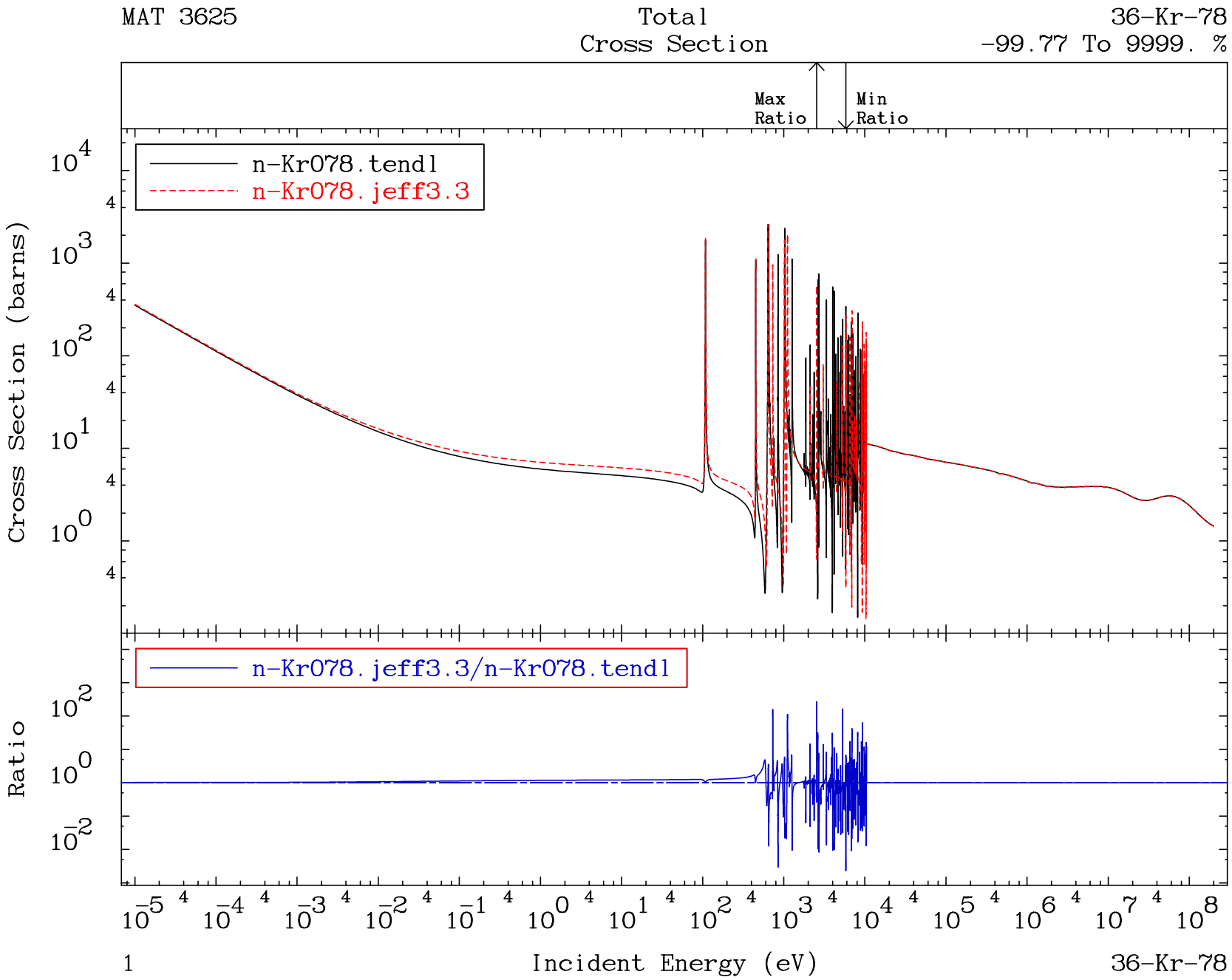
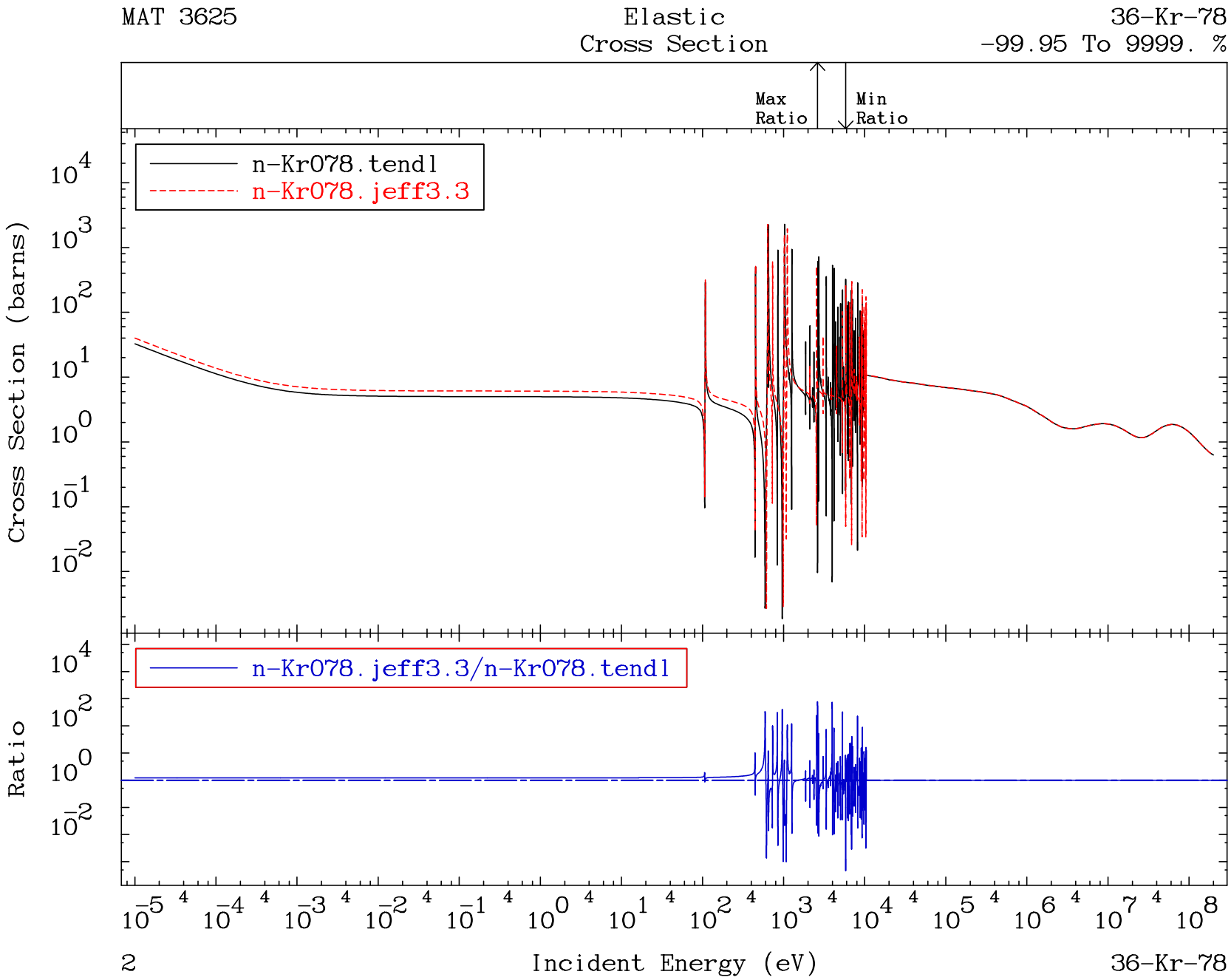
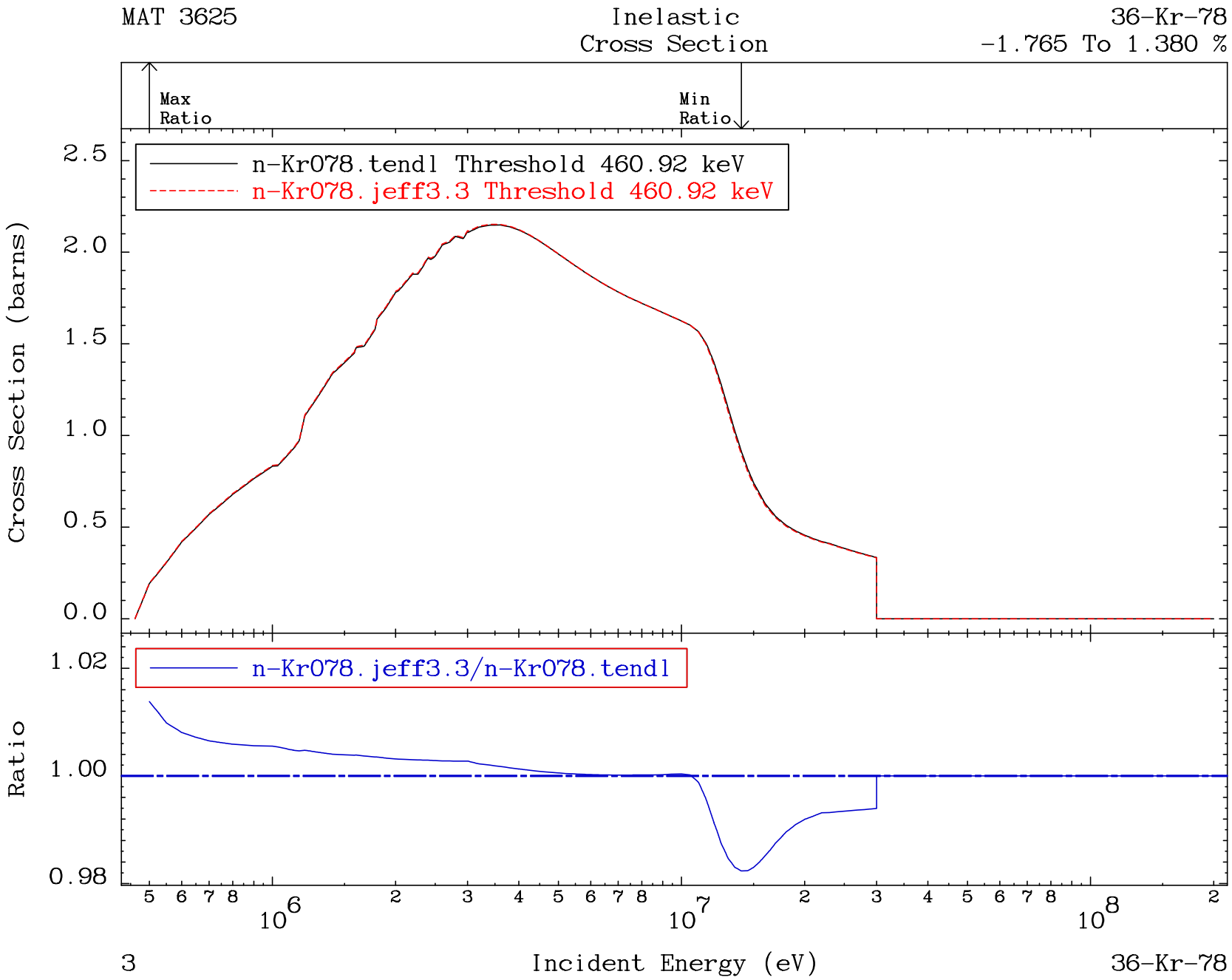
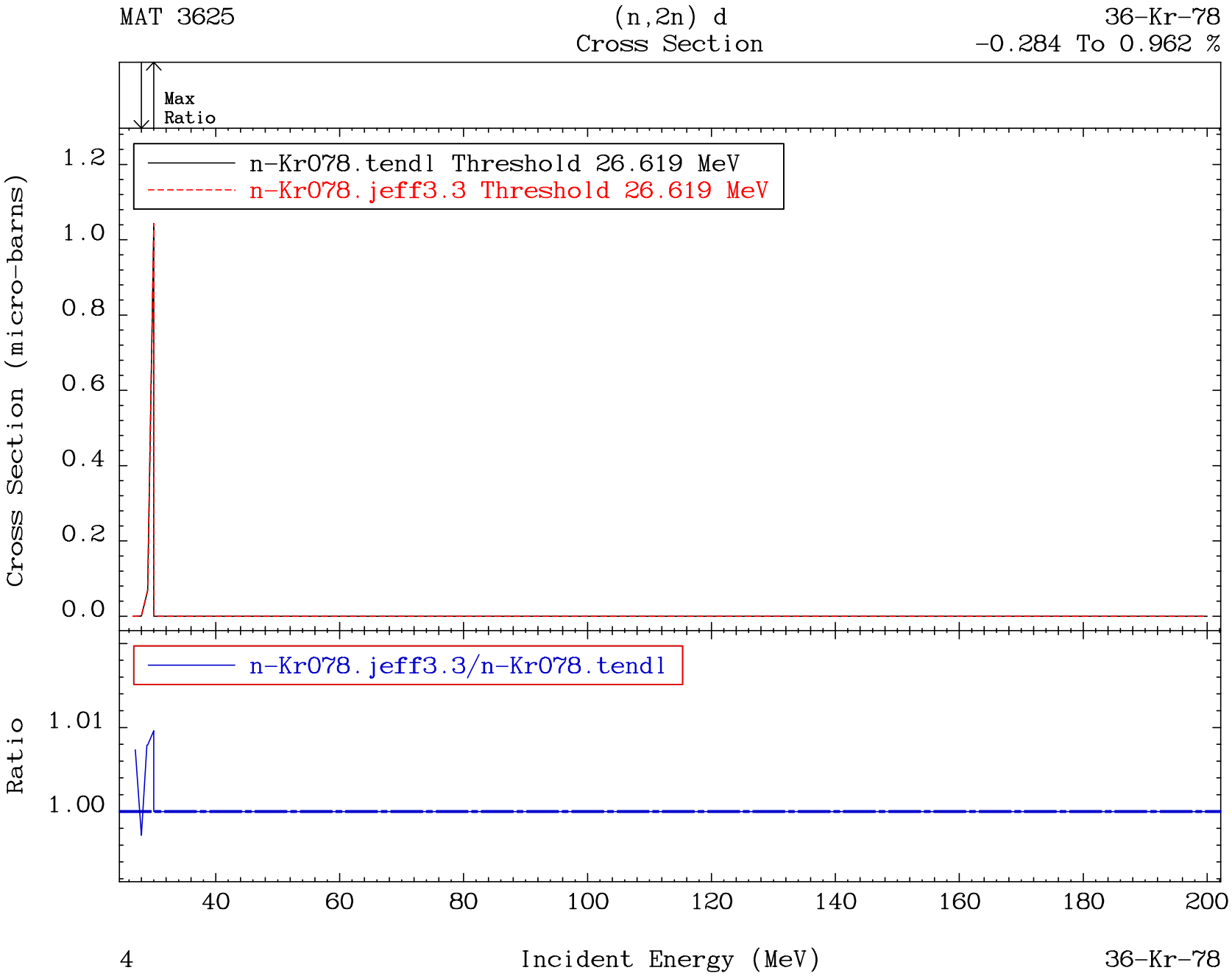
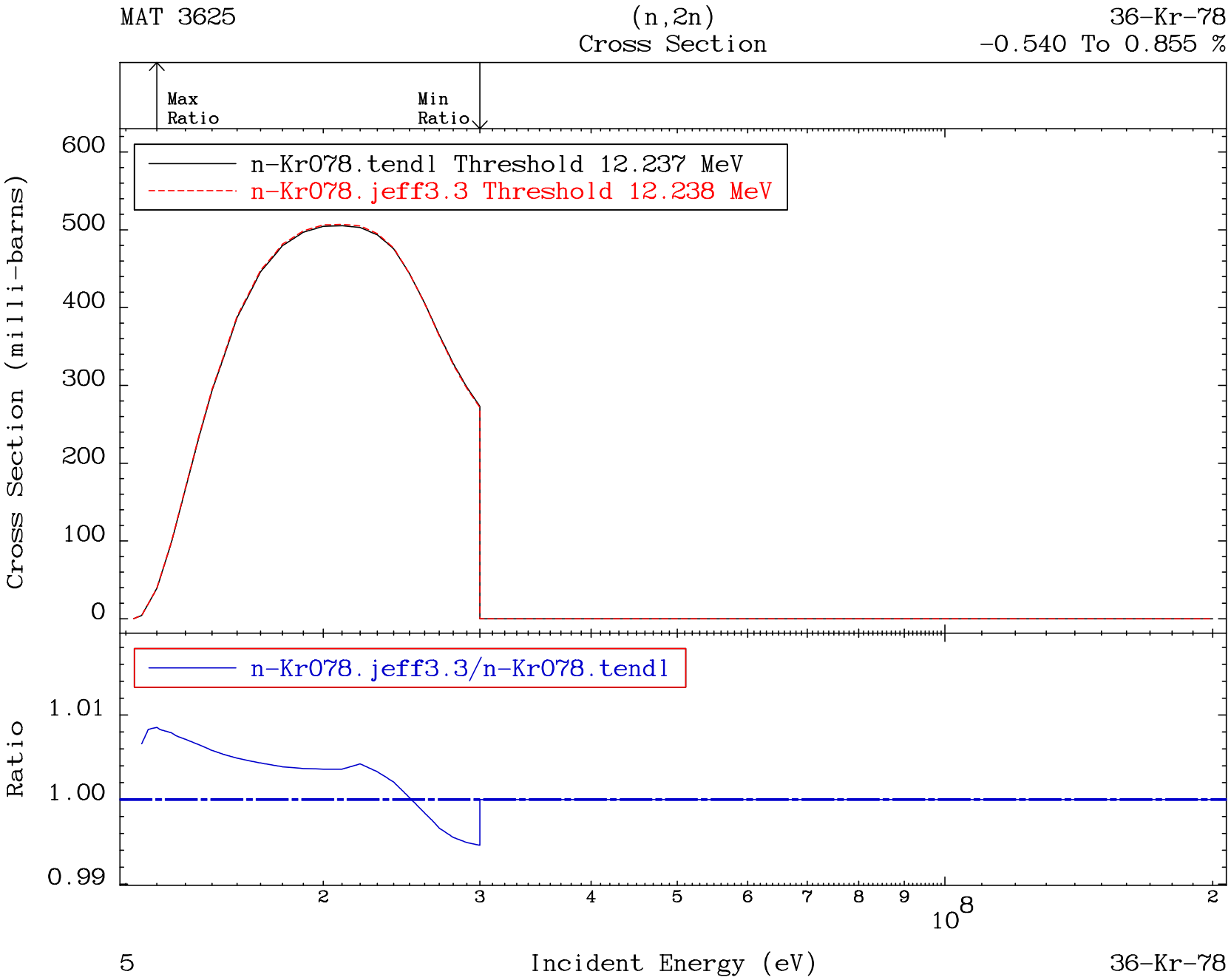
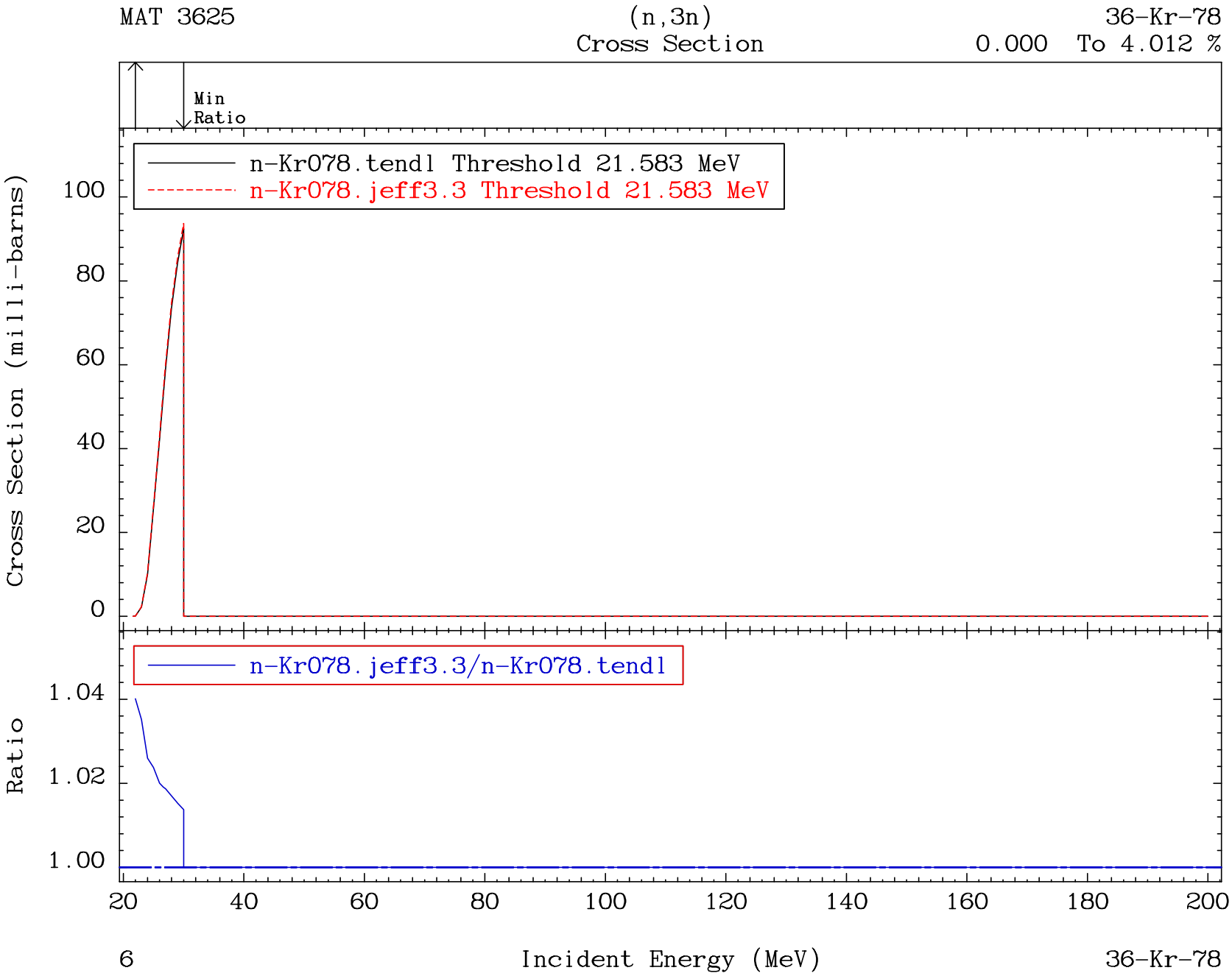

MAT 3625
Total
Cross Section
36-Kr-78
-99.77 To 9999. %
Max
Ratio
Min
Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
1
36-Kr-78

