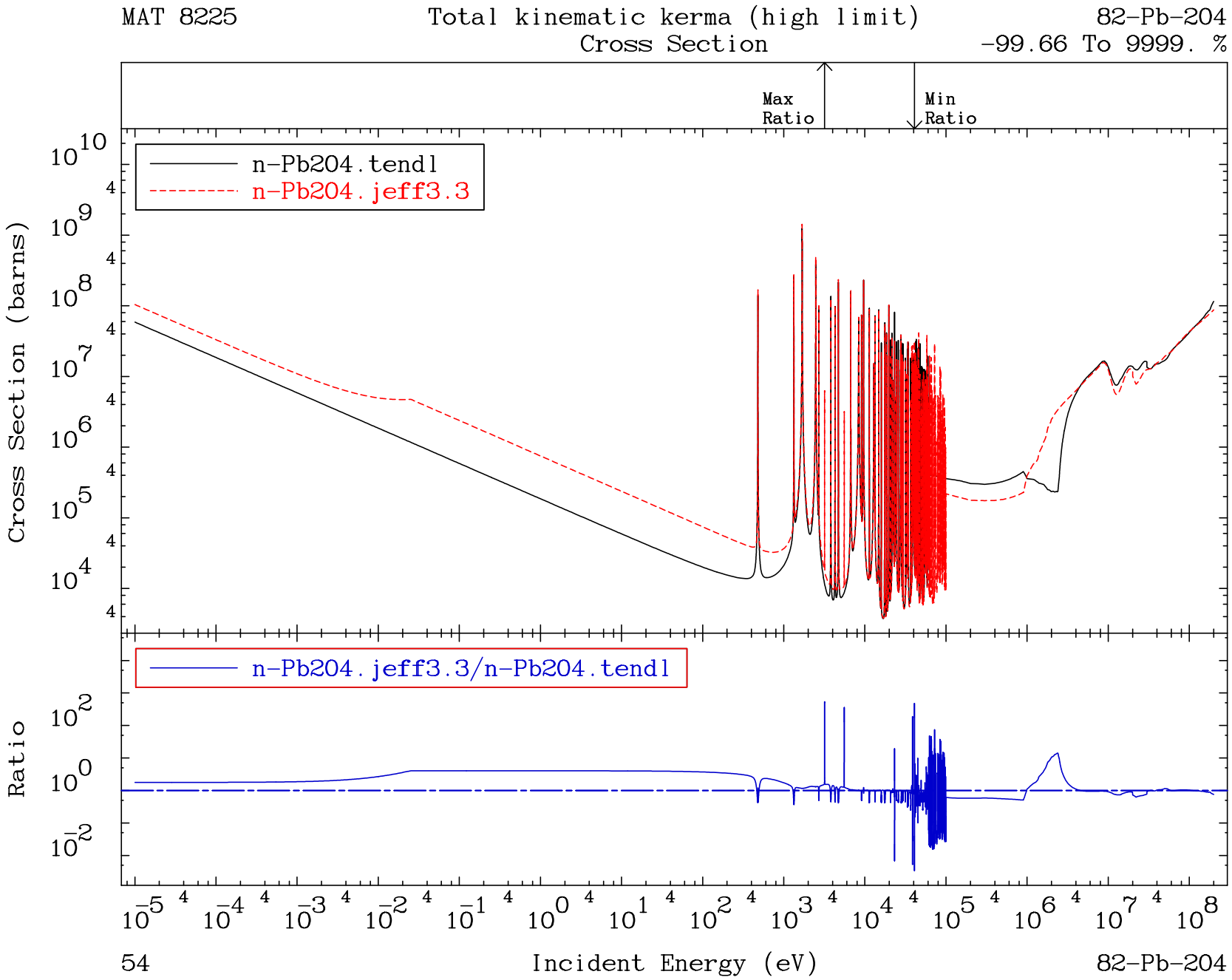

MAT 8225
Kerma non-elastic (all but mt2)
Cross Section
82-Pb-204
-99.71 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
49
82-Pb-204