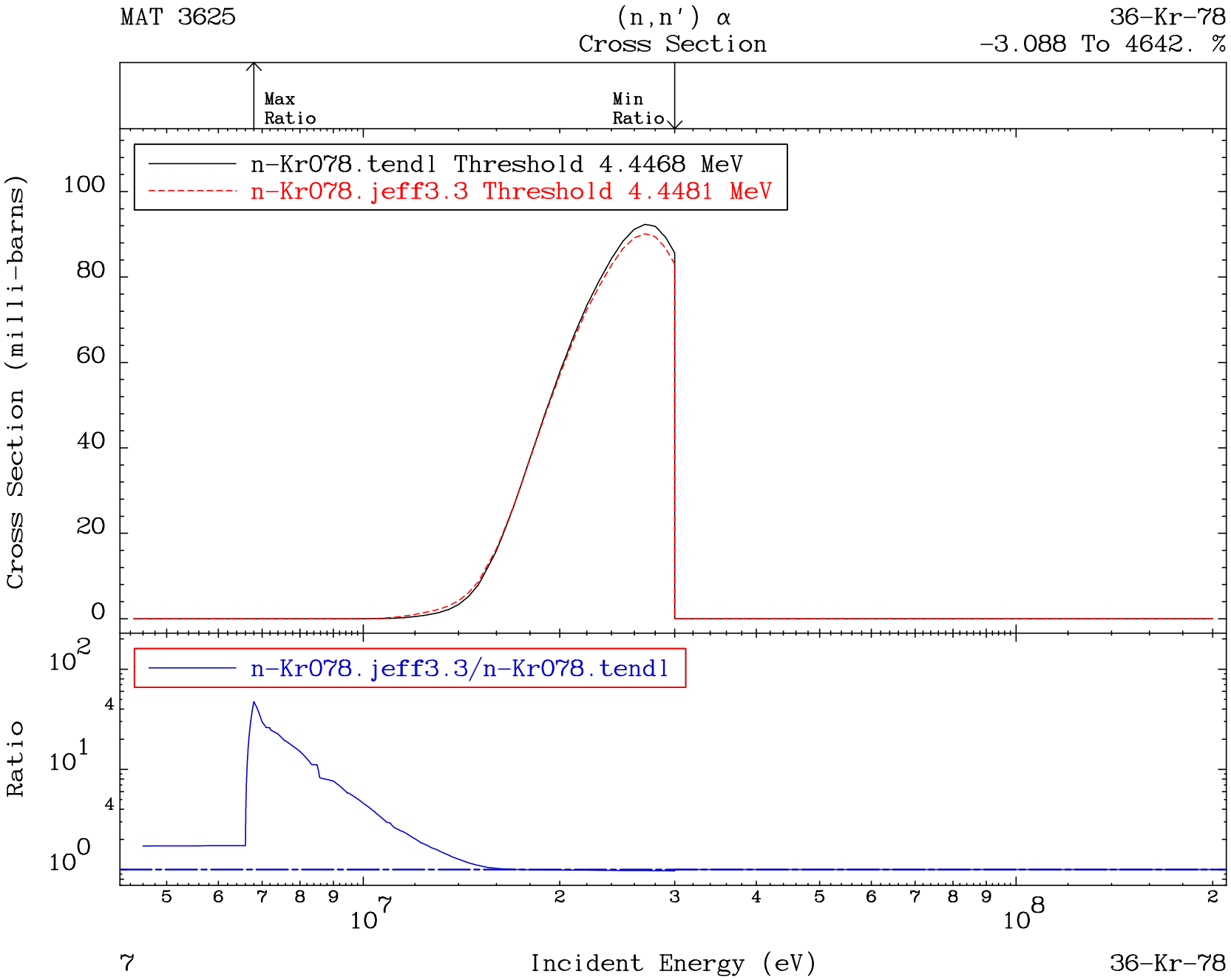

MAT 3625
Elastic
Cross Section
36-Kr-78
-99.95 To 9999. %
Max
Ratio
Min
Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
2
36-Kr-78

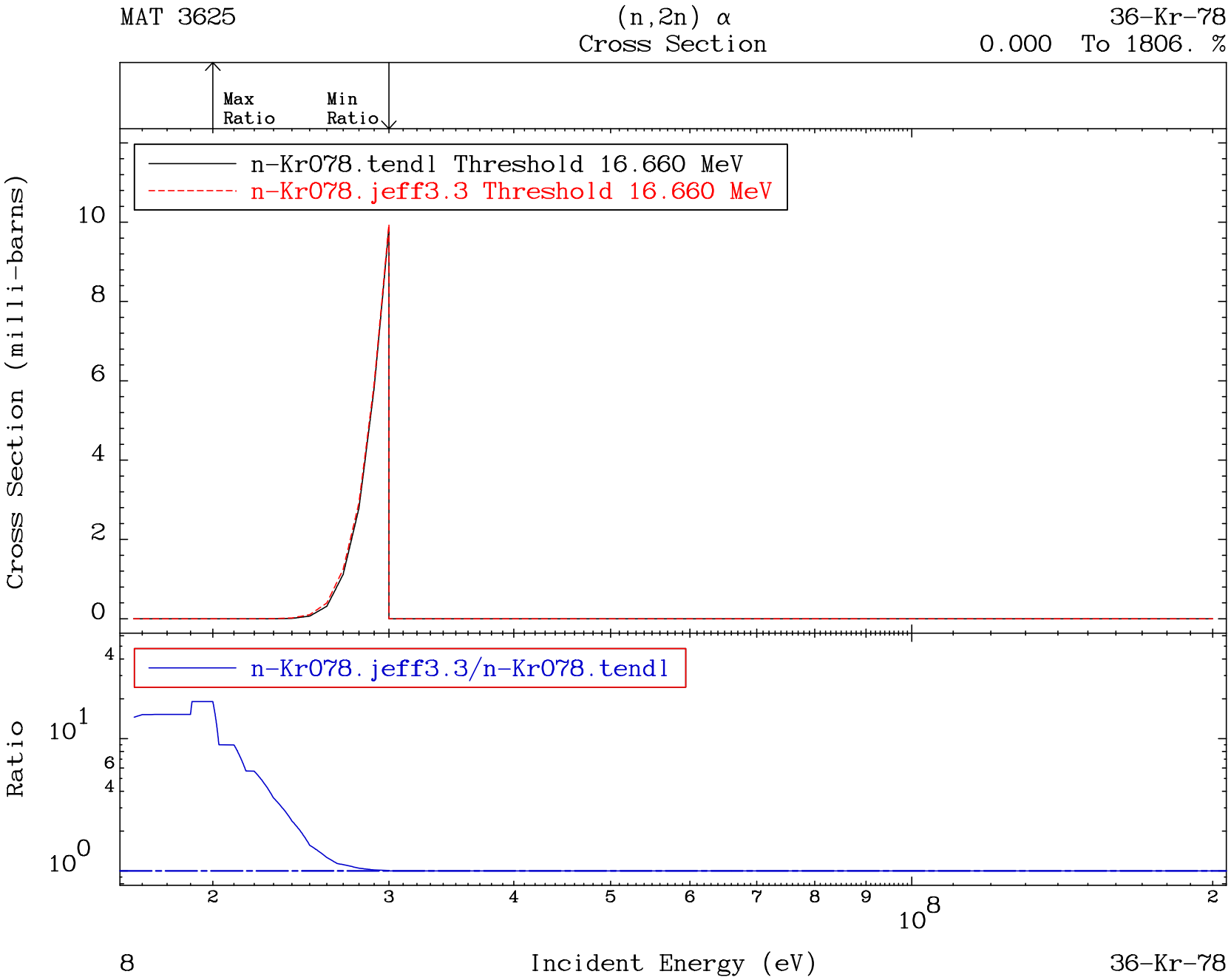

MAT 3625
Inelastic
Cross Section
36-Kr-78
-1.765 To 1.380 %
Max
Ratio
Min
Ratio
n-Kr078.tendl Threshold 460.92 keV
n-Kr078.jeff3.3 Threshold 460.92 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.00
0.98
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
36-Kr-78

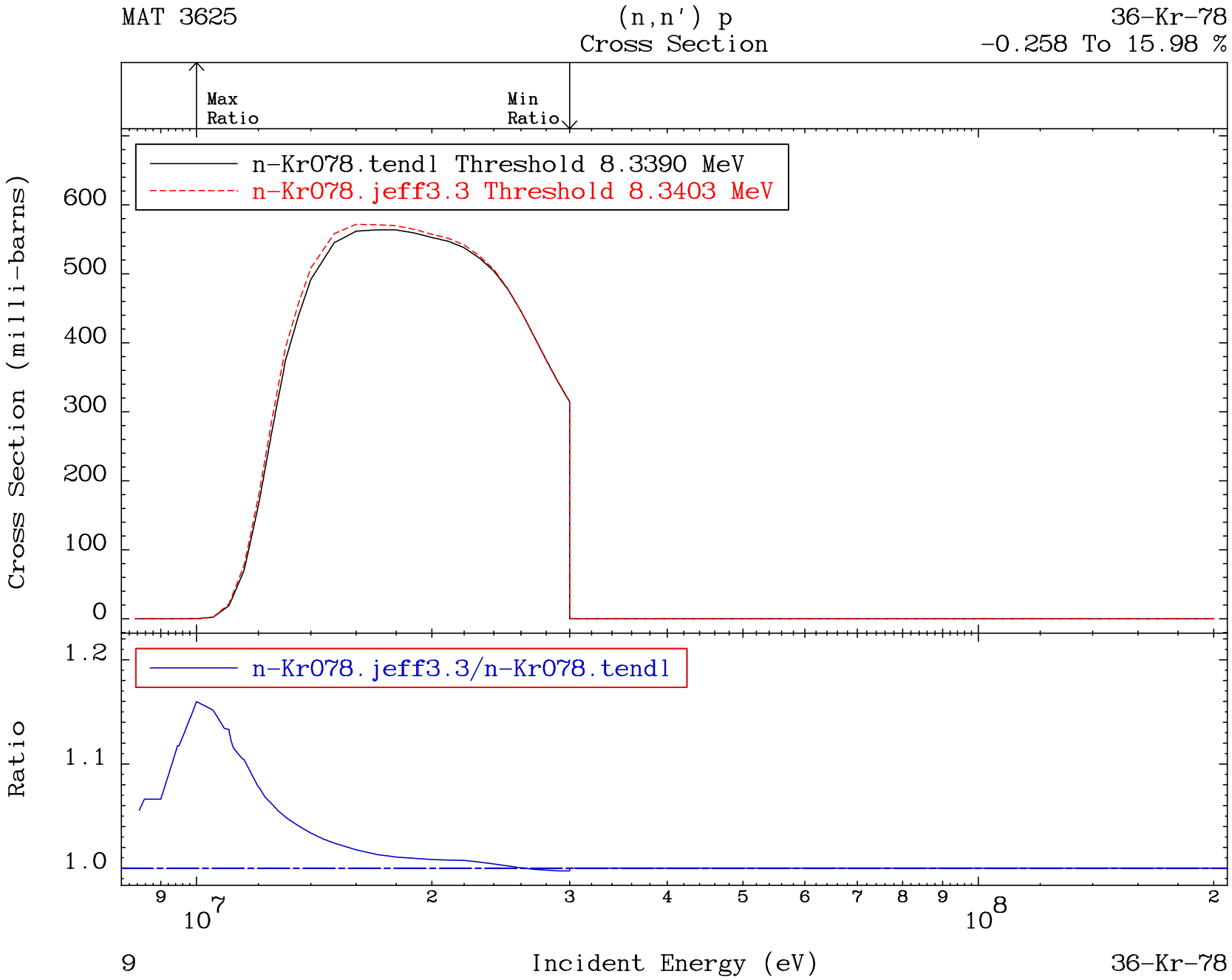

MAT 3625
(n,2n) d
Cross Section
36-Kr-78
-0.284 To 0.962 %
Max
Ratio
n-Kr078.tendl Threshold 26.619 MeV
n-Kr078.jeff3.3 Threshold 26.619 MeV
Cross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
36-Kr-78

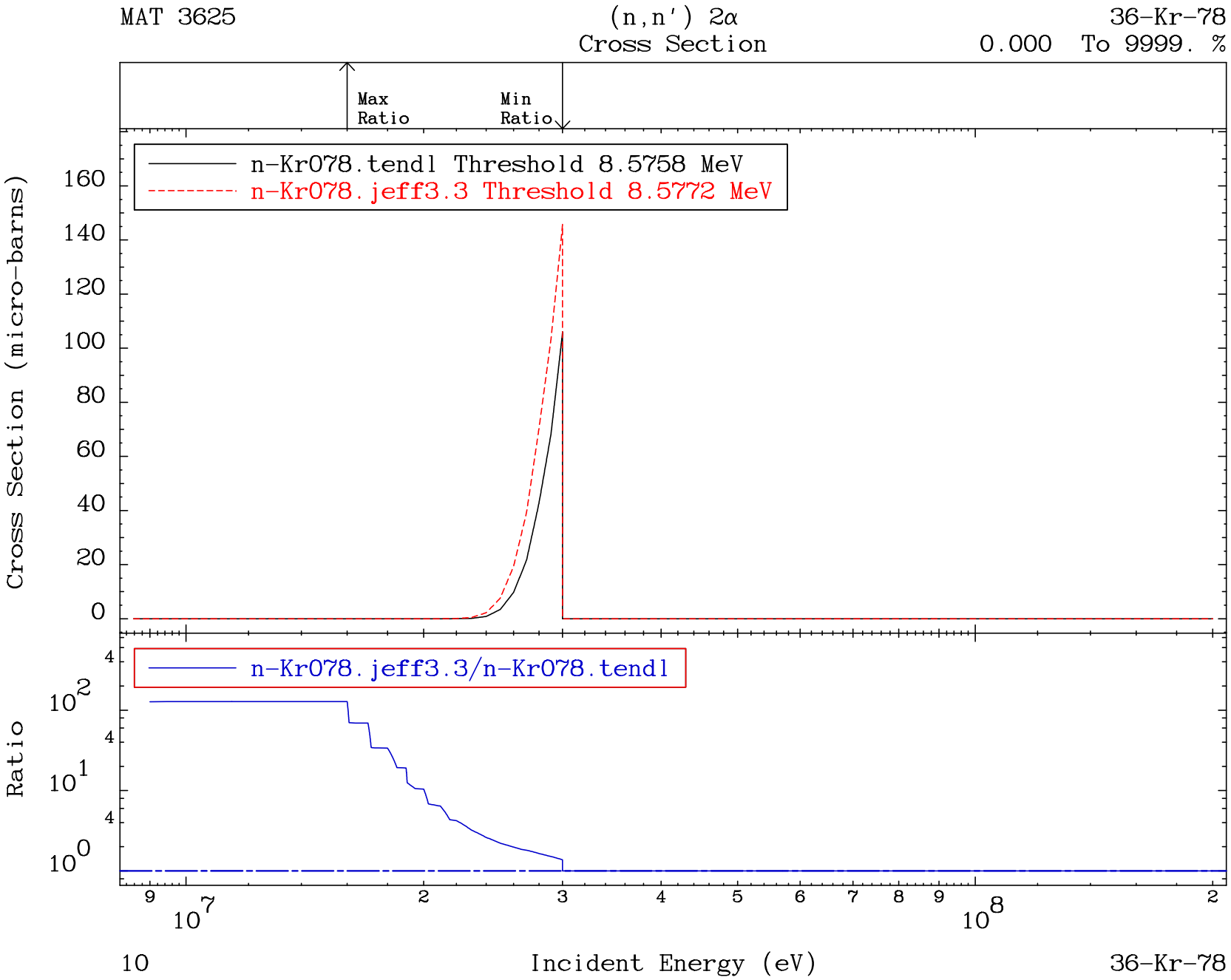

MAT 3625
(n,2n)
Cross Section
36-Kr-78
-0.540 To 0.855 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 12.237 MeV
n-Kr078.jeff3.3 Threshold 12.238 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
36-Kr-78

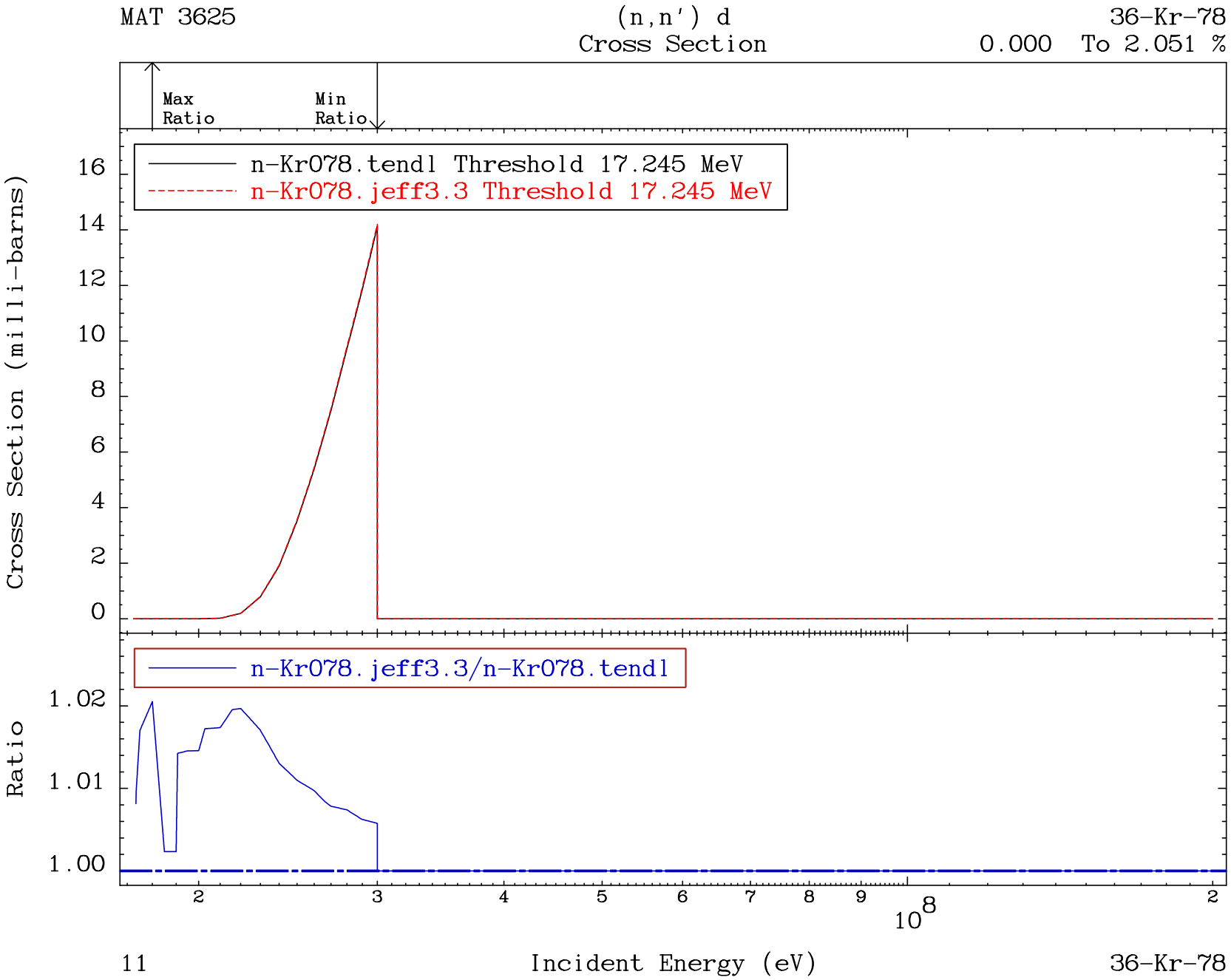

MAT 3625
(n,3n)
Cross Section
36-Kr-78
0.000 To 4.012 %
Min
Ratio
n-Kr078.tendl Threshold 21.583 MeV
n-Kr078.jeff3.3 Threshold 21.583 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.04
1.02
1.00
20
40
60
80
100
120
140
160
180
200
6
Incident Energy (MeV)
36-Kr-78

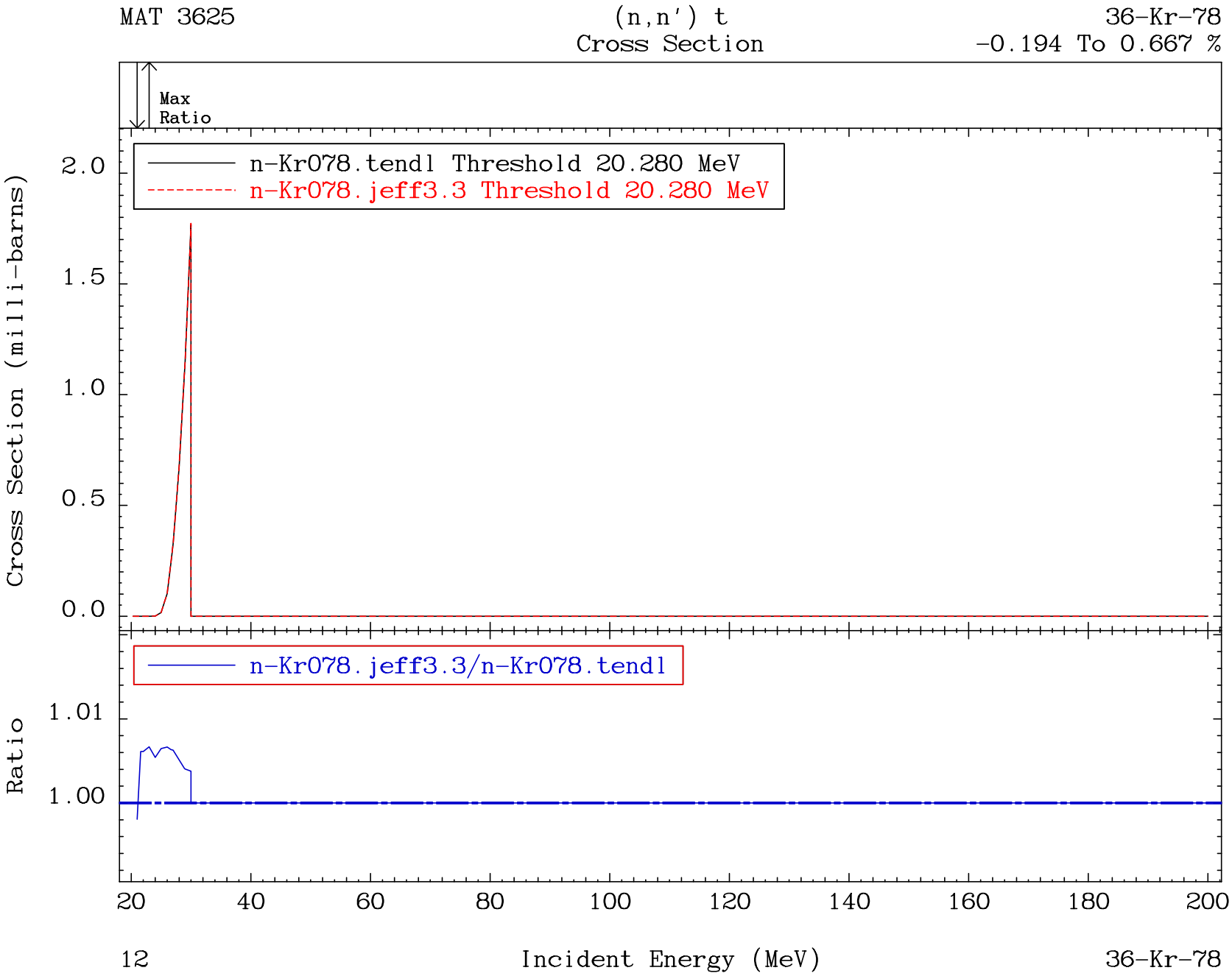

MAT 3625
(n,n') α
Cross Section
36-Kr-78
-3.088 To 4642. %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 4.4468 MeV
n-Kr078.jeff3.3 Threshold 4.4481 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
10^2
4
10^1
4
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
36-Kr-78

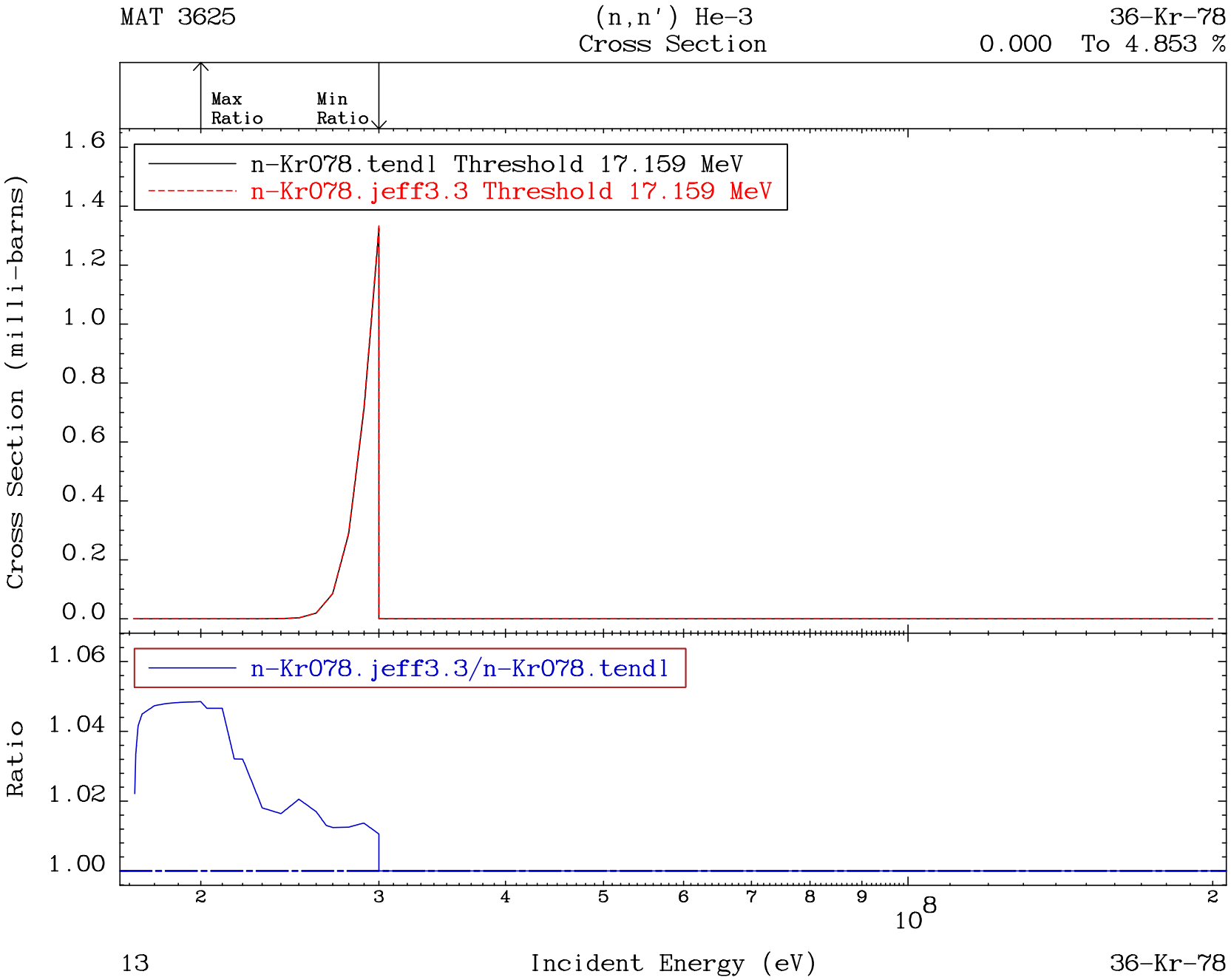

MAT 3625
(n,2n) α
Cross Section
36-Kr-78
0.000 To 1806. %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 16.660 MeV
n-Kr078.jeff3.3 Threshold 16.660 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
10^1
6
4
10^0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
36-Kr-78

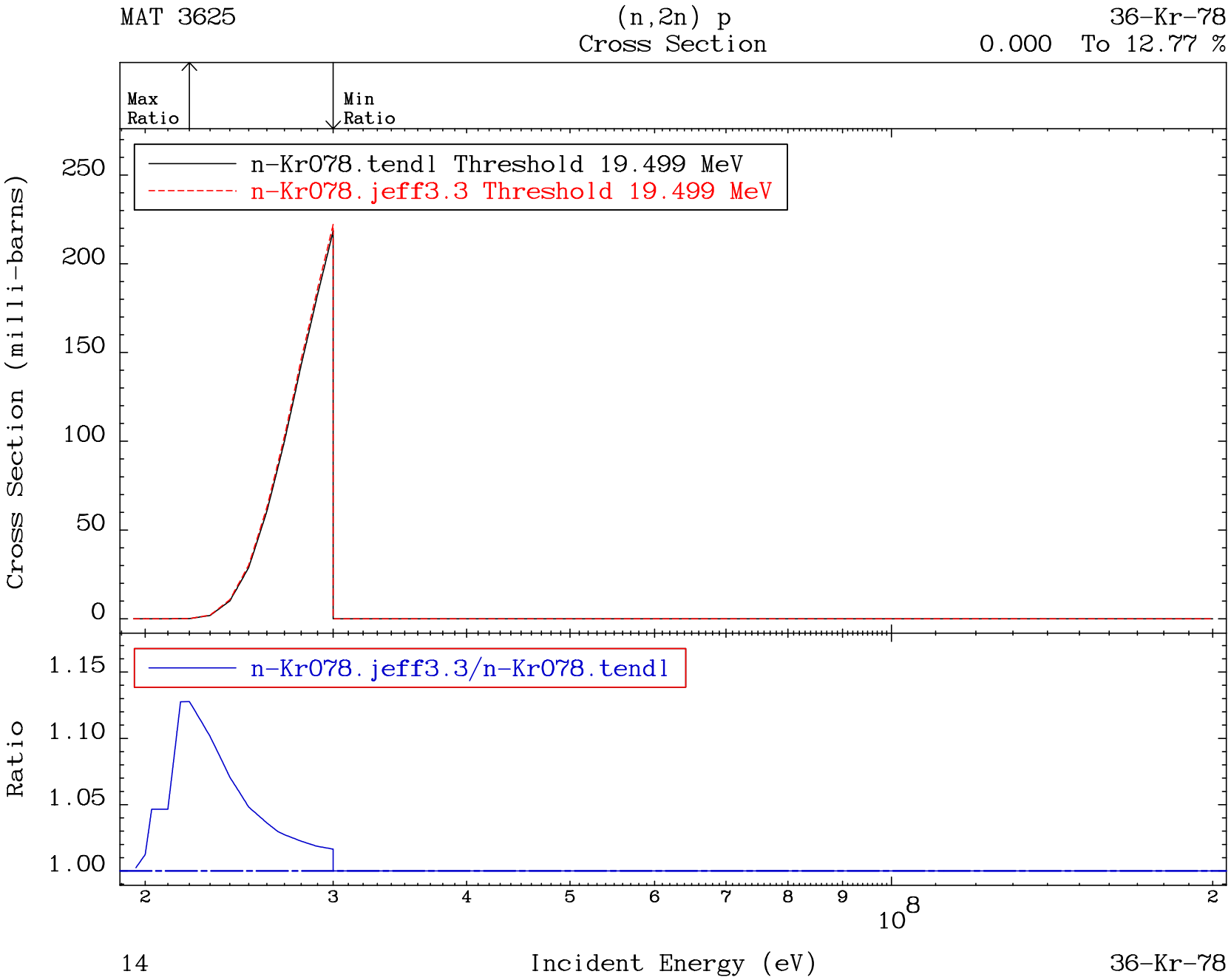

MAT 3625
(n,n') p
Cross Section
36-Kr-78
-0.258 To 15.98 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 8.3390 MeV
n-Kr078.jeff3.3 Threshold 8.3403 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.2
1.1
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
36-Kr-78

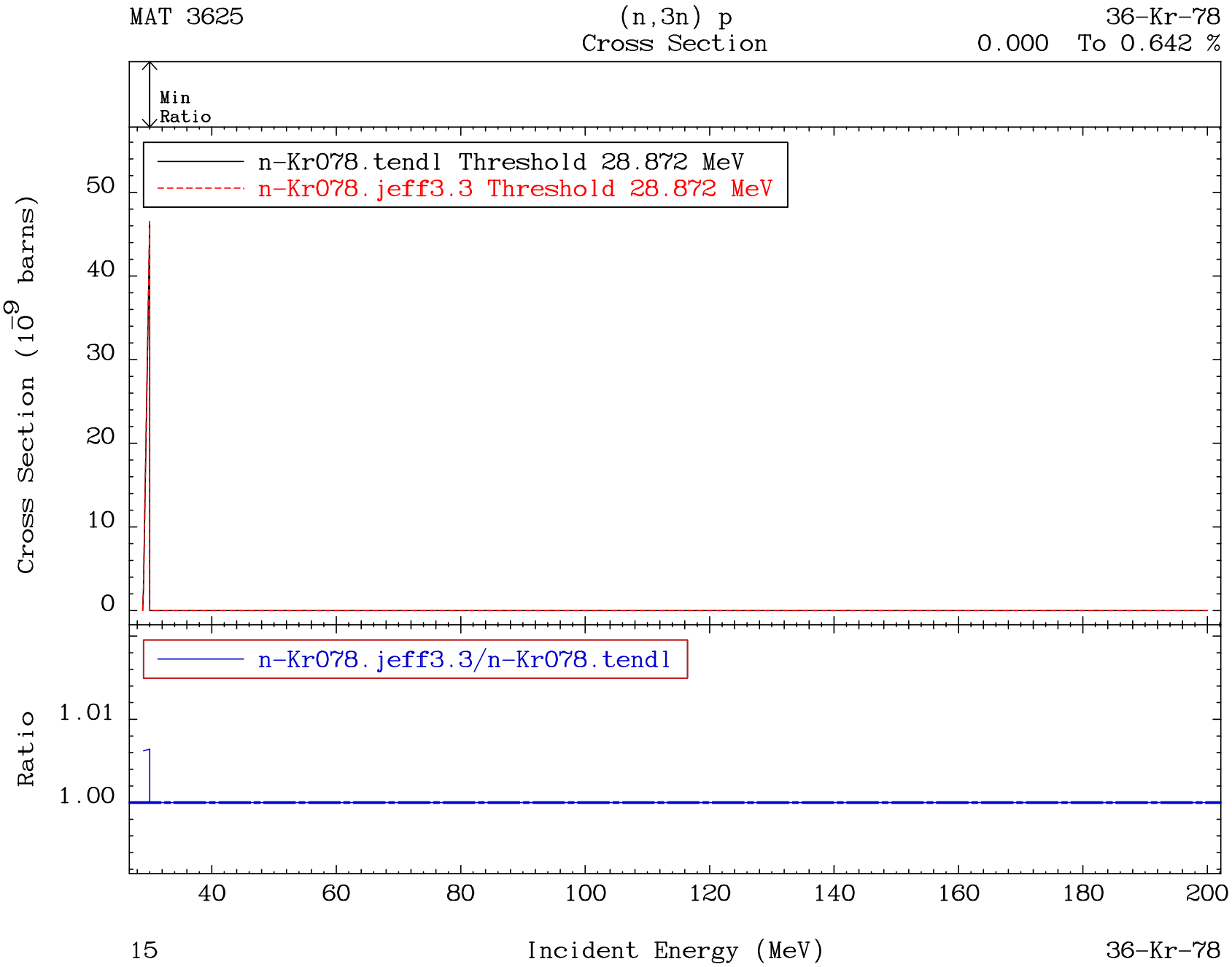

MAT 3625
(n,n') 2α
Cross Section
36-Kr-78
0.000 To 9999. %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 8.5758 MeV
n-Kr078.jeff3.3 Threshold 8.5772 MeV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
10^2
10^1
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
36-Kr-78

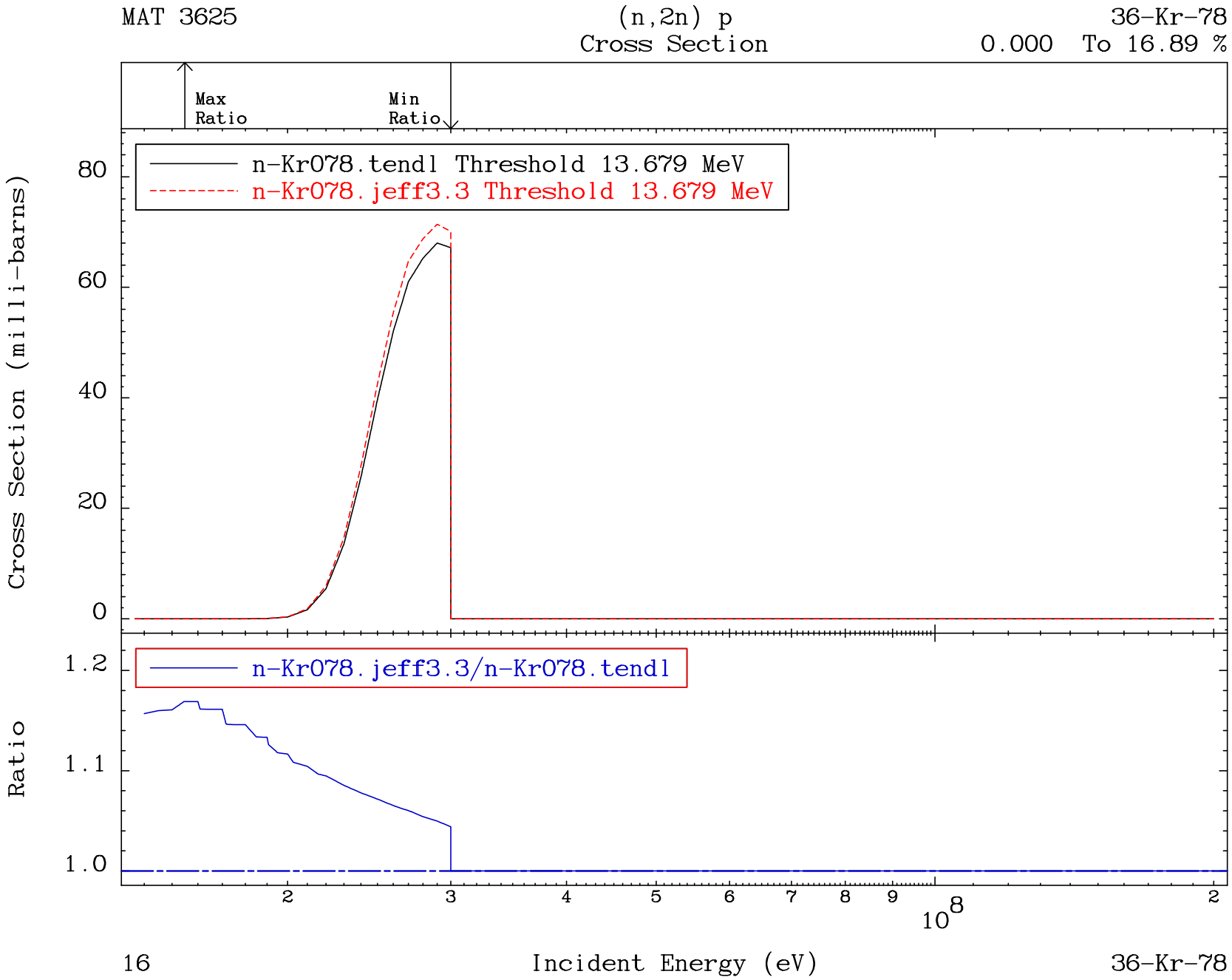

MAT 3625
(n,n') d
Cross Section
36-Kr-78
0.000 To 2.051 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 17.245 MeV
n-Kr078.jeff3.3 Threshold 17.245 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
36-Kr-78

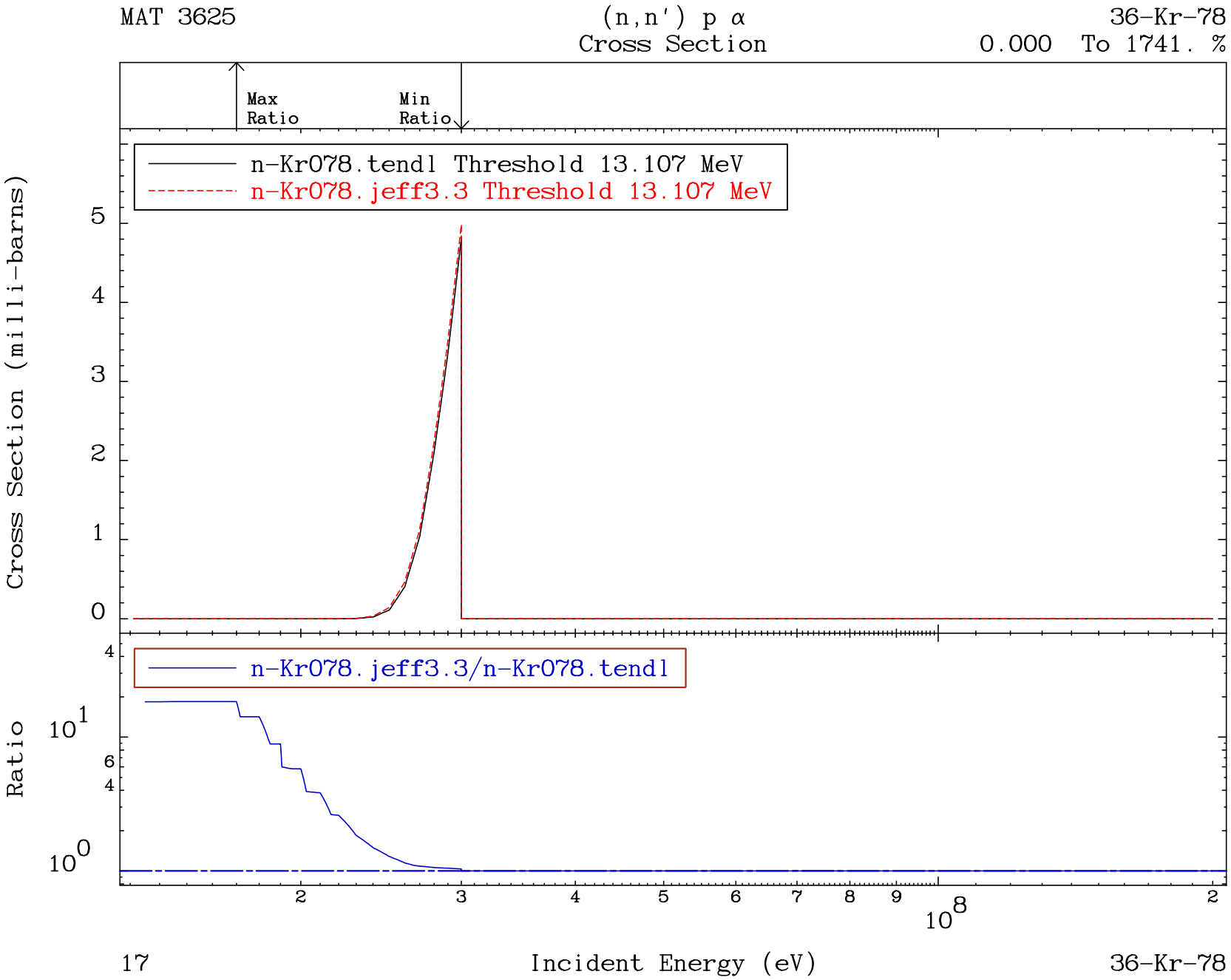

MAT 3625
(n,n') t
Cross Section
36-Kr-78
-0.194 To 0.667 %
Max
Ratio
n-Kr078.tendl Threshold 20.280 MeV
n-Kr078.jeff3.3 Threshold 20.280 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
20
40
60
80
100
120
140
160
180
200
12
Incident Energy (MeV)
36-Kr-78

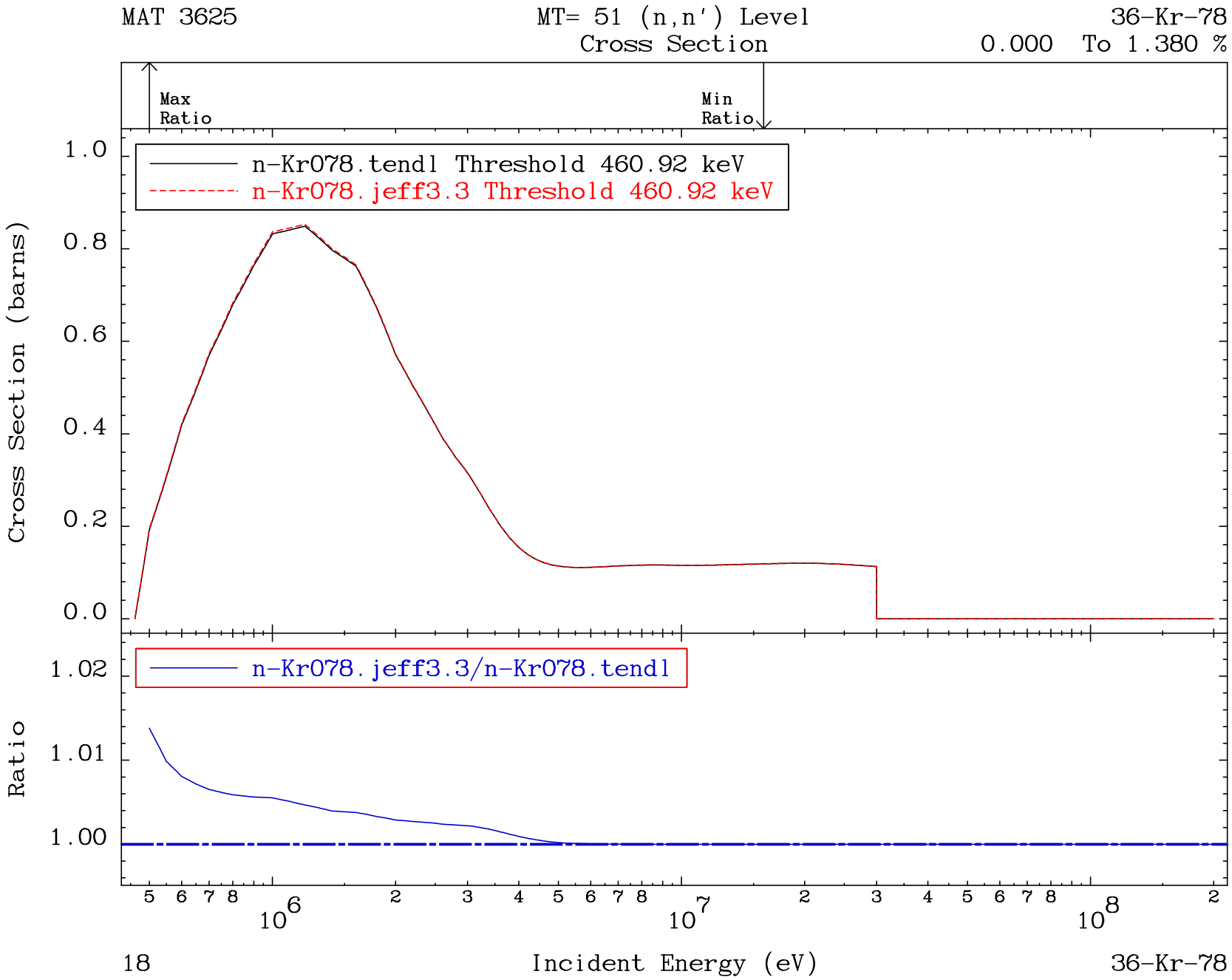

MAT 3625
(n,n') He-3
Cross Section
36-Kr-78
0.000 To 4.853 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 17.159 MeV
n-Kr078.jeff3.3 Threshold 17.159 MeV
Cross Section (milli-barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.06
1.04
1.02
1.00
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
36-Kr-78