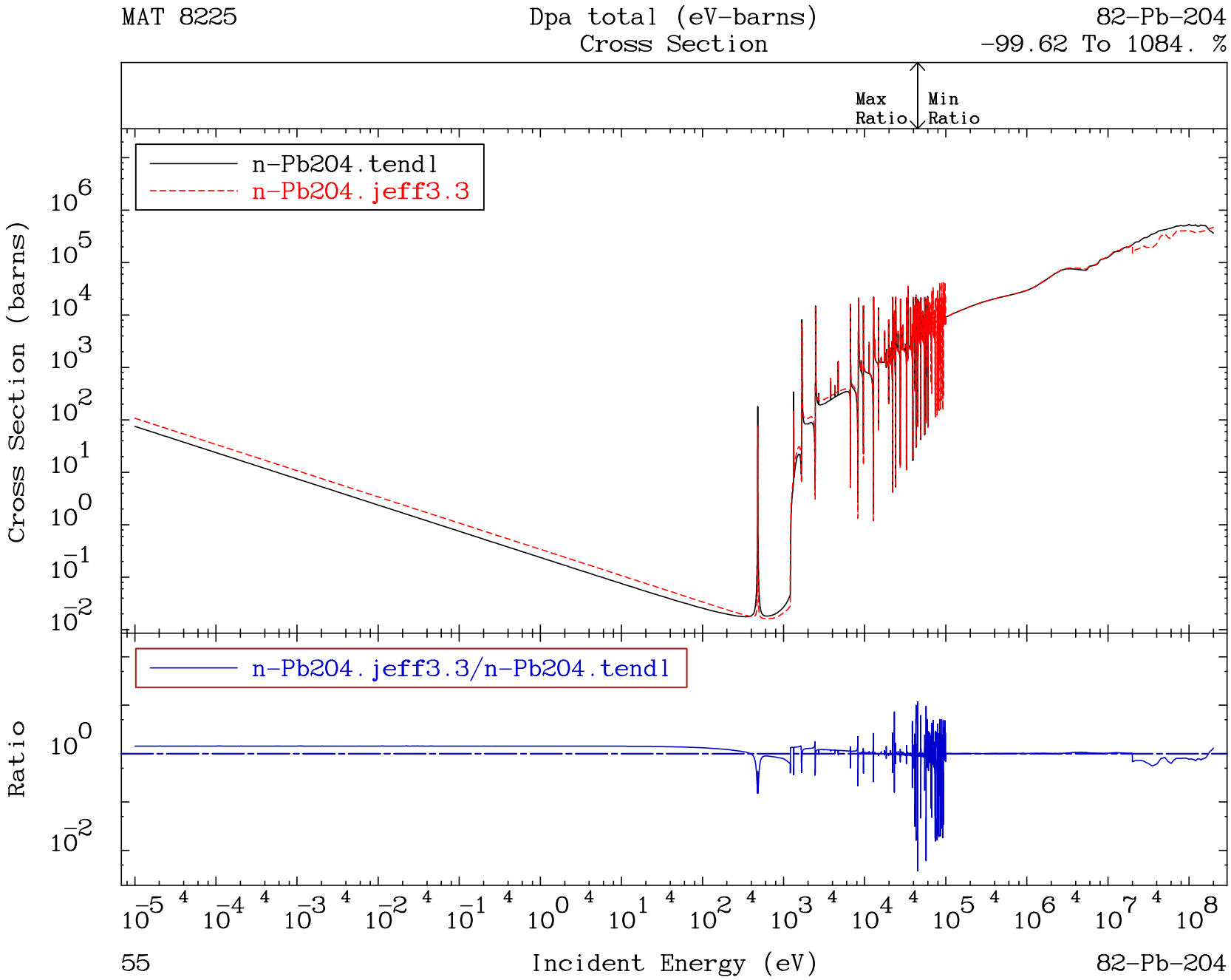

MAT 8225
Kerma inelastic (mt51-91)
Cross Section
82-Pb-204
-100.0 To 3.144 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 950.00 keV
n-Pb204.jeff3.3 Threshold 915.21 keV
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
50
82-Pb-204

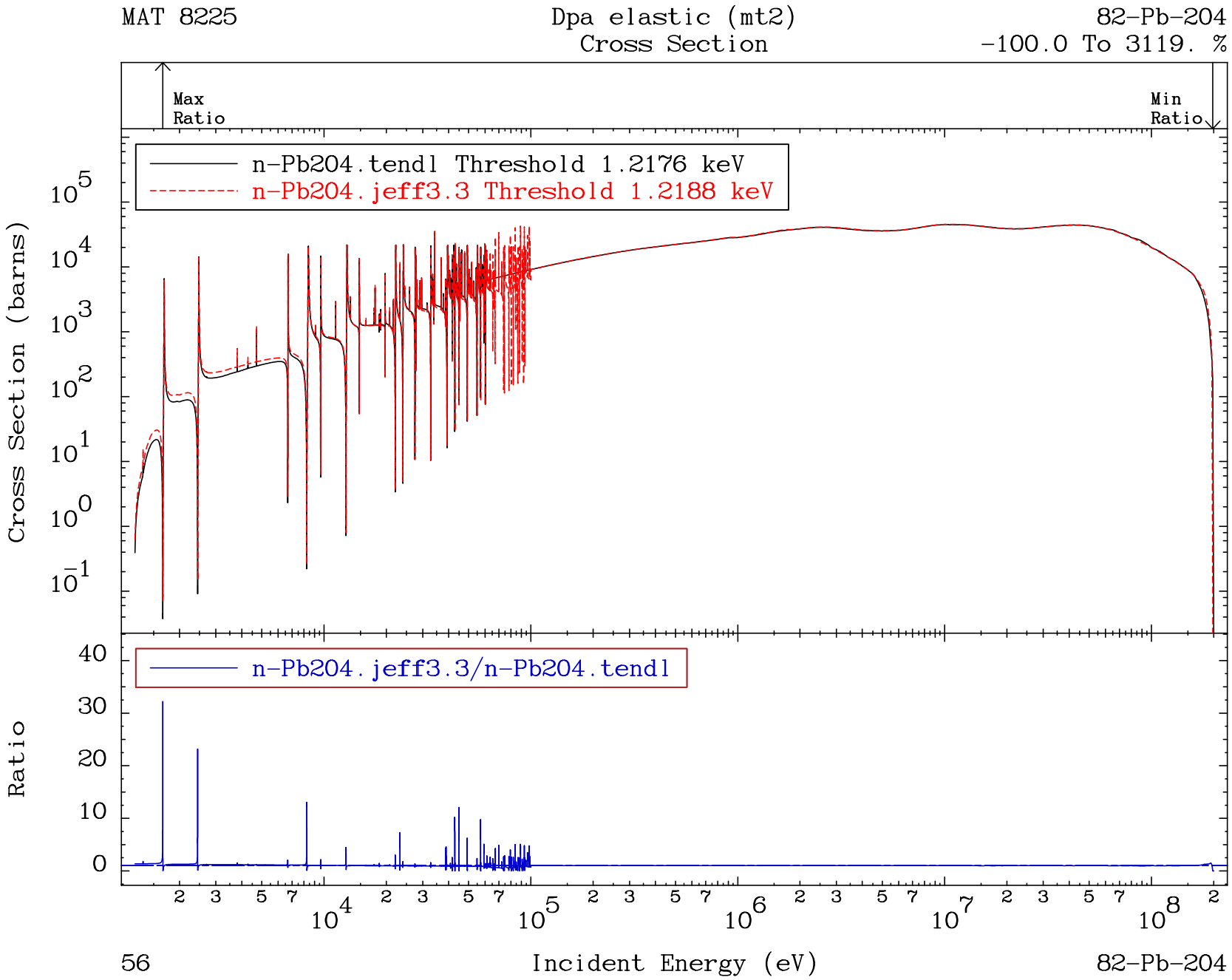

MAT 8225
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
82-Pb-204
-100.0 To 3.144 %
Max Ratio
Min Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
1.2
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
51
Incident Energy (eV)
82-Pb-204