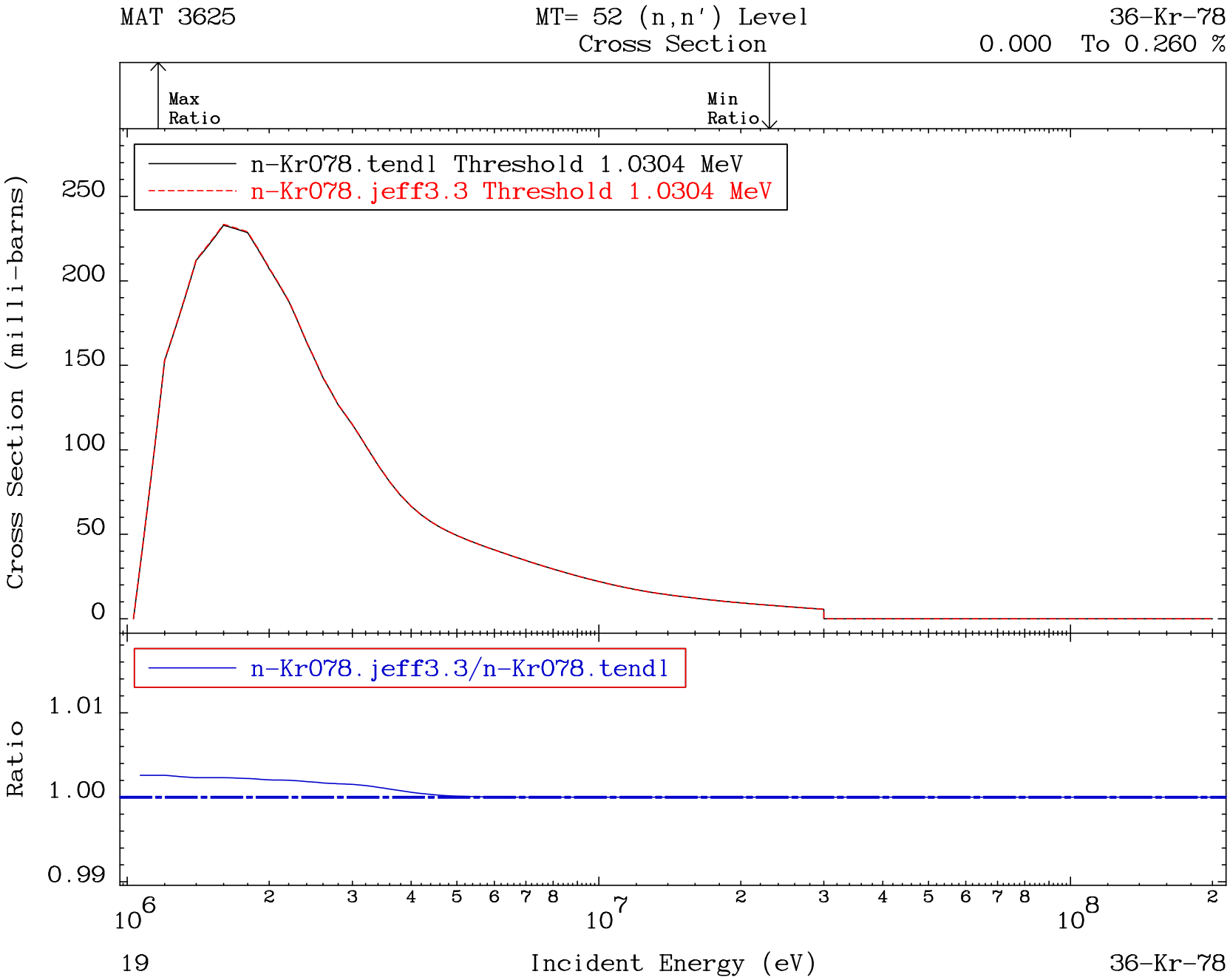

MAT 3625
(n,2n) p
Cross Section
36-Kr-78
0.000 To 12.77 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 19.499 MeV
n-Kr078.jeff3.3 Threshold 19.499 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
36-Kr-78

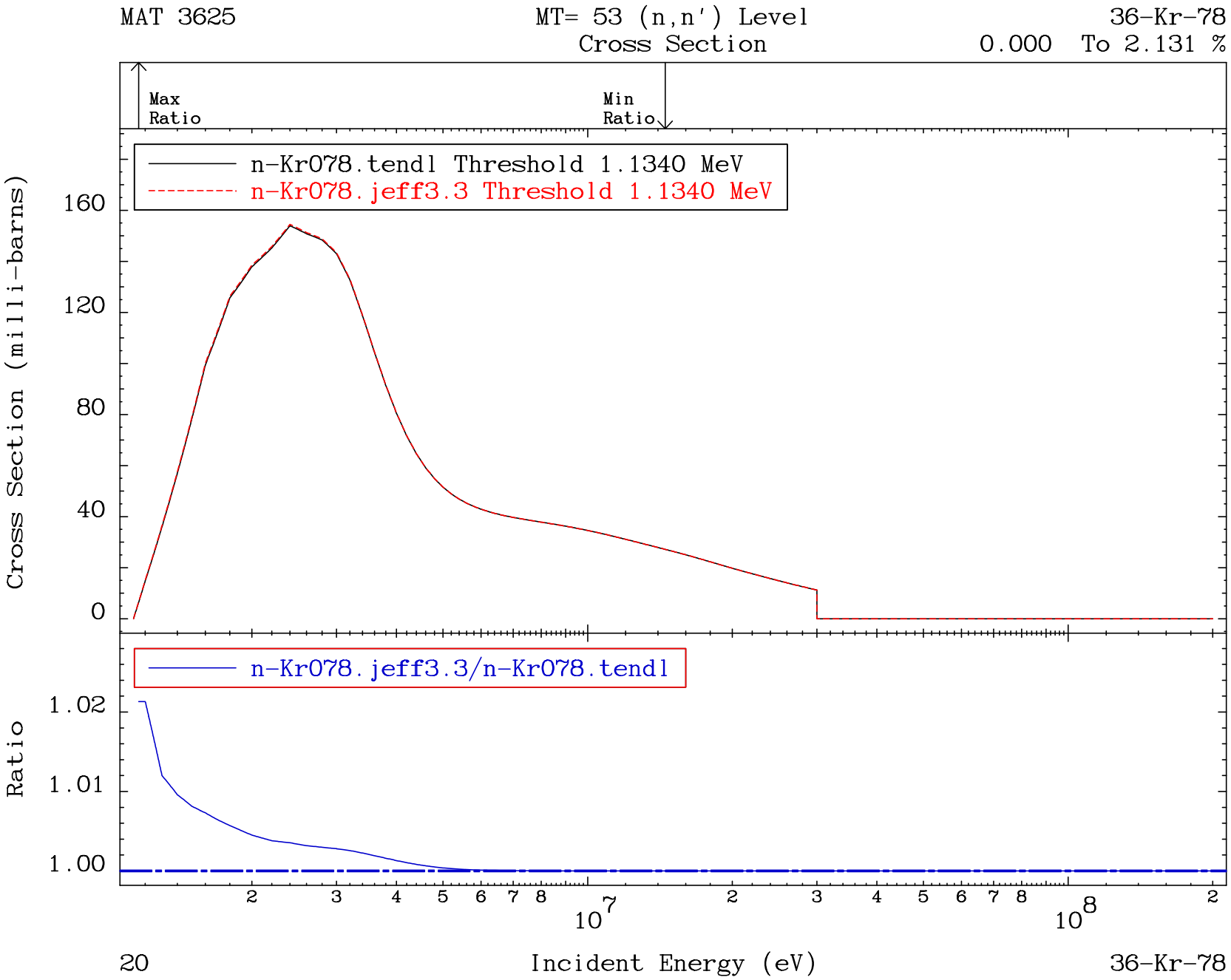

MAT 3625
(n,3n) p
Cross Section
36-Kr-78
0.000 To 0.642 %
Min
Ratio
n-Kr078.tendl Threshold 28.872 MeV
n-Kr078.jeff3.3 Threshold 28.872 MeV
Cross Section (10^-9 barns)
50
40
30
20
10
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
36-Kr-78

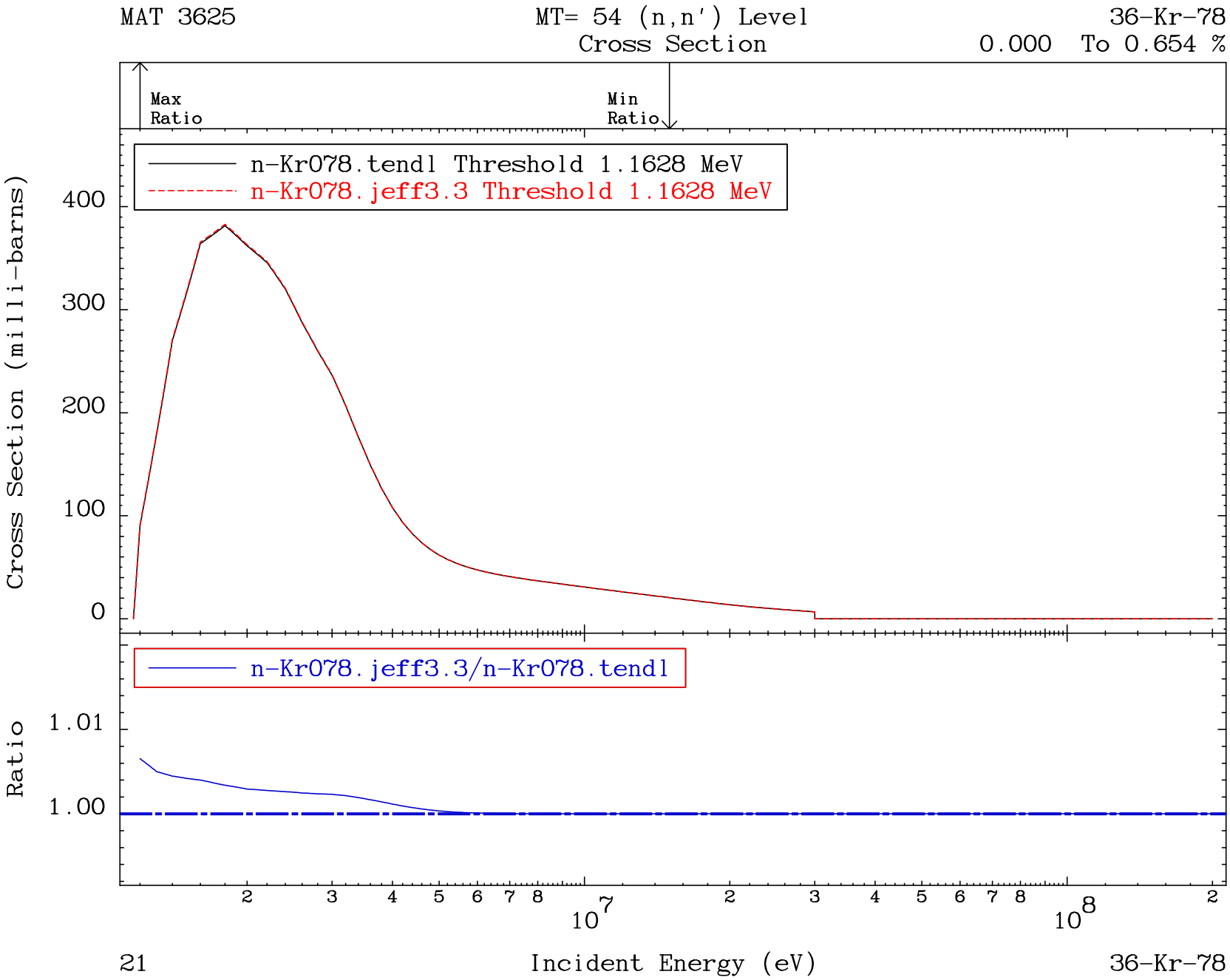

MAT 3625
(n,2n) p
Cross Section
36-Kr-78
0.000 To 16.89 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 13.679 MeV
n-Kr078.jeff3.3 Threshold 13.679 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
16
Incident Energy (eV)
36-Kr-78

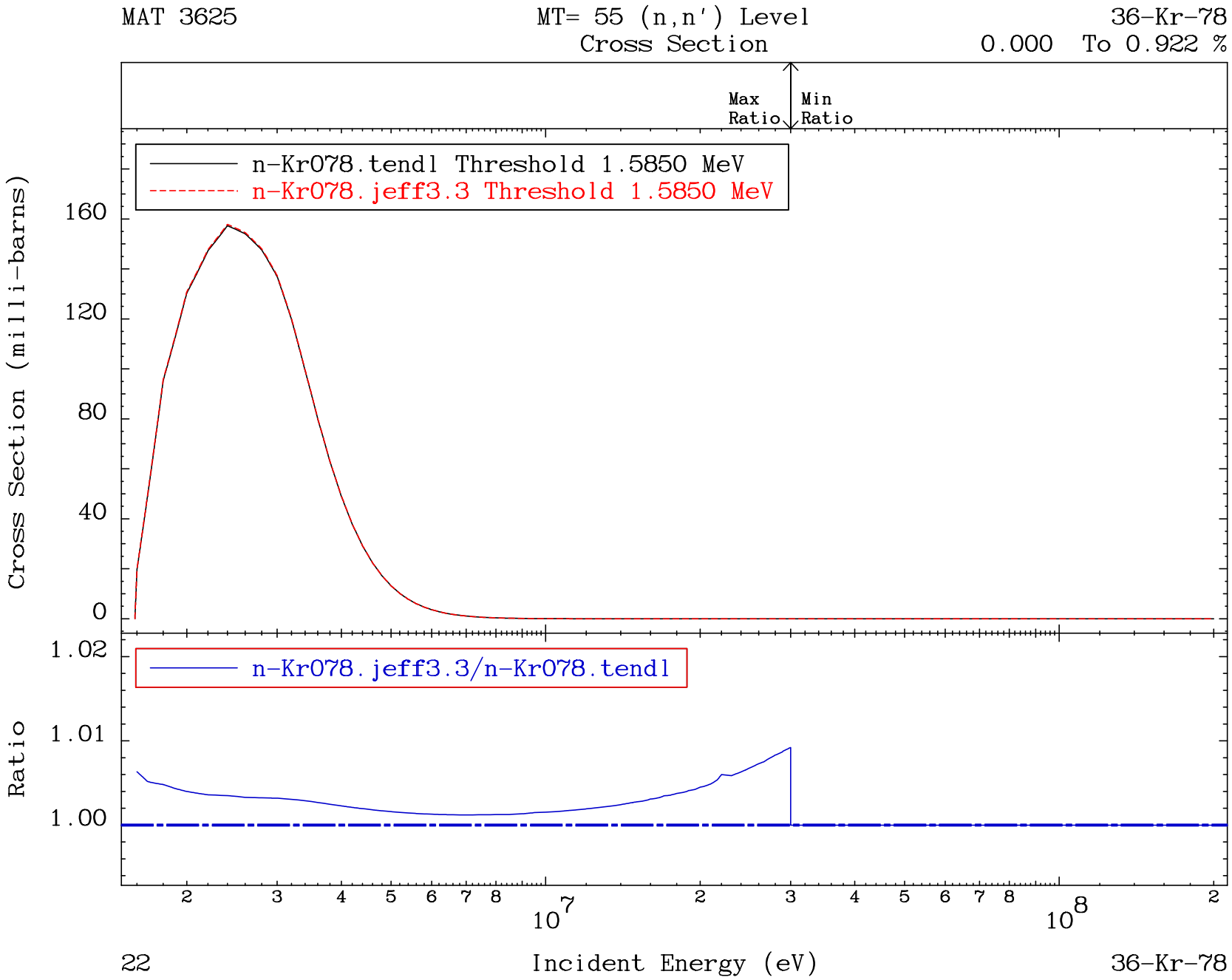

MAT 3625
(n,n') p α
Cross Section
36-Kr-78
0.000 To 1741. %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 13.107 MeV
n-Kr078.jeff3.3 Threshold 13.107 MeV
Cross Section (milli-barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
17
36-Kr-78

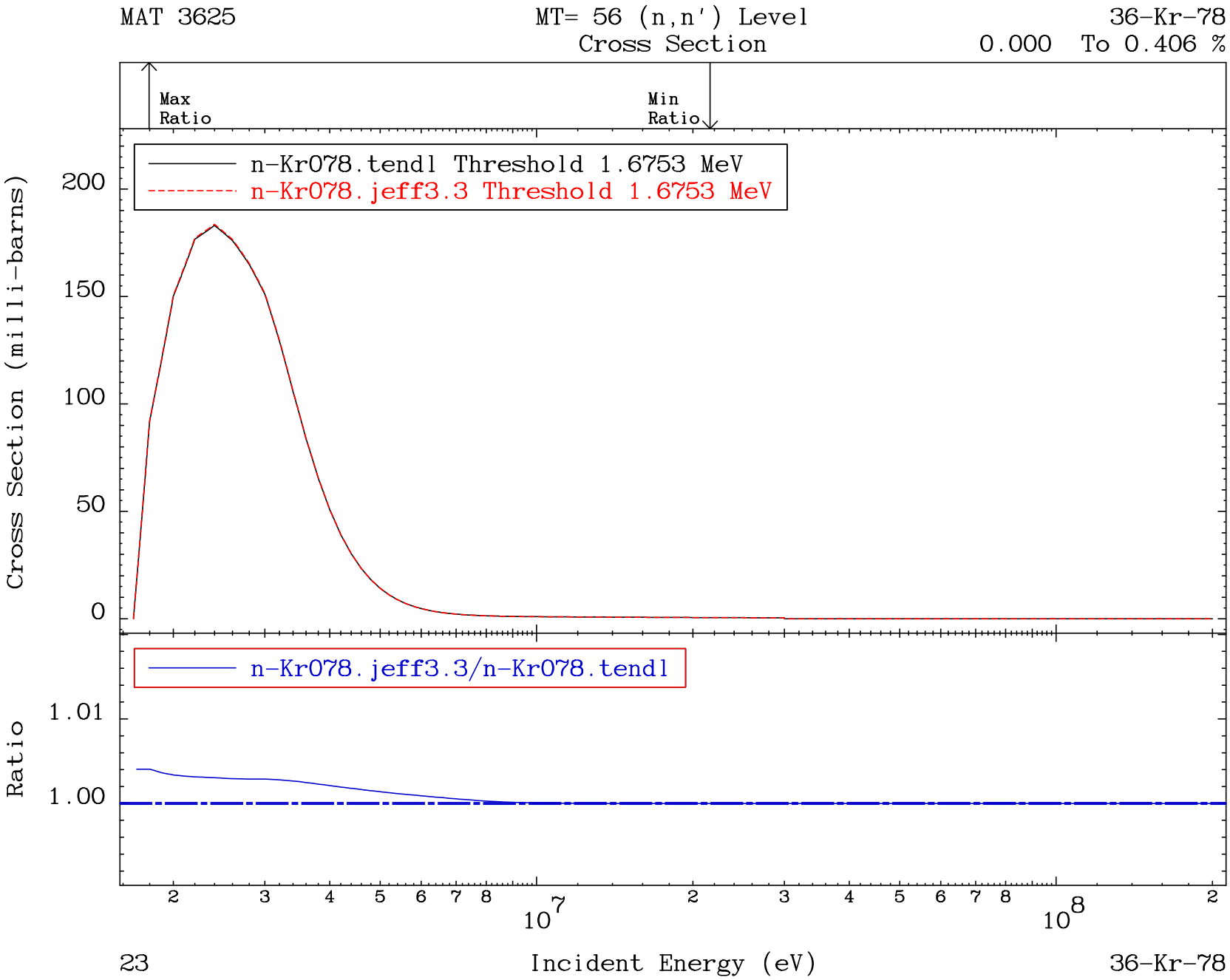

MAT 3625
MT= 51 (n,n') Level
Cross Section
36-Kr-78
0.000 To 1.380 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 460.92 keV
n-Kr078.jeff3.3 Threshold 460.92 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
36-Kr-78

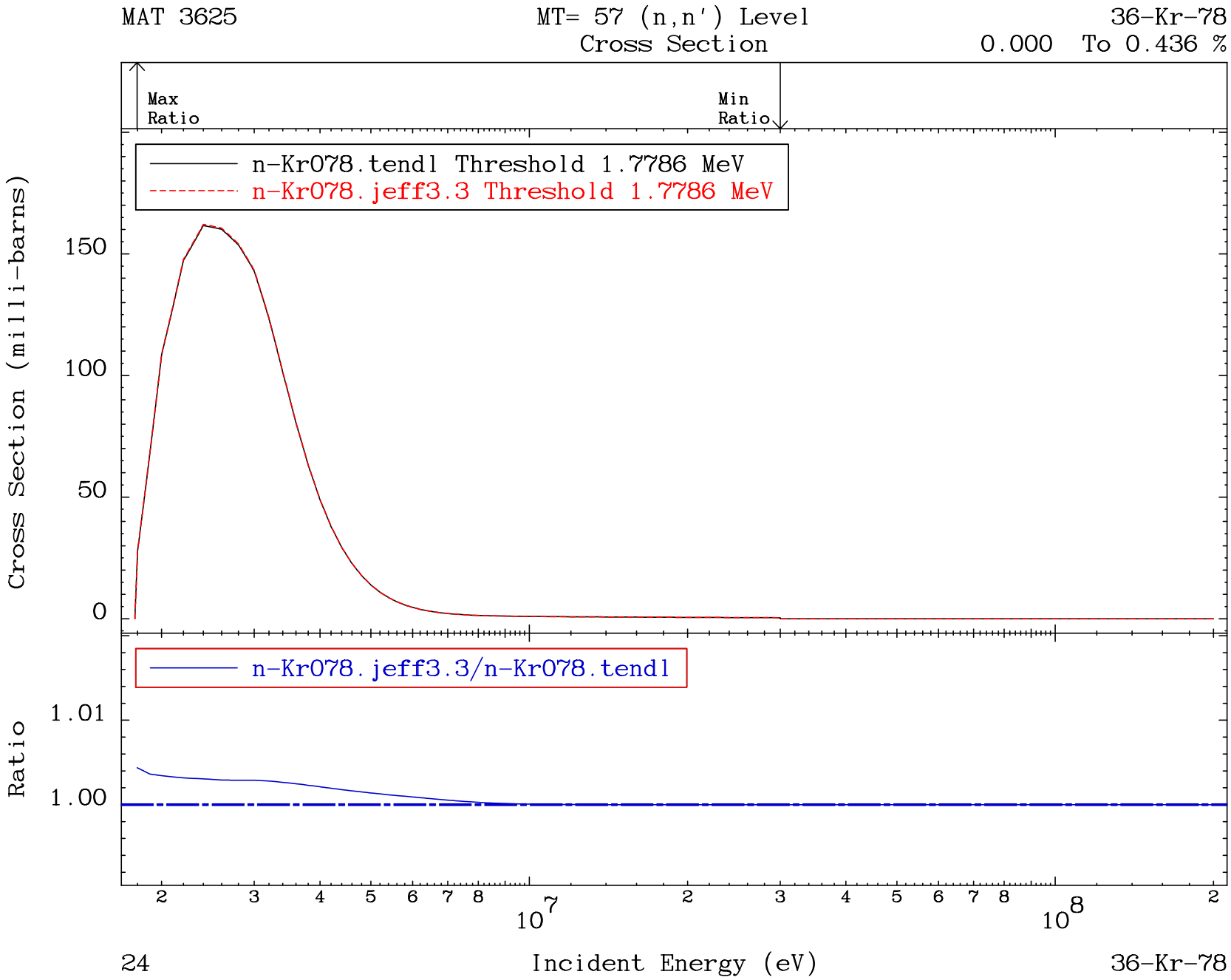

MAT 3625
MT= 52 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.260 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 1.0304 MeV
n-Kr078.jeff3.3 Threshold 1.0304 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
0.99
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
36-Kr-78

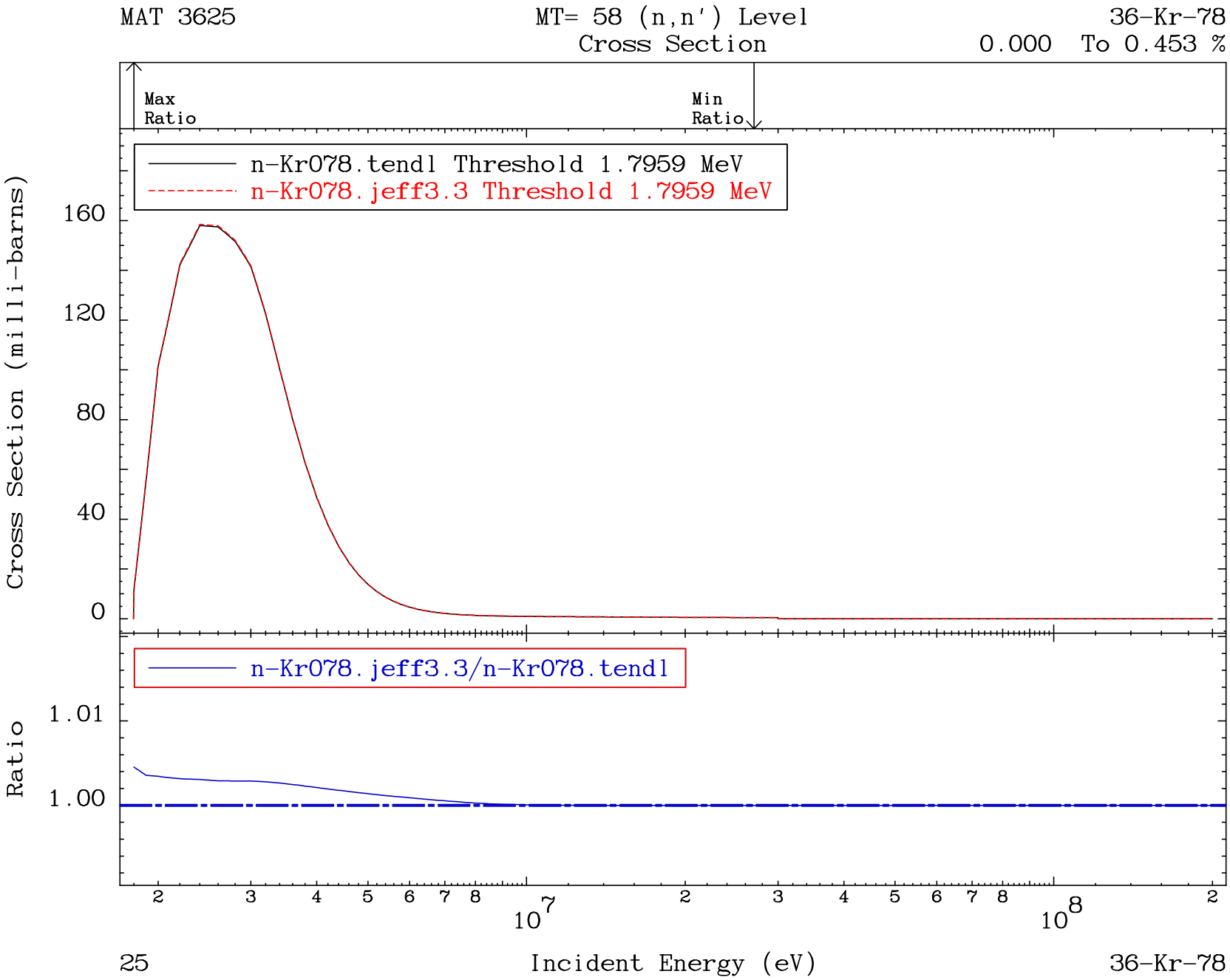

MAT 3625
MT= 53 (n,n') Level
Cross Section
36-Kr-78
0.000 To 2.131 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 1.1340 MeV
n-Kr078.jeff3.3 Threshold 1.1340 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
36-Kr-78

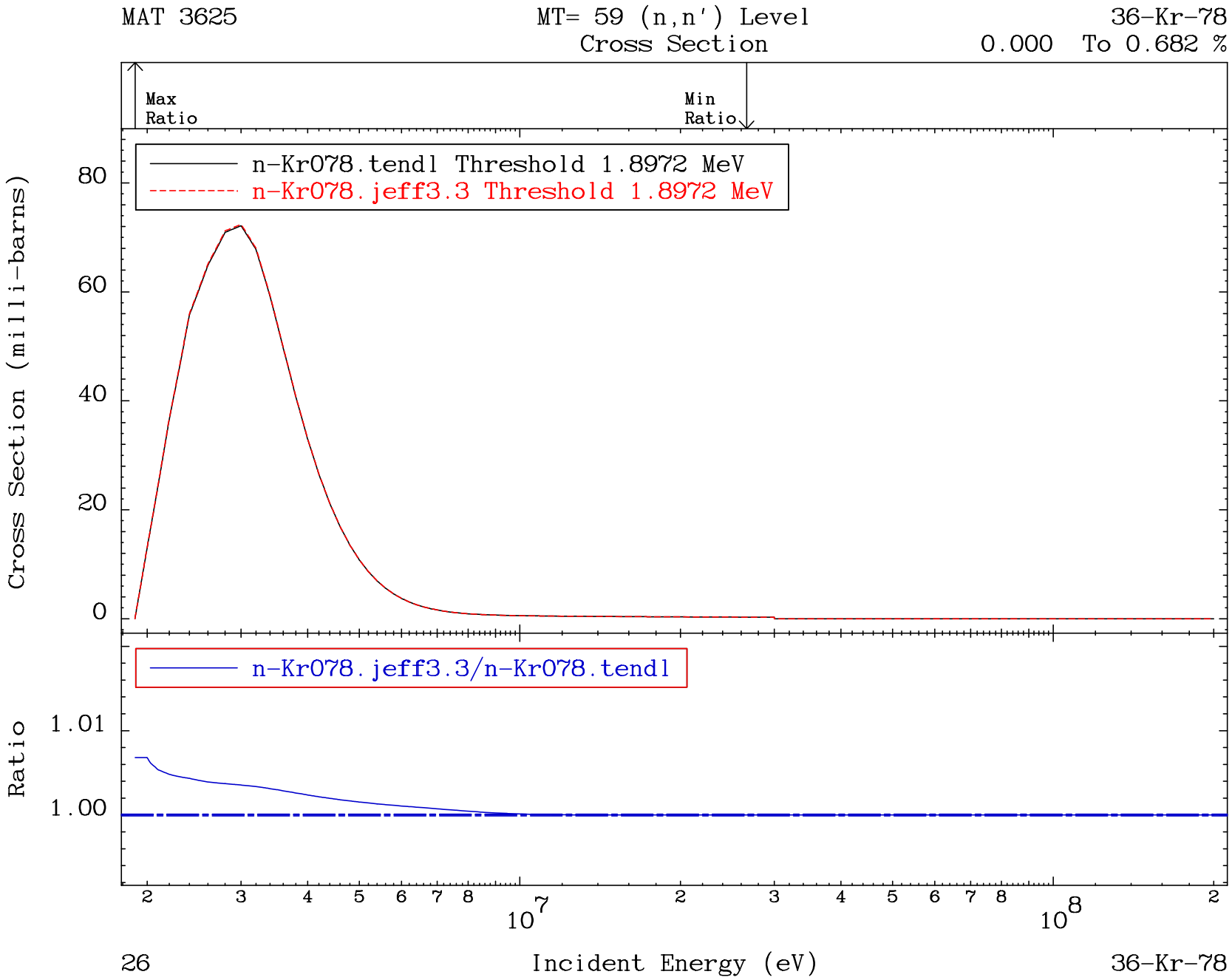

MAT 3625
MT= 54 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.654 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 1.1628 MeV
n-Kr078.jeff3.3 Threshold 1.1628 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
36-Kr-78

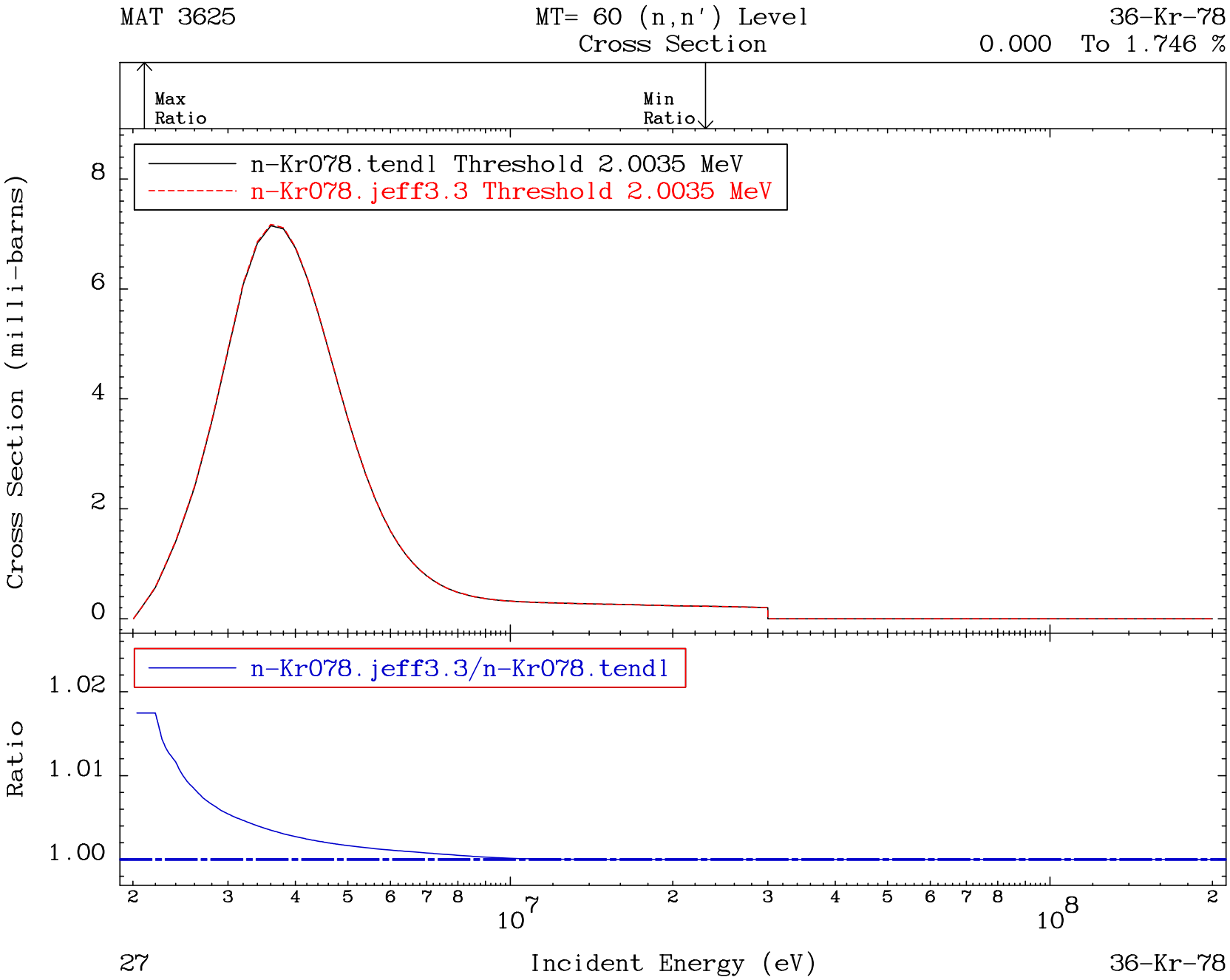

MAT 3625
MT= 55 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.922 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 1.5850 MeV
n-Kr078.jeff3.3 Threshold 1.5850 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
36-Kr-78

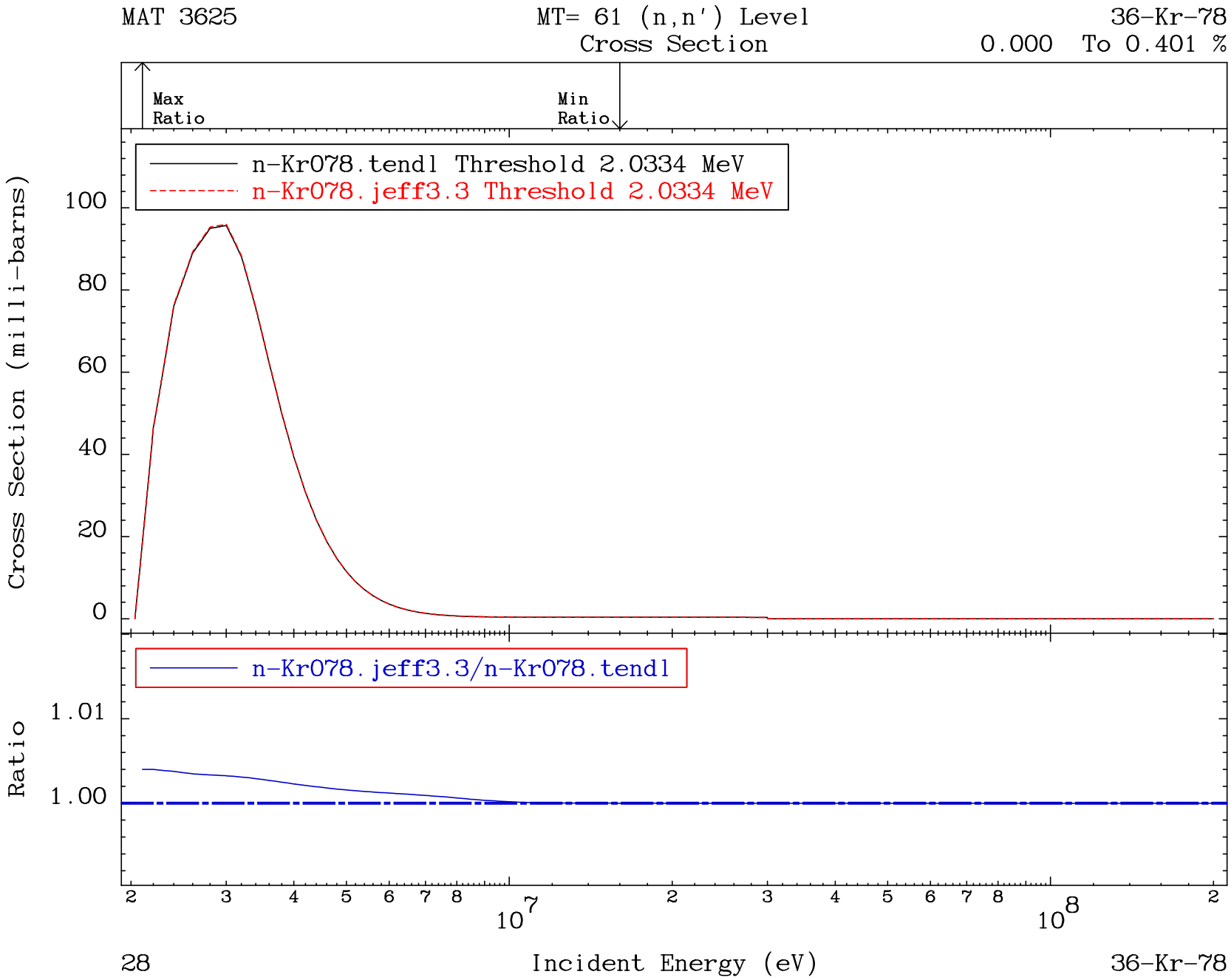

MAT 3625
MT= 56 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.406 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 1.6753 MeV
n-Kr078.jeff3.3 Threshold 1.6753 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
36-Kr-78

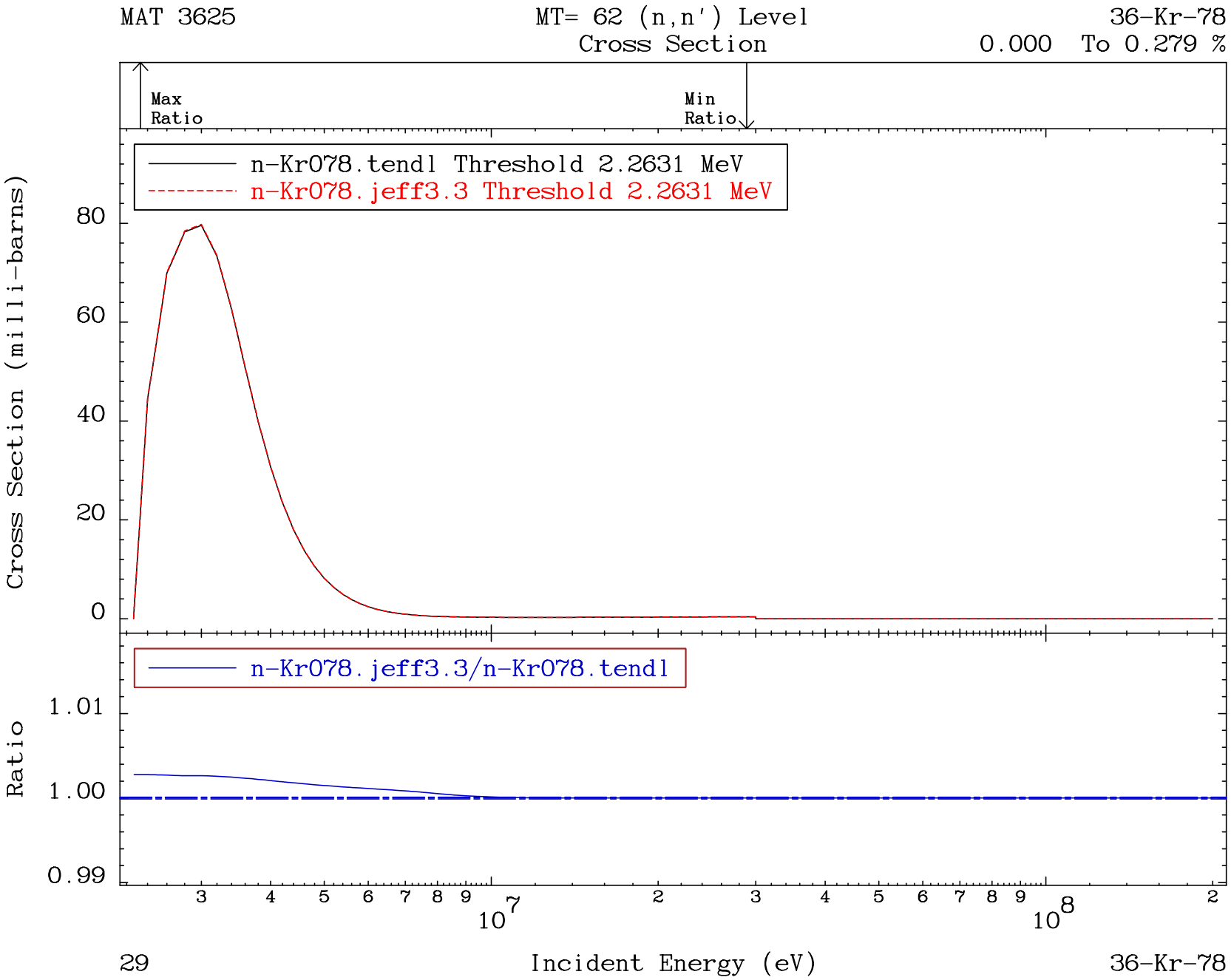

MAT 3625
MT= 57 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.436 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 1.7786 MeV
n-Kr078.jeff3.3 Threshold 1.7786 MeV
Cross Section (milli-barns)
150
100
50
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
36-Kr-78

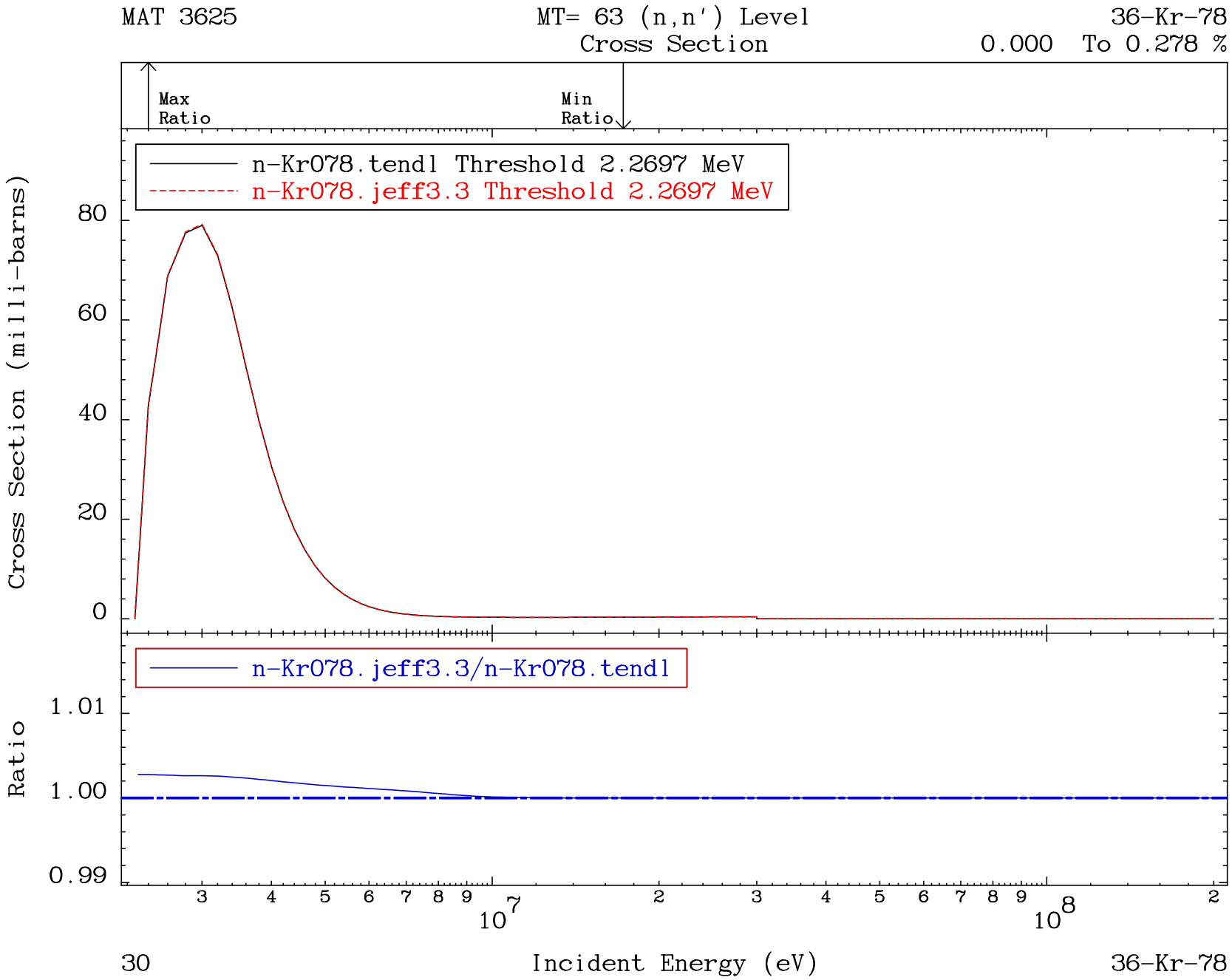

MAT 3625
MT= 58 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.453 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 1.7959 MeV
n-Kr078.jeff3.3 Threshold 1.7959 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
36-Kr-78