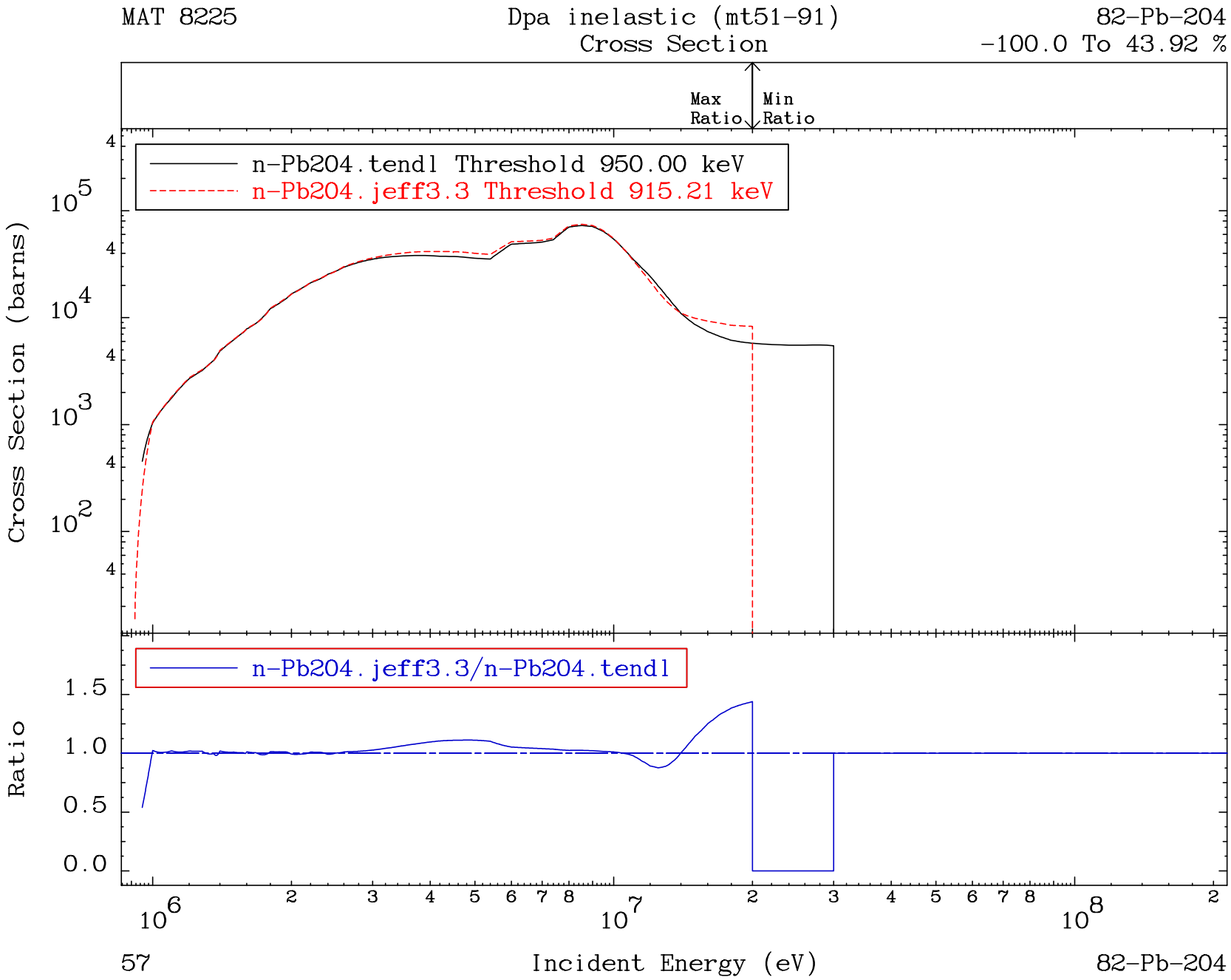

MAT 8225
Kerma capture (mt102)
Cross Section
82-Pb-204
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
52
82-Pb-204