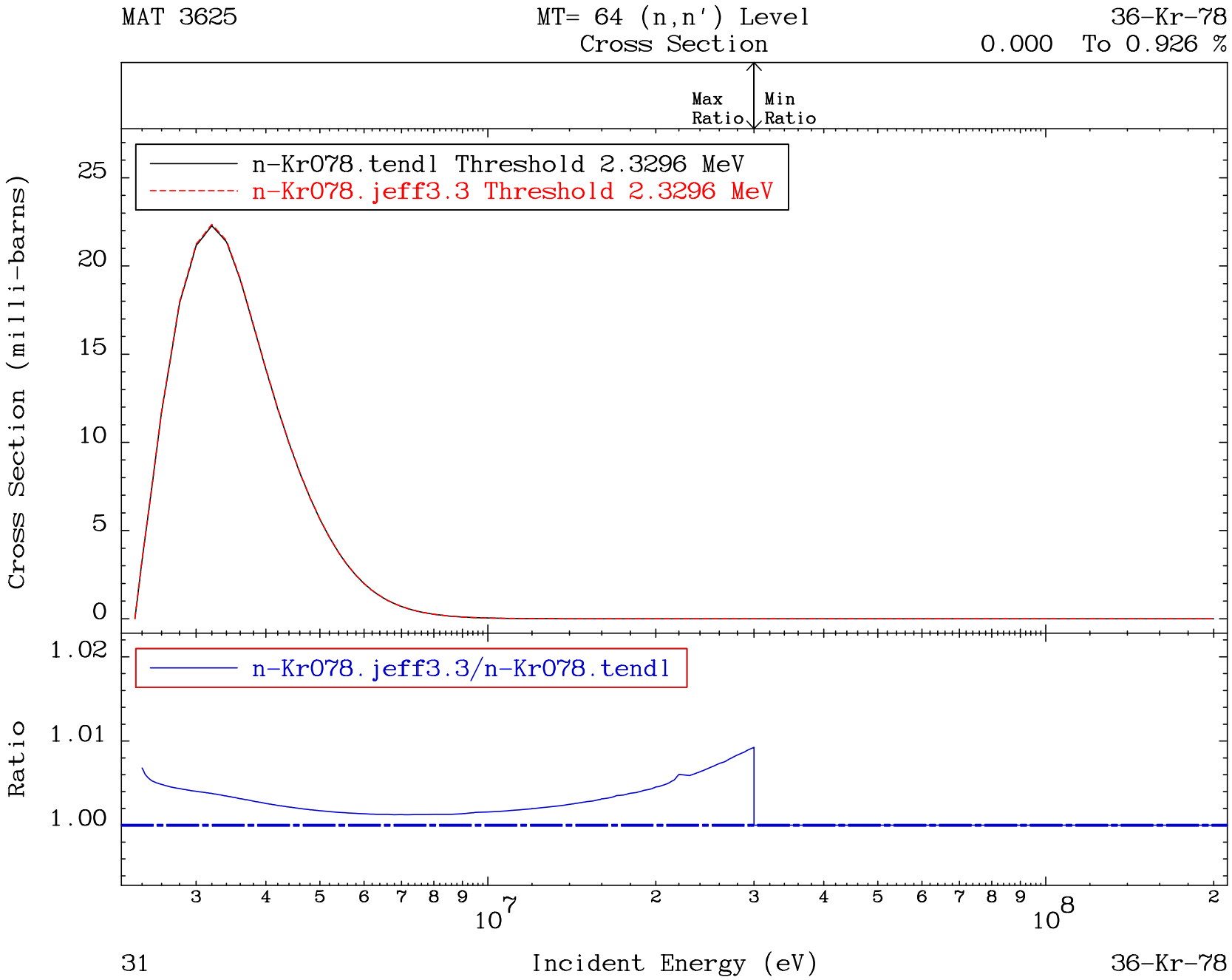

MAT 3625
MT= 59 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.682 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 1.8972 MeV
n-Kr078.jeff3.3 Threshold 1.8972 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
26
Incident Energy (eV)
36-Kr-78

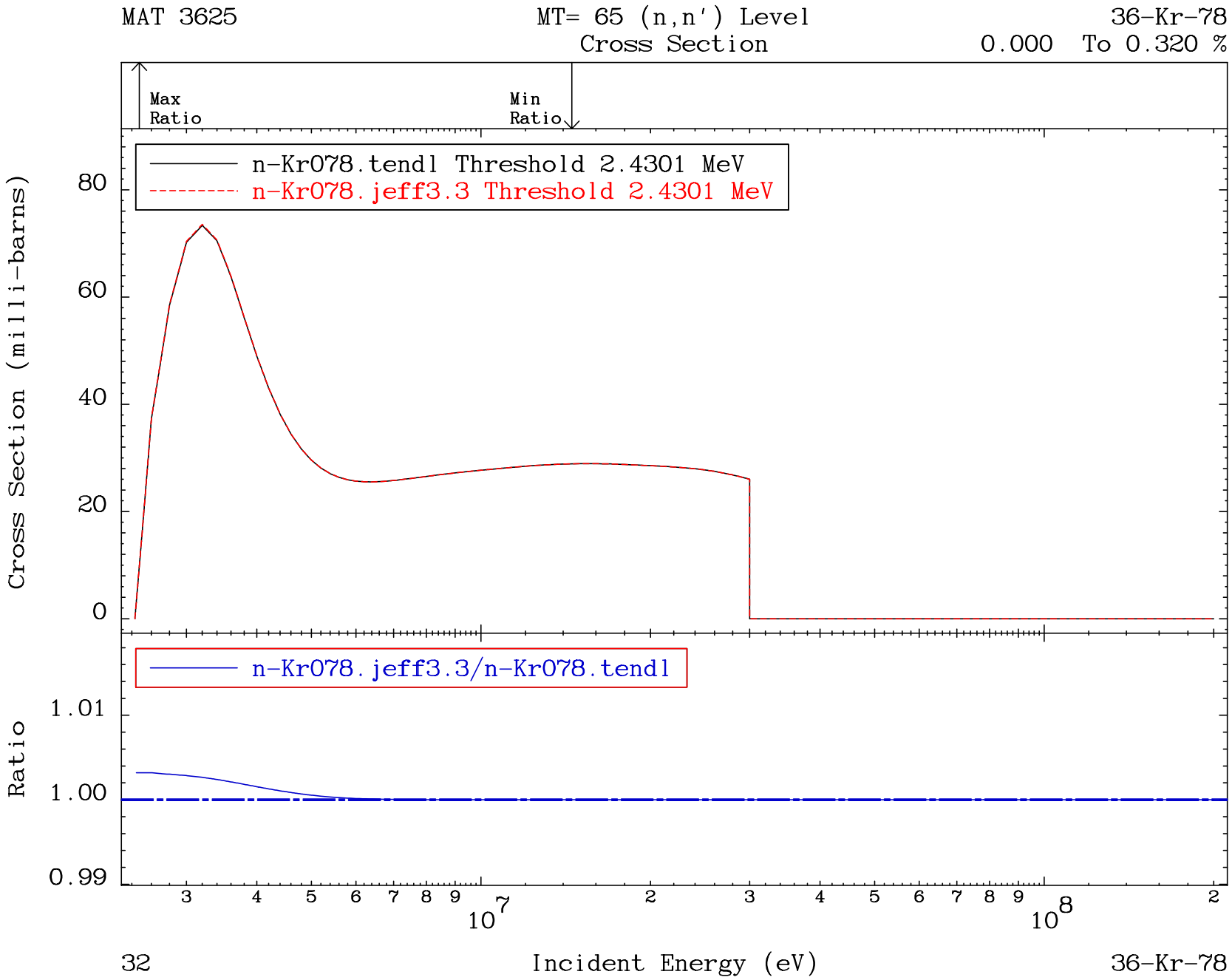

MAT 3625
MT= 60 (n,n') Level
Cross Section
36-Kr-78
0.000 To 1.746 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.0035 MeV
n-Kr078.jeff3.3 Threshold 2.0035 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.00
1.01
1.02
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
36-Kr-78

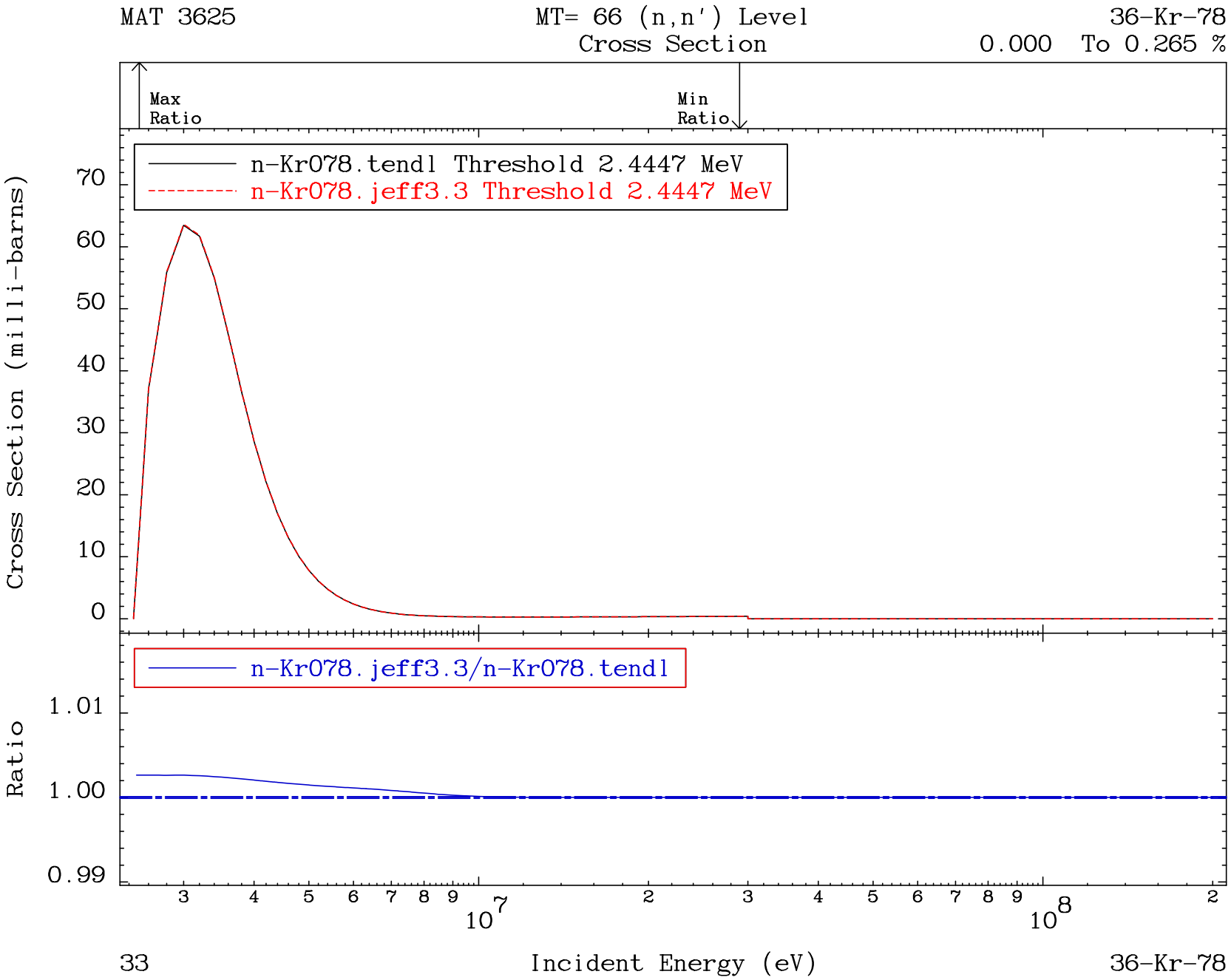

MAT 3625
MT= 61 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.401 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.0334 MeV
n-Kr078.jeff3.3 Threshold 2.0334 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
36-Kr-78

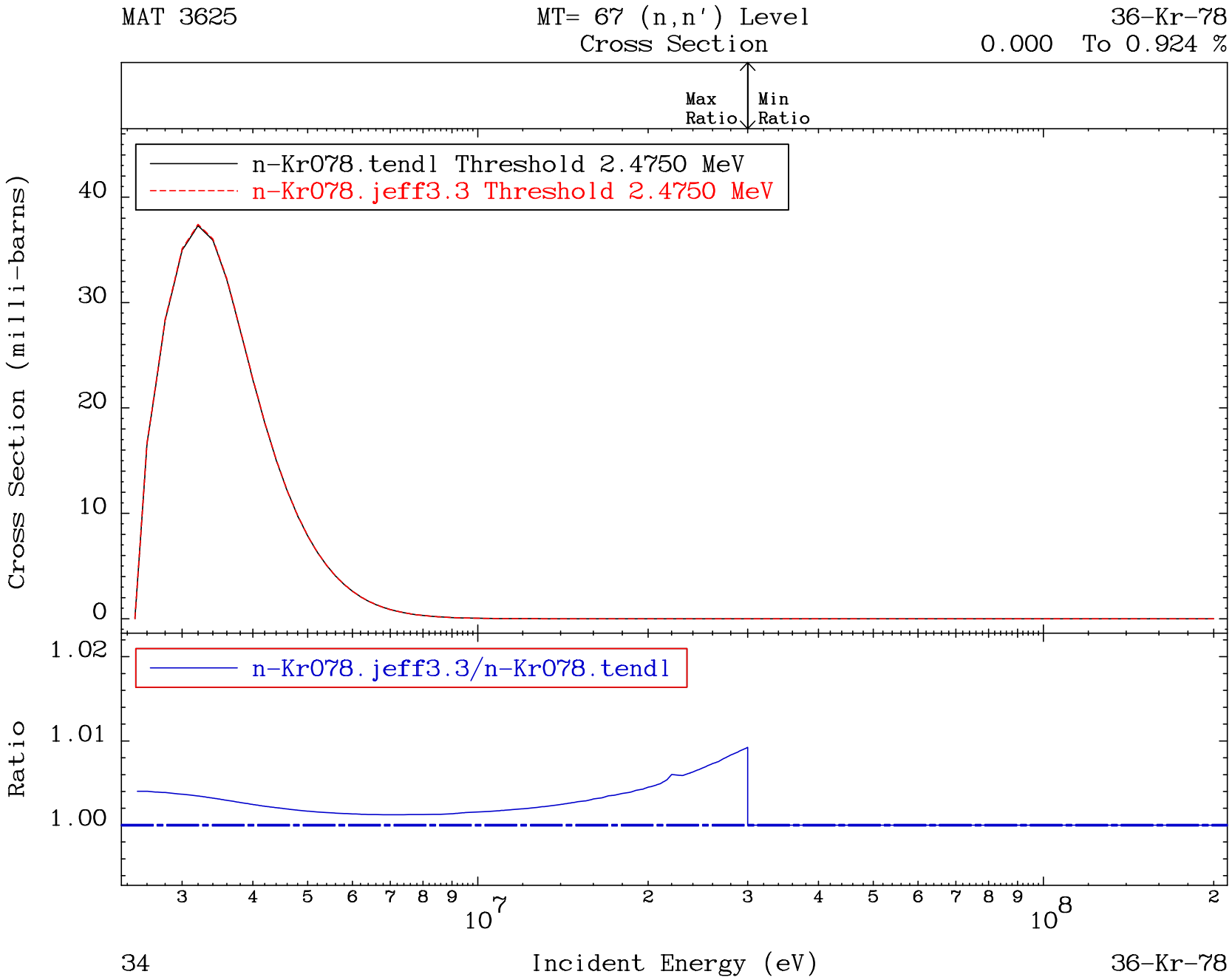

MAT 3625
MT= 62 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.279 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.2631 MeV
n-Kr078.jeff3.3 Threshold 2.2631 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
36-Kr-78

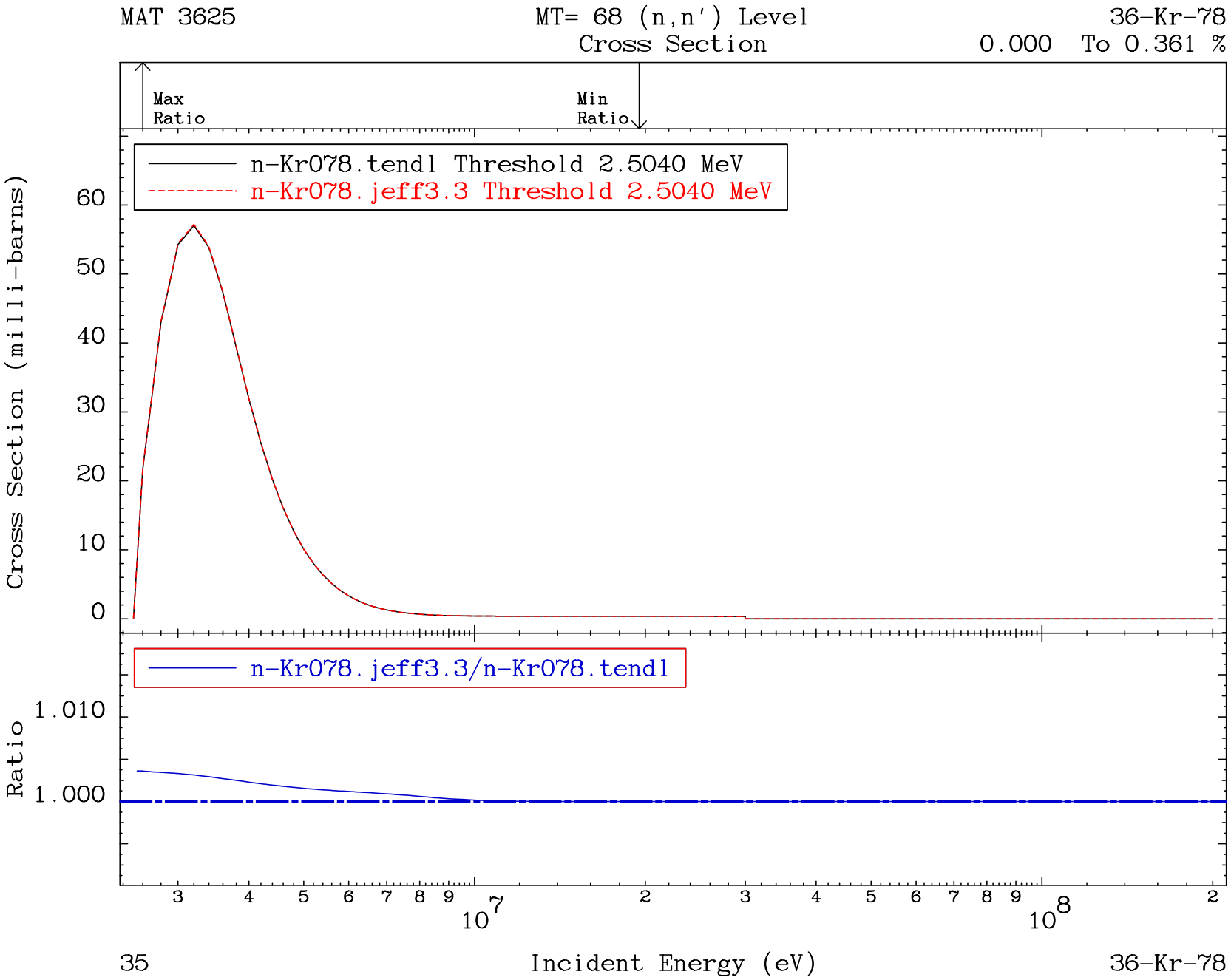

MAT 3625
MT= 63 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.278 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.2697 MeV
n-Kr078.jeff3.3 Threshold 2.2697 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
36-Kr-78

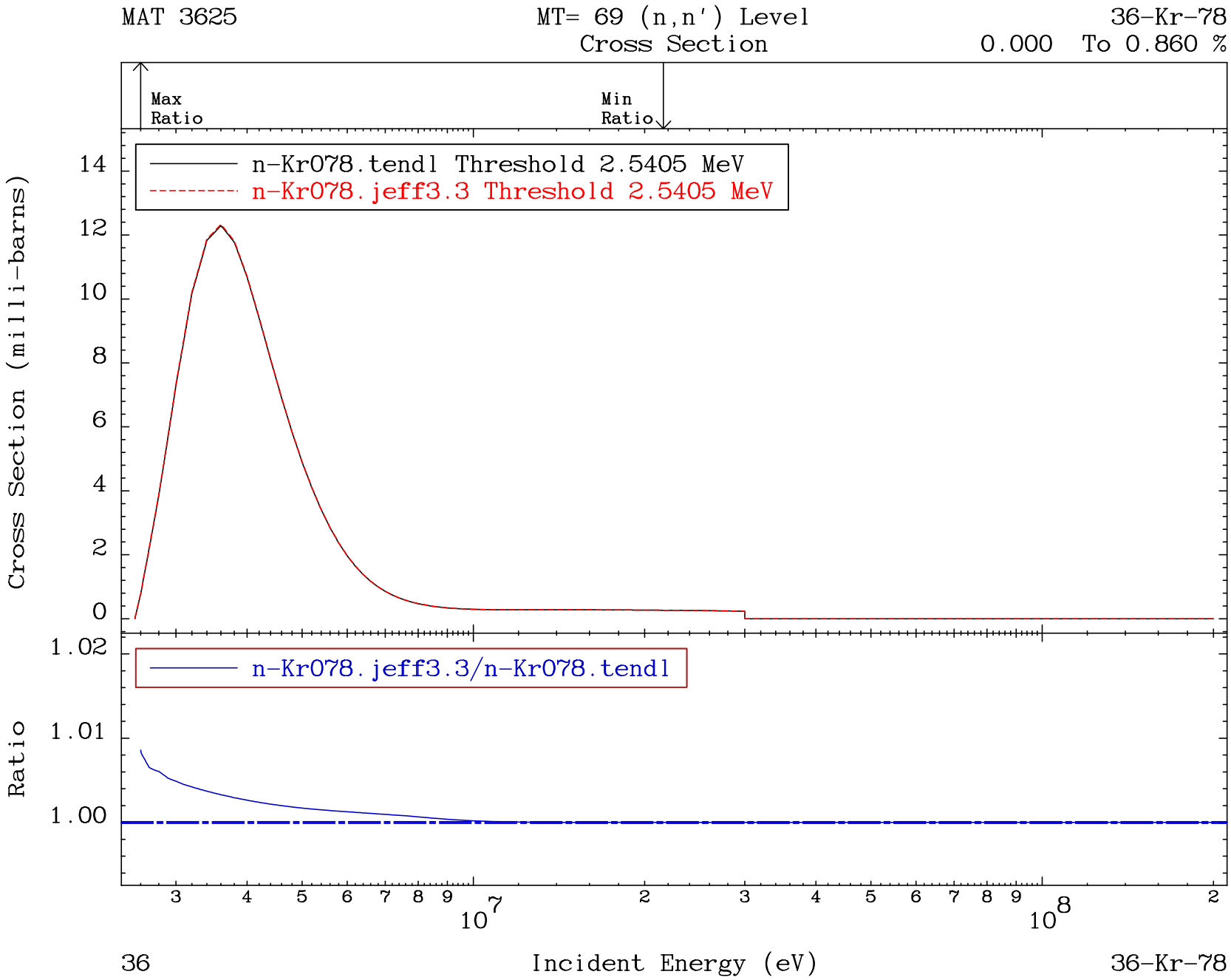

MAT 3625
MT= 64 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.926 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.3296 MeV
n-Kr078.jeff3.3 Threshold 2.3296 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
31
Incident Energy (eV)
36-Kr-78