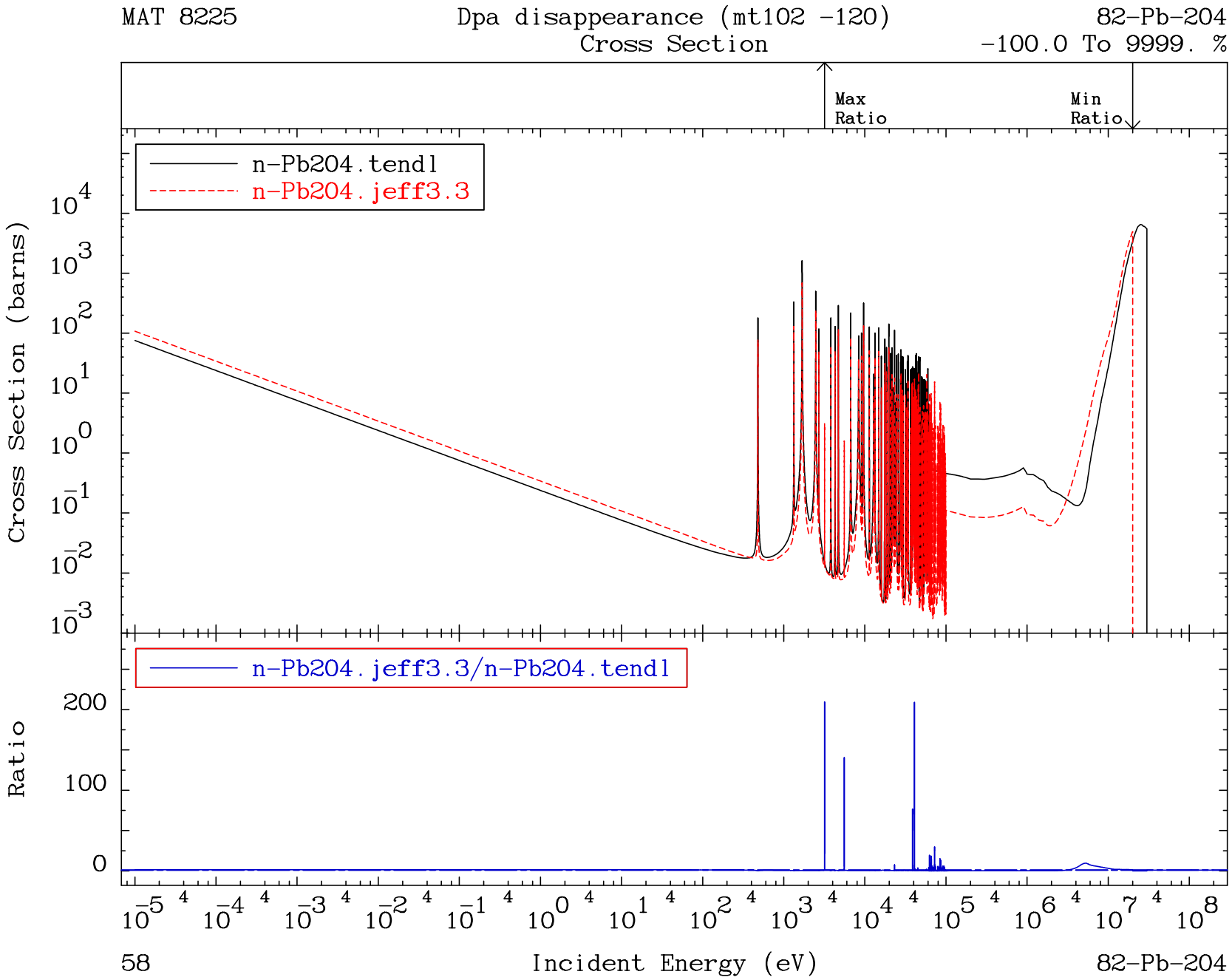

MAT 8225
Total photon (eV-barns)
Cross Section
82-Pb-204
-99.71 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
53
Incident Energy (eV)
82-Pb-204

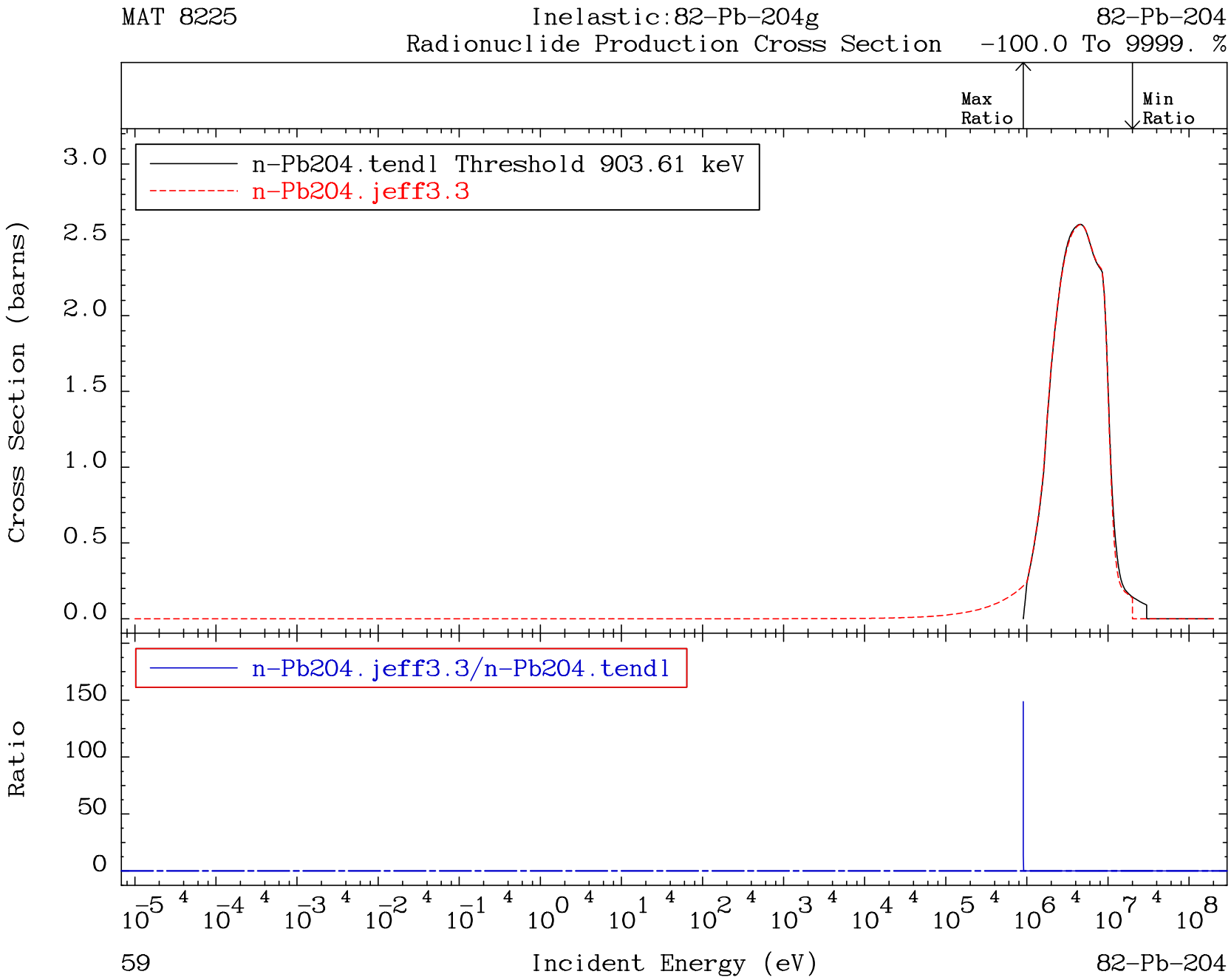

MAT 8225
Total kinematic kerma (high limit)
Cross Section
82-Pb-204
-99.66 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
54
82-Pb-204

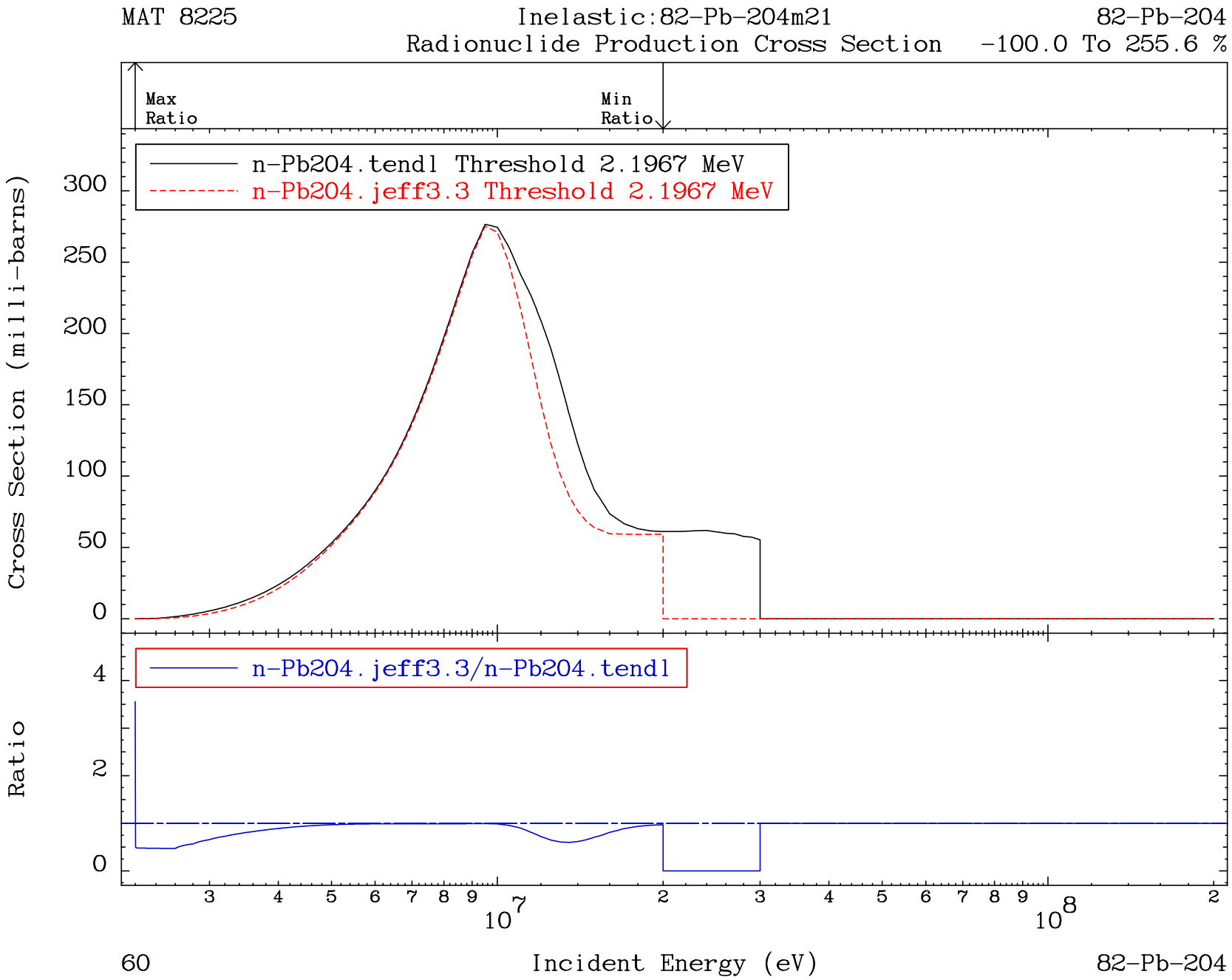

MAT 8225
Dpa total (eV-barns)
Cross Section
82-Pb-204
-99.62 To 1084. %
Max Ratio
Min Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
55
Incident Energy (eV)
82-Pb-204

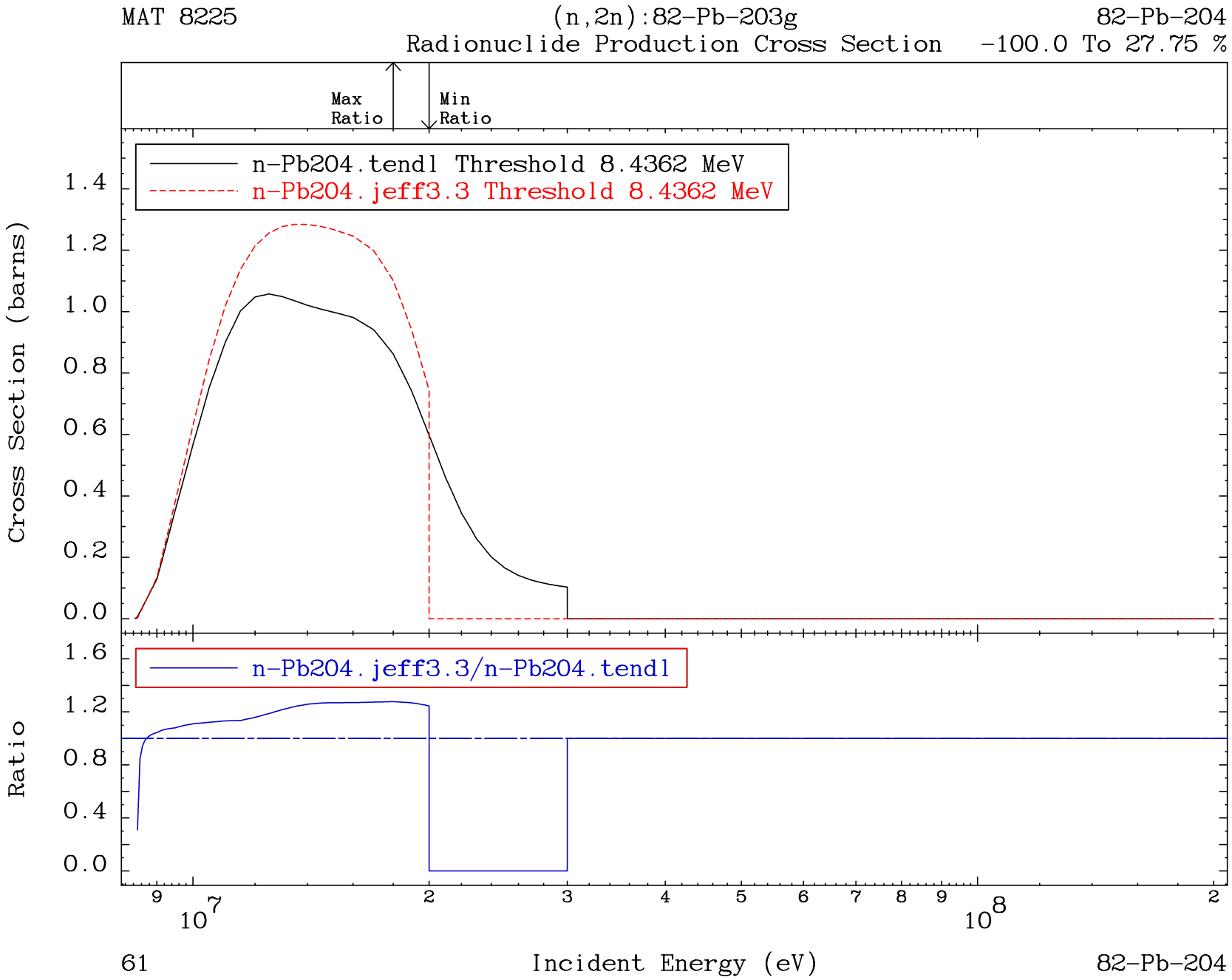

MAT 8225
Dpa elastic (mt2)
Cross Section
82-Pb-204
-100.0 To 3119. %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 1.2176 keV
n-Pb204.jeff3.3 Threshold 1.2188 keV
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
56
82-Pb-204