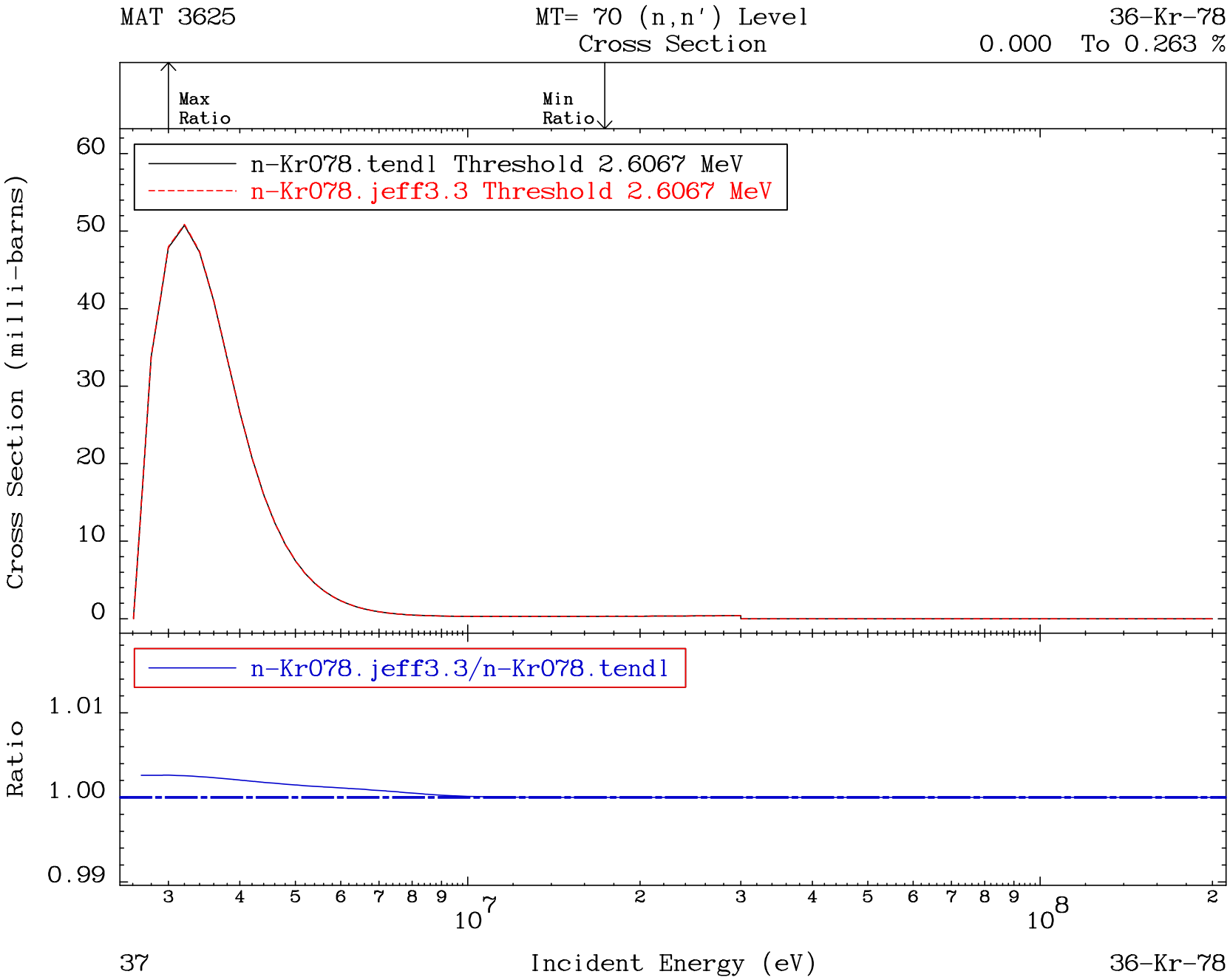

MAT 3625
MT= 65 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.320 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.4301 MeV
n-Kr078.jeff3.3 Threshold 2.4301 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
32
Incident Energy (eV)
36-Kr-78

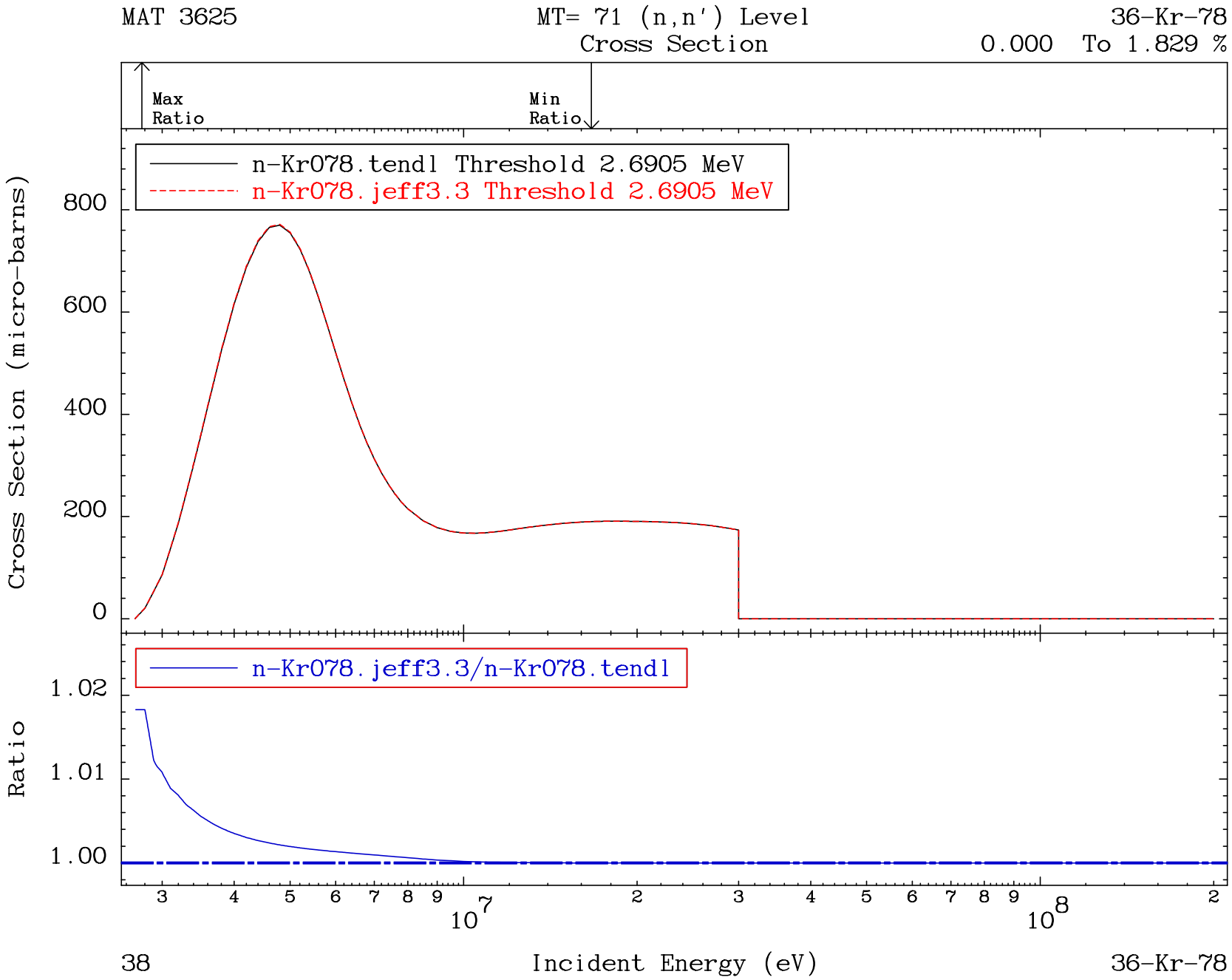

MAT 3625
MT= 66 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.265 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.4447 MeV
n-Kr078.jeff3.3 Threshold 2.4447 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
33
Incident Energy (eV)
36-Kr-78

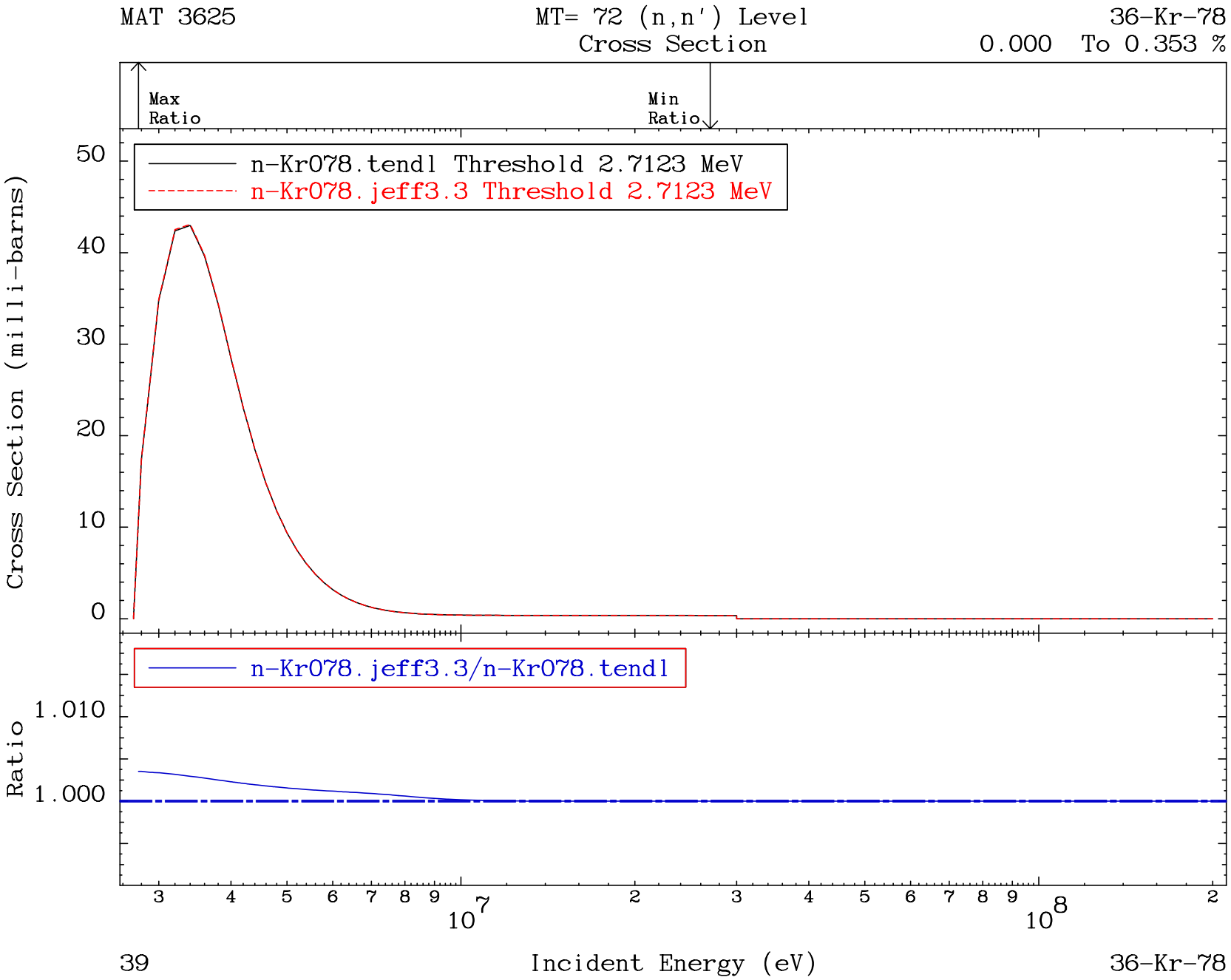

MAT 3625
MT= 67 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.924 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.4750 MeV
n-Kr078.jeff3.3 Threshold 2.4750 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
34
Incident Energy (eV)
36-Kr-78

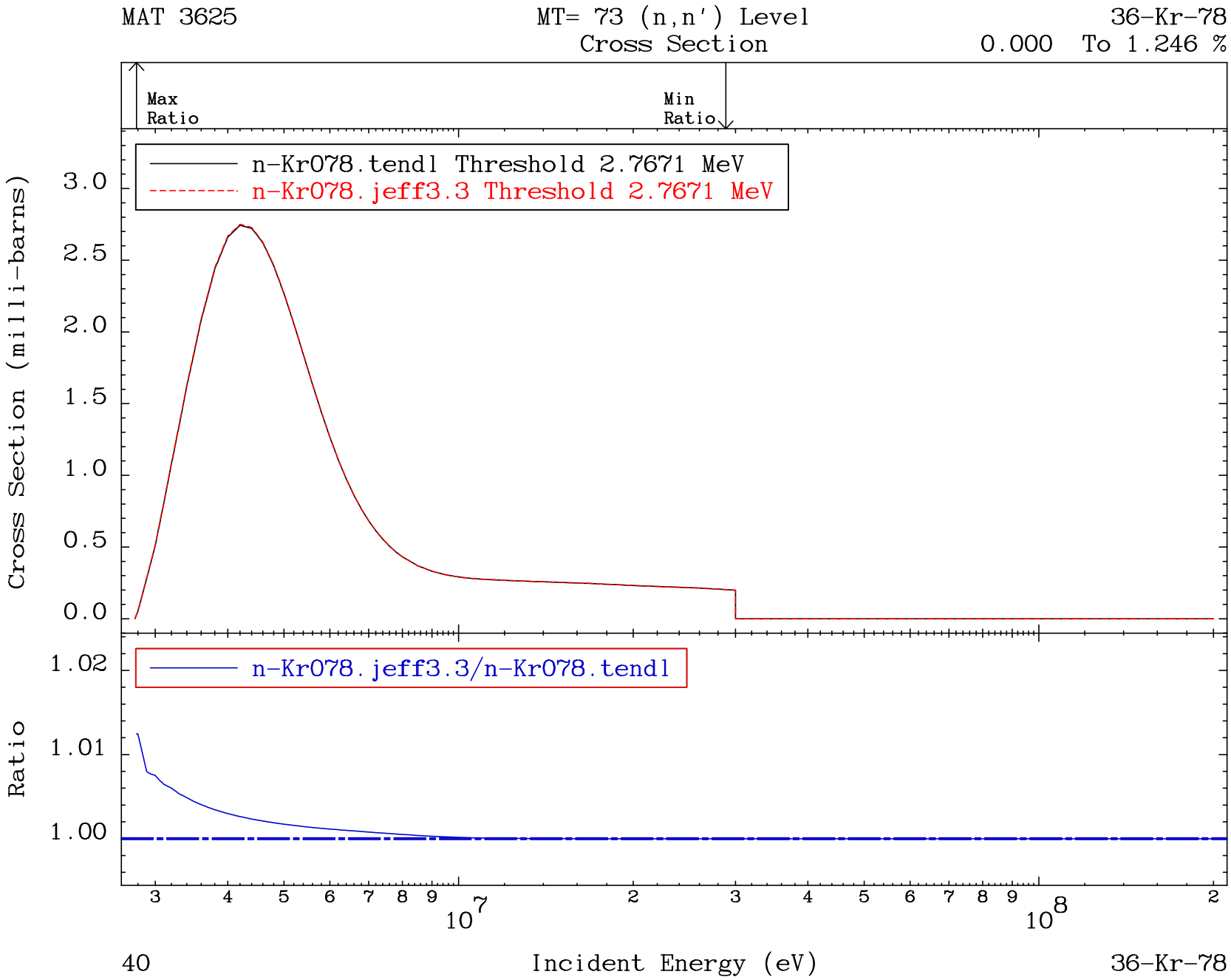

MAT 3625
MT= 68 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.361 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.5040 MeV
n-Kr078.jeff3.3 Threshold 2.5040 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.010
1.000
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
35
Incident Energy (eV)
36-Kr-78

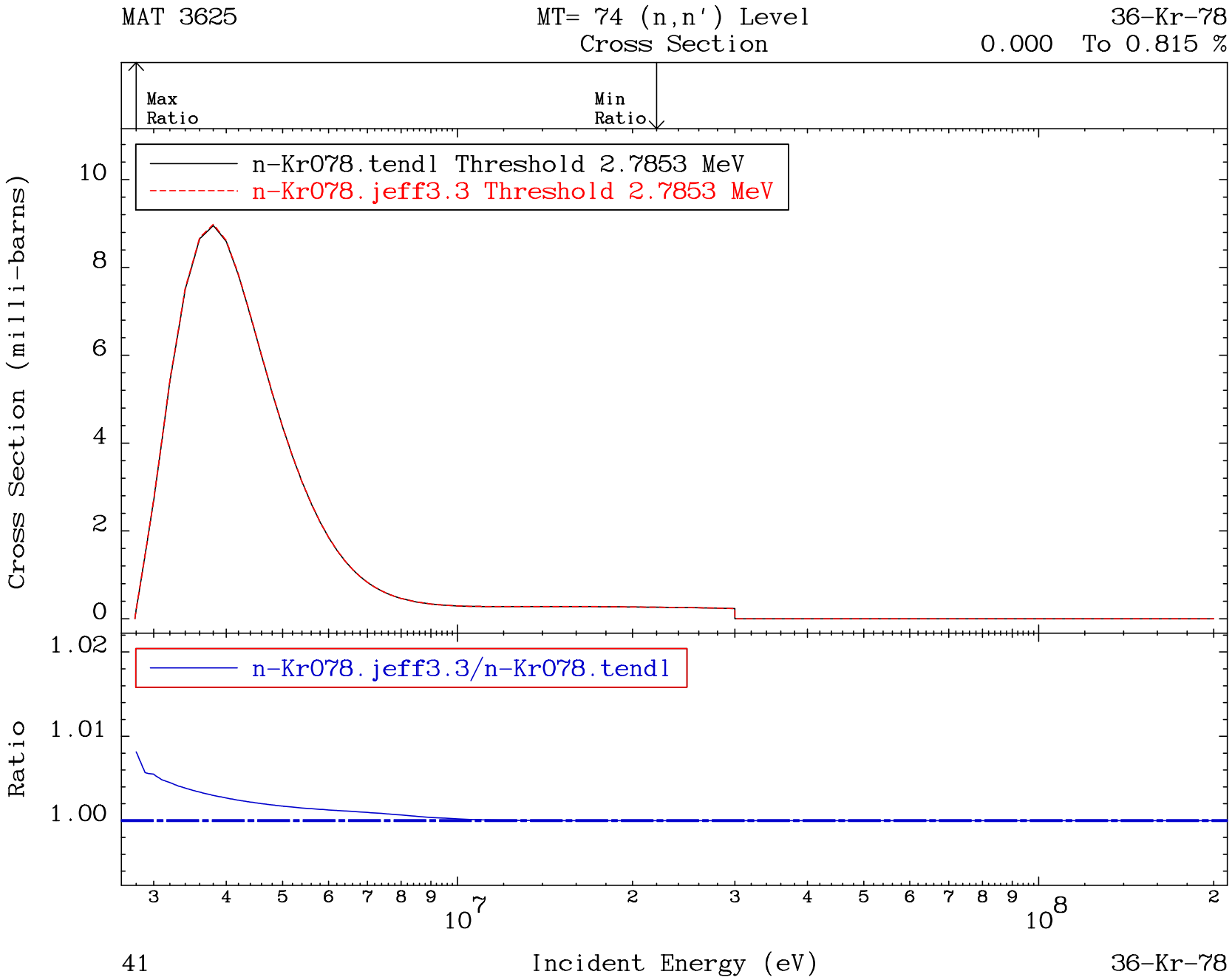

MAT 3625
MT= 69 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.860 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.5405 MeV
n-Kr078.jeff3.3 Threshold 2.5405 MeV
Cross Section (milli-barns)
14
12
10
8
6
4
2
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
36
Incident Energy (eV)
36-Kr-78

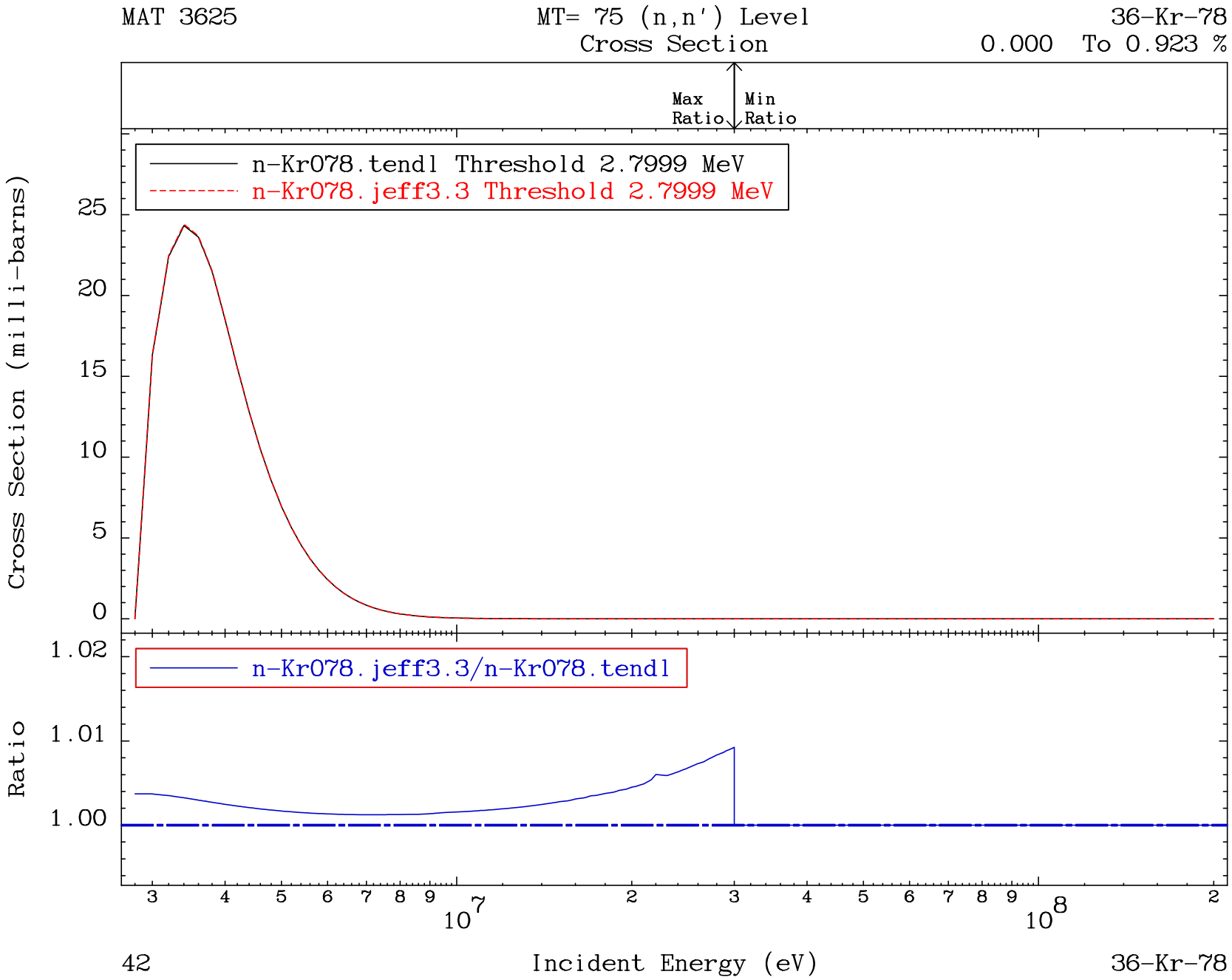

MAT 3625
MT= 70 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.263 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.6067 MeV
n-Kr078.jeff3.3 Threshold 2.6067 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
37
Incident Energy (eV)
36-Kr-78