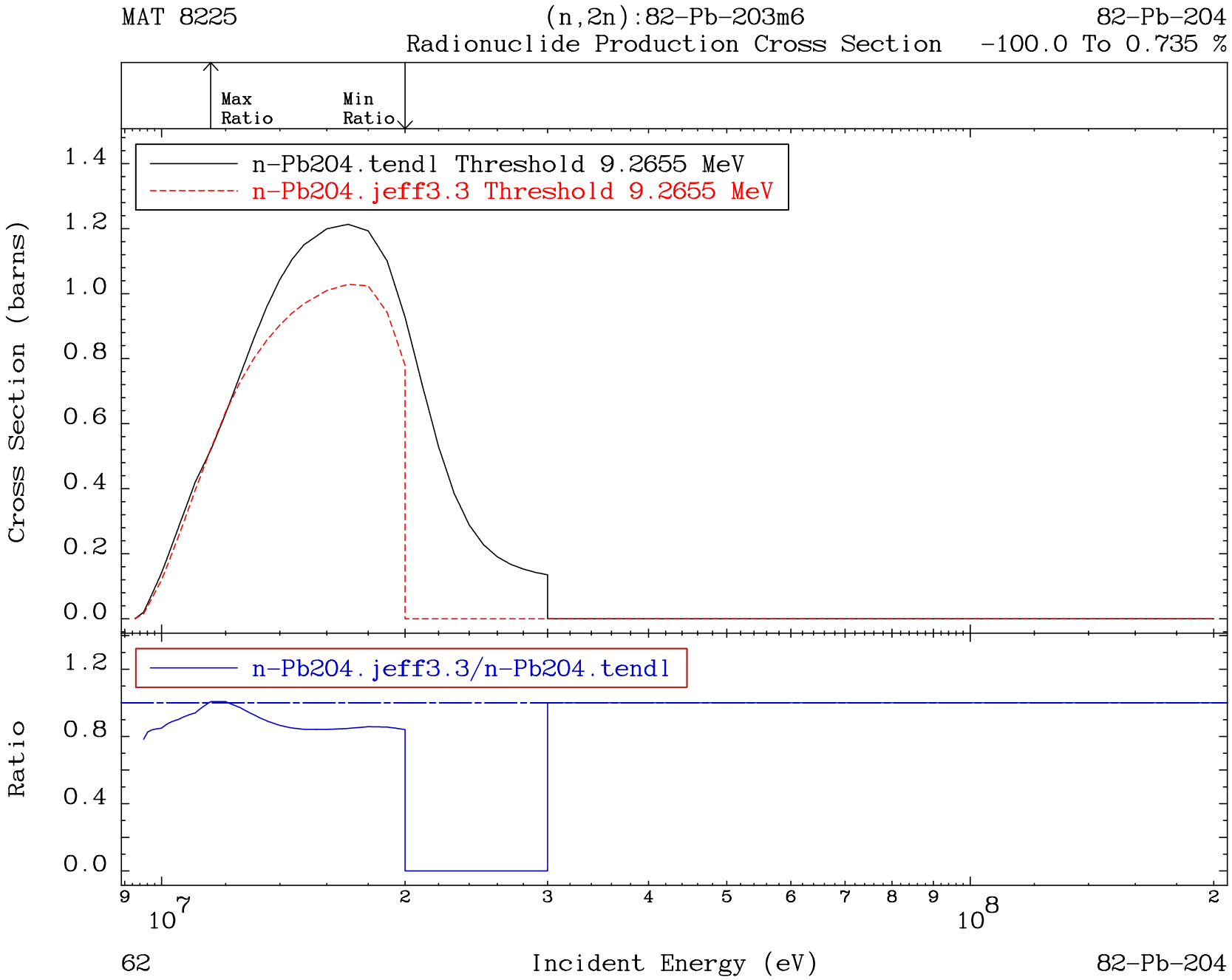

MAT 8225
Dpa inelastic (mt51-91)
Cross Section
82-Pb-204
-100.0 To 43.92 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 950.00 keV
n-Pb204.jeff3.3 Threshold 915.21 keV
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
57
82-Pb-204

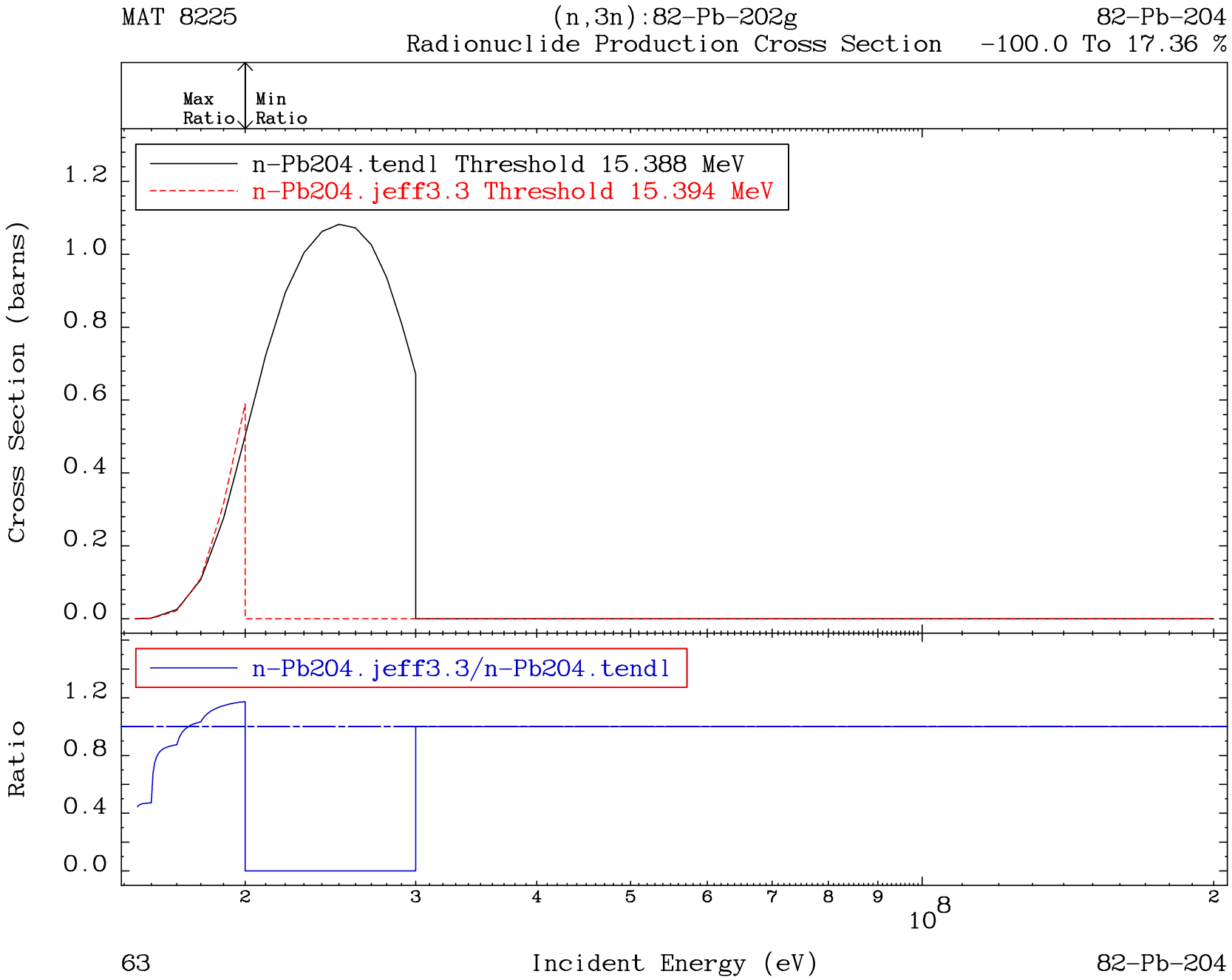

MAT 8225
Dpa disappearance (mt102 -120)
Cross Section
82-Pb-204
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl
n-Pb204.jeff3.3
Cross Section (barns)
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
Incident Energy (eV)
58
82-Pb-204

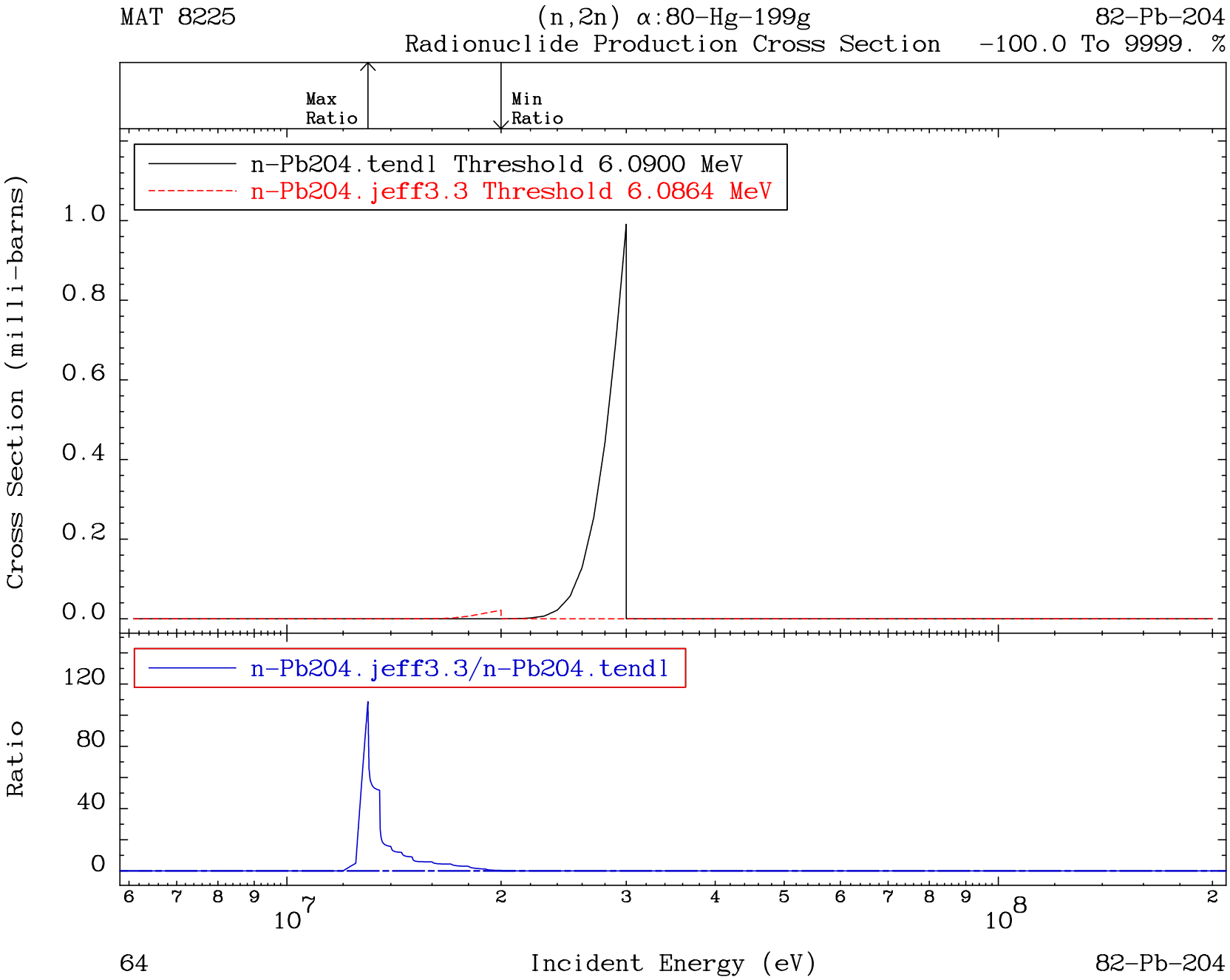

MAT 8225
Inelastic:82-Pb-204g
82-Pb-204
Radionuclide Production Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 903.61 keV
n-Pb204.jeff3.3
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
150
100
50
0
10-5 10-4 10-3 10-2 10-1 100 101 102 103 104 105 106 107 108
59
Incident Energy (eV)
82-Pb-204

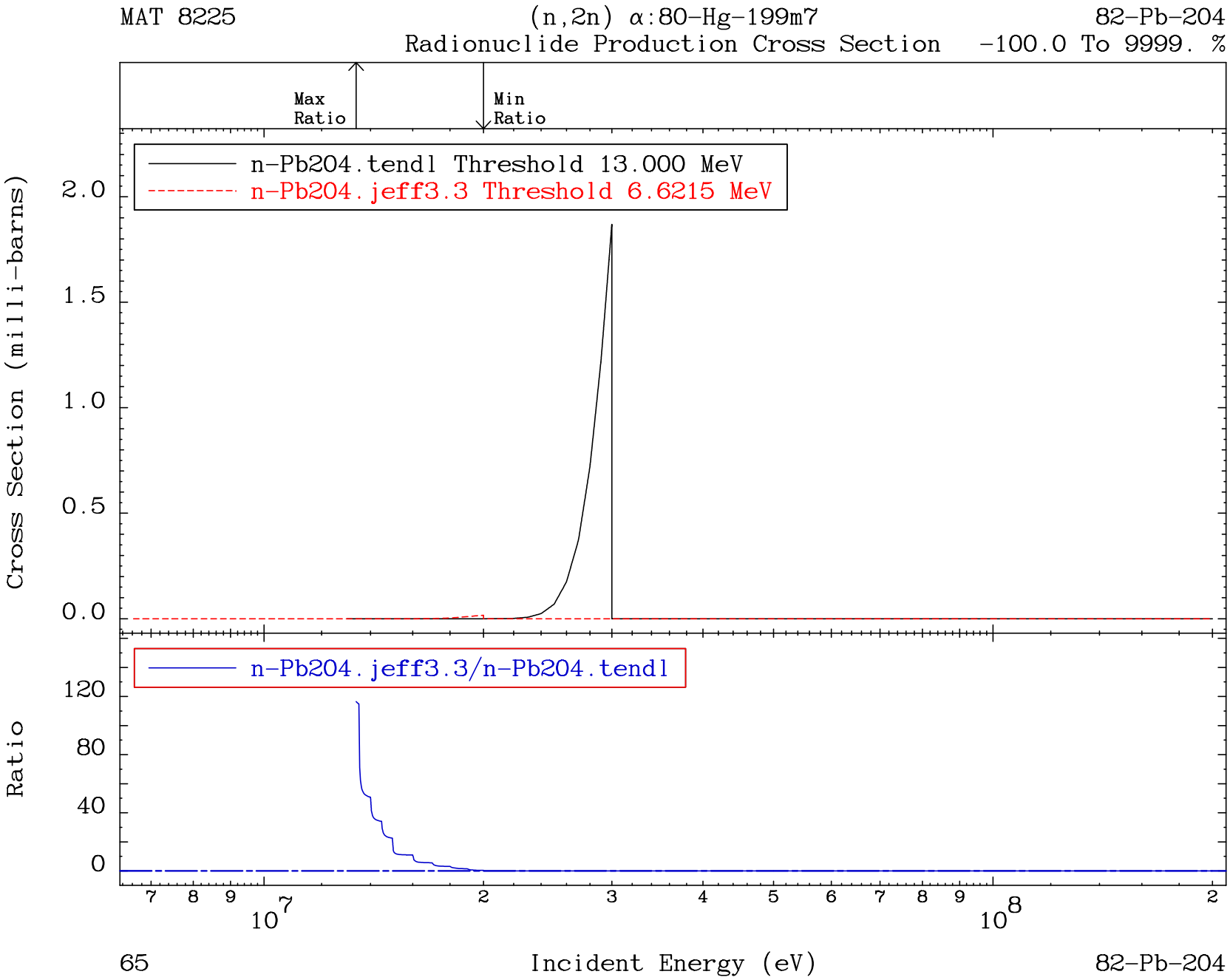

MAT 8225
Inelastic:82-Pb-204m21
82-Pb-204
Radionuclide Production Cross Section -100.0 To 255.6 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 2.1967 MeV
n-Pb204.jeff3.3 Threshold 2.1967 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
4
2
0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
60
Incident Energy (eV)
82-Pb-204


MAT 8225
(n,2n):82-Pb-203g
82-Pb-204
Radionuclide Production Cross Section -100.0 To 27.75 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 8.4362 MeV
n-Pb204.jeff3.3 Threshold 8.4362 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
1.6
1.2
0.8
0.4
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
61
Incident Energy (eV)
82-Pb-204


MAT 8225
(n,2n):82-Pb-203m6
82-Pb-204
Radionuclide Production Cross Section -100.0 To 0.735 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 9.2655 MeV
n-Pb204.jeff3.3 Threshold 9.2655 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
1.2
0.8
0.4
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
62
Incident Energy (eV)
82-Pb-204


MAT 8225
(n,3n):82-Pb-202g
82-Pb-204
Radionuclide Production Cross Section -100.0 To 17.36 %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 15.388 MeV
n-Pb204.jeff3.3 Threshold 15.394 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
82-Pb-204


MAT 8225
(n,2n) α:80-Hg-199g
82-Pb-204
Radionuclide Production Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 6.0900 MeV
n-Pb204.jeff3.3 Threshold 6.0864 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
120
80
40
0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
64
Incident Energy (eV)
82-Pb-204


MAT 8225
(n,2n) α:80-Hg-199m7
82-Pb-204
Radionuclide Production Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
n-Pb204.tendl Threshold 13.000 MeV
n-Pb204.jeff3.3 Threshold 6.6215 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Pb204.jeff3.3/n-Pb204.tendl
Ratio
120
80
40
0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
65
Incident Energy (eV)
82-Pb-204