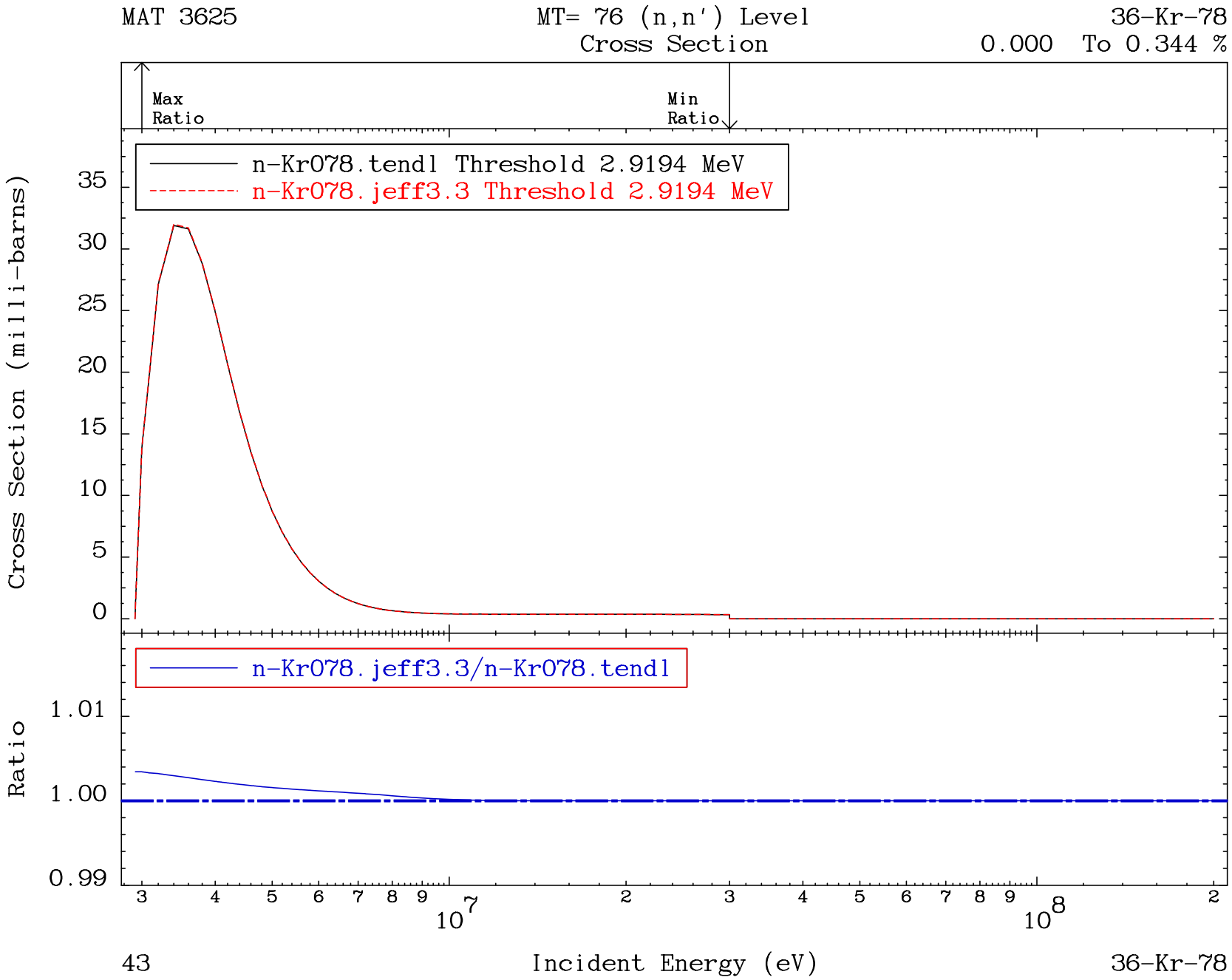

MAT 3625
MT= 71 (n,n') Level
Cross Section
36-Kr-78
0.000 To 1.829 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.6905 MeV
n-Kr078.jeff3.3 Threshold 2.6905 MeV
Cross Section (micro-barns)
800
600
400
200
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
38
Incident Energy (eV)
36-Kr-78

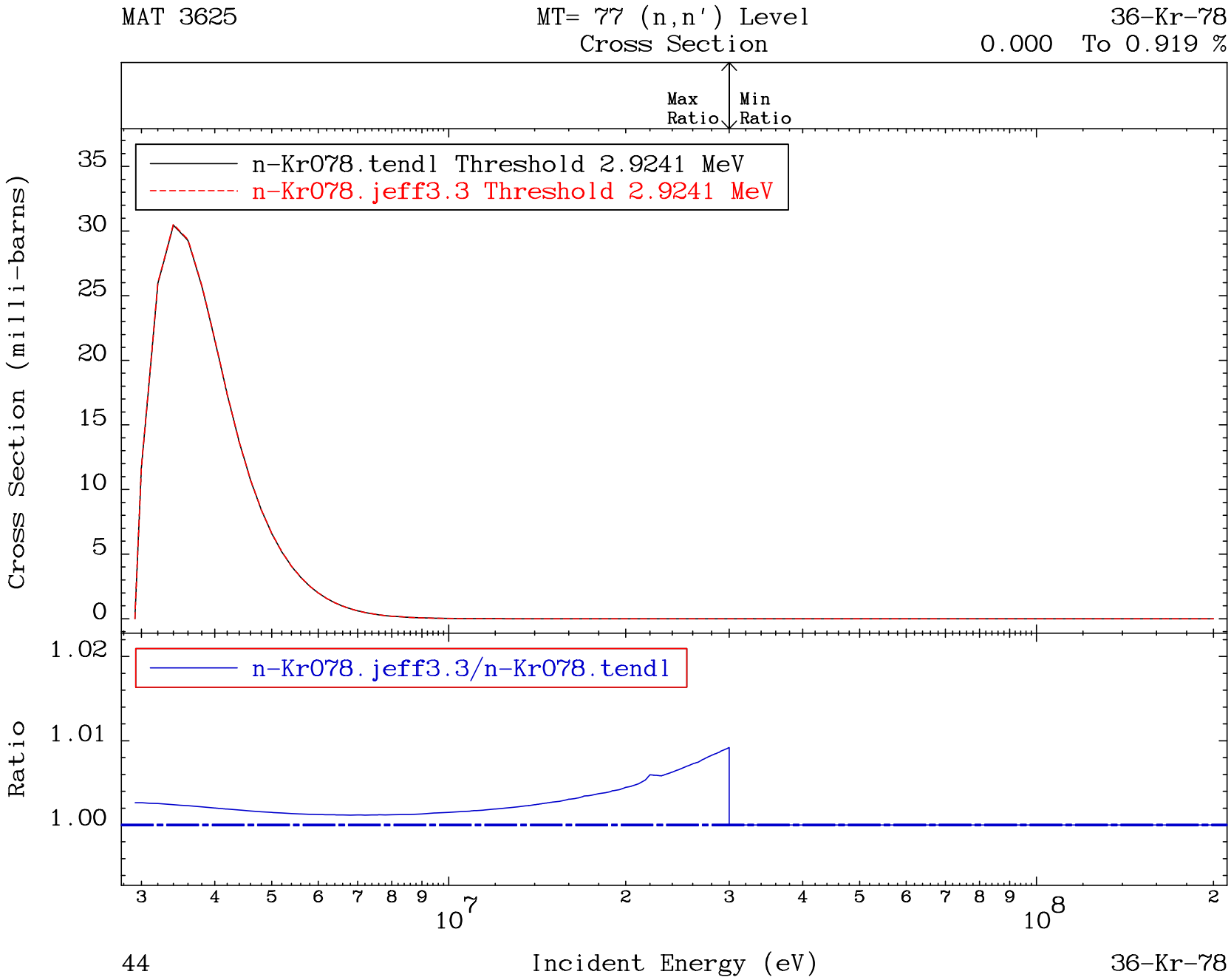

MAT 3625
MT= 72 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.353 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.7123 MeV
n-Kr078.jeff3.3 Threshold 2.7123 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.010
1.000
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
36-Kr-78

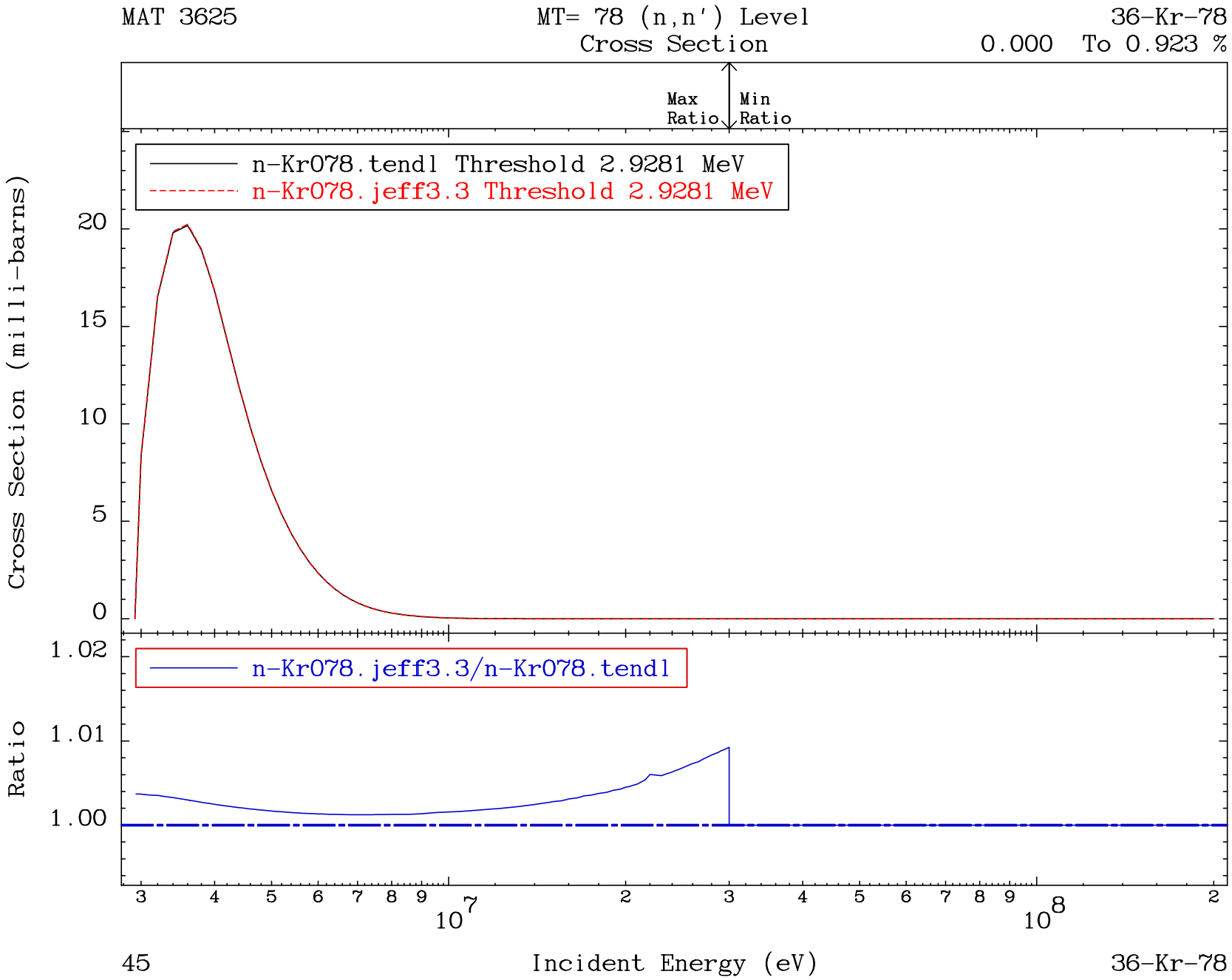

MAT 3625
MT= 73 (n,n') Level
Cross Section
36-Kr-78
0.000 To 1.246 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.7671 MeV
n-Kr078.jeff3.3 Threshold 2.7671 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
36-Kr-78

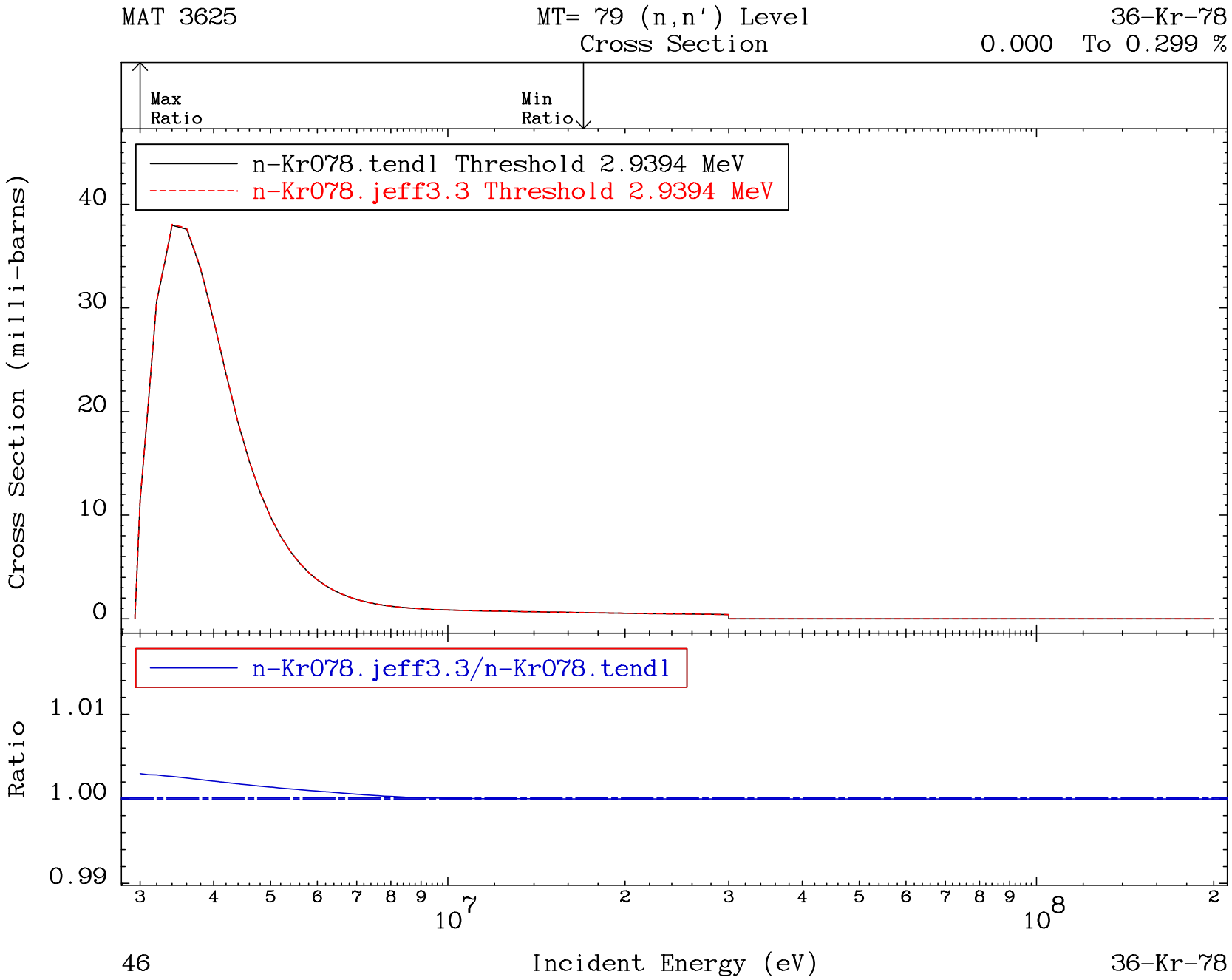

MAT 3625
MT= 74 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.815 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.7853 MeV
n-Kr078.jeff3.3 Threshold 2.7853 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
41
Incident Energy (eV)
36-Kr-78

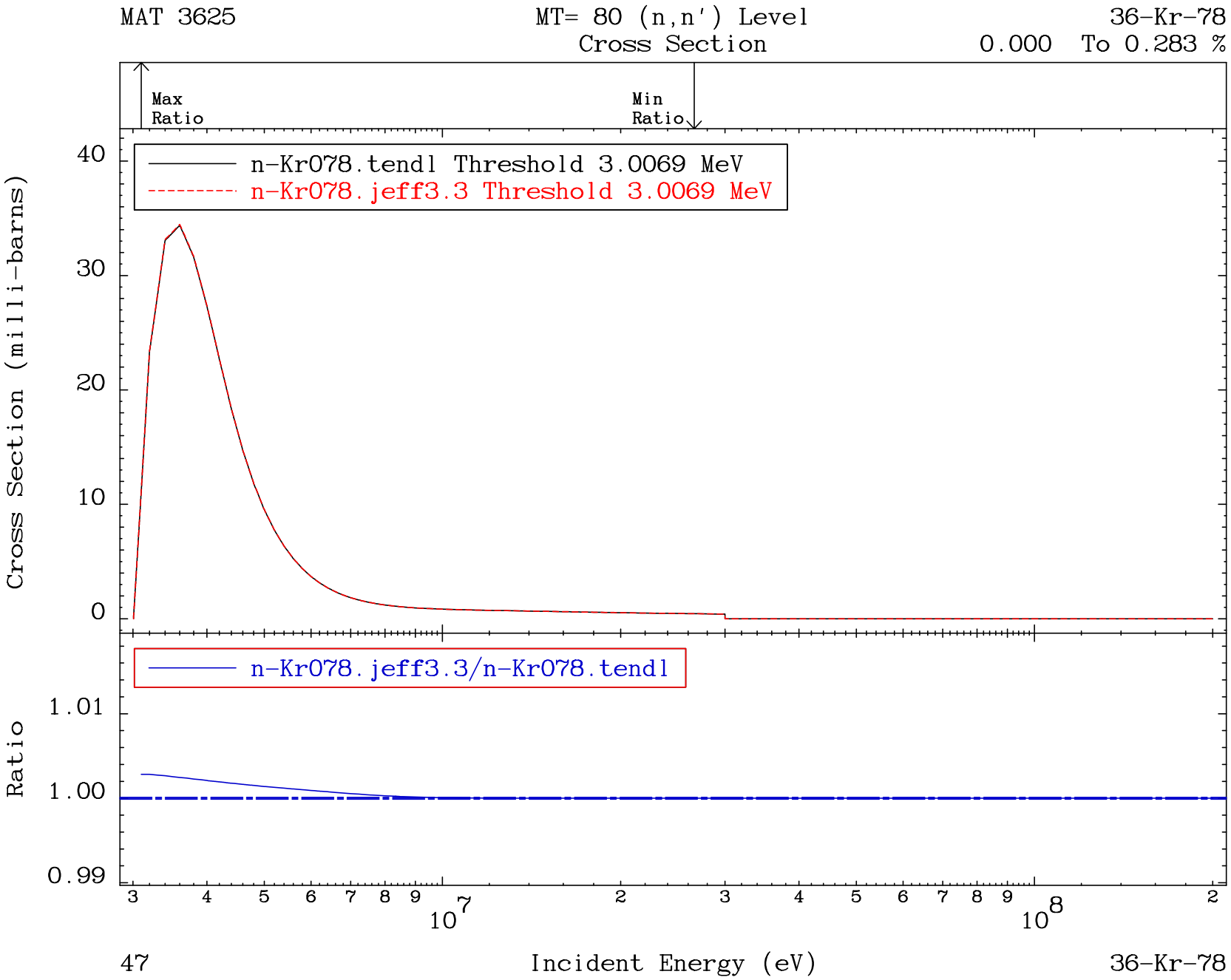

MAT 3625
MT= 75 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.923 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.7999 MeV
n-Kr078.jeff3.3 Threshold 2.7999 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
42
Incident Energy (eV)
36-Kr-78

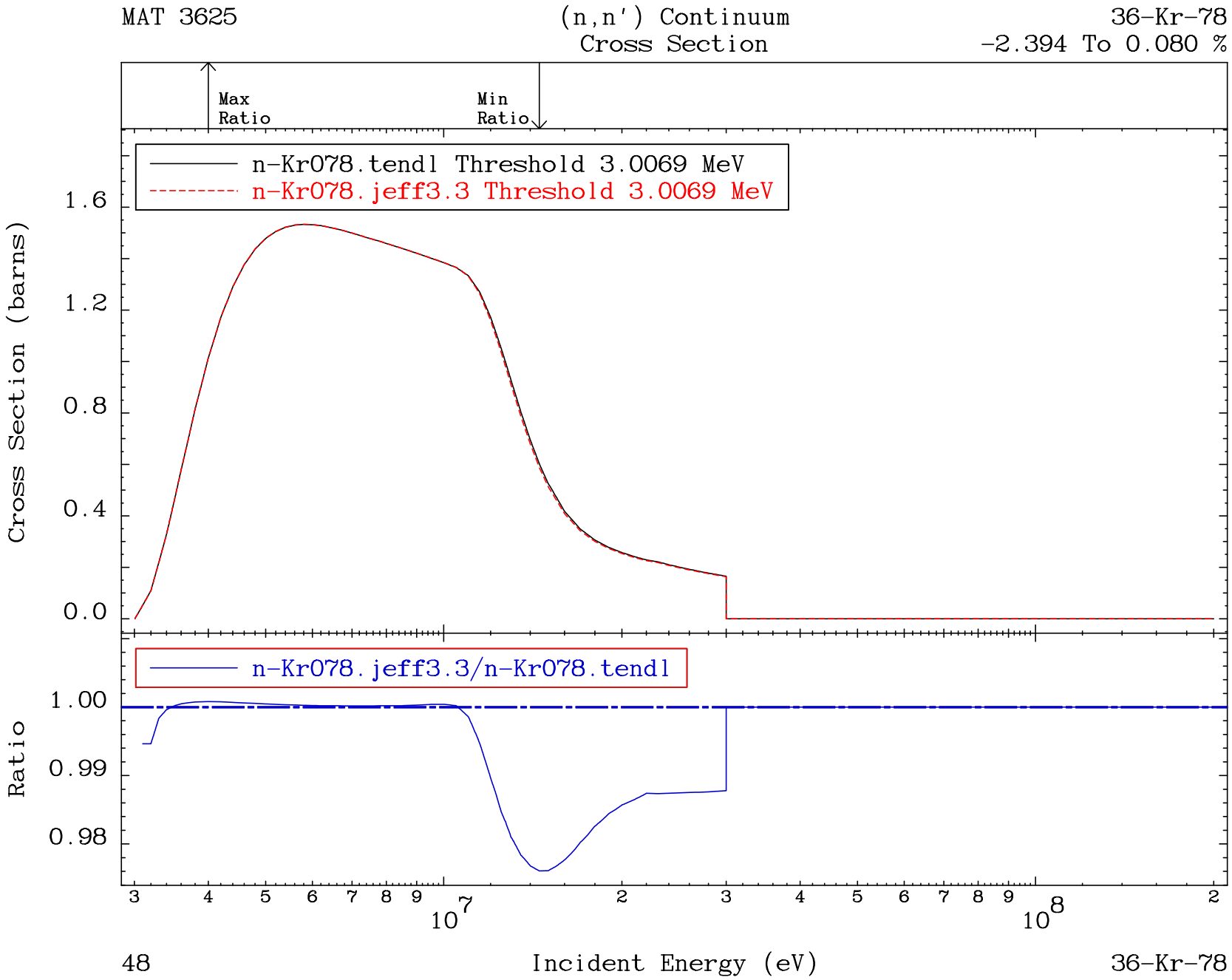

MAT 3625
MT= 76 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.344 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.9194 MeV
n-Kr078.jeff3.3 Threshold 2.9194 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
43
Incident Energy (eV)
36-Kr-78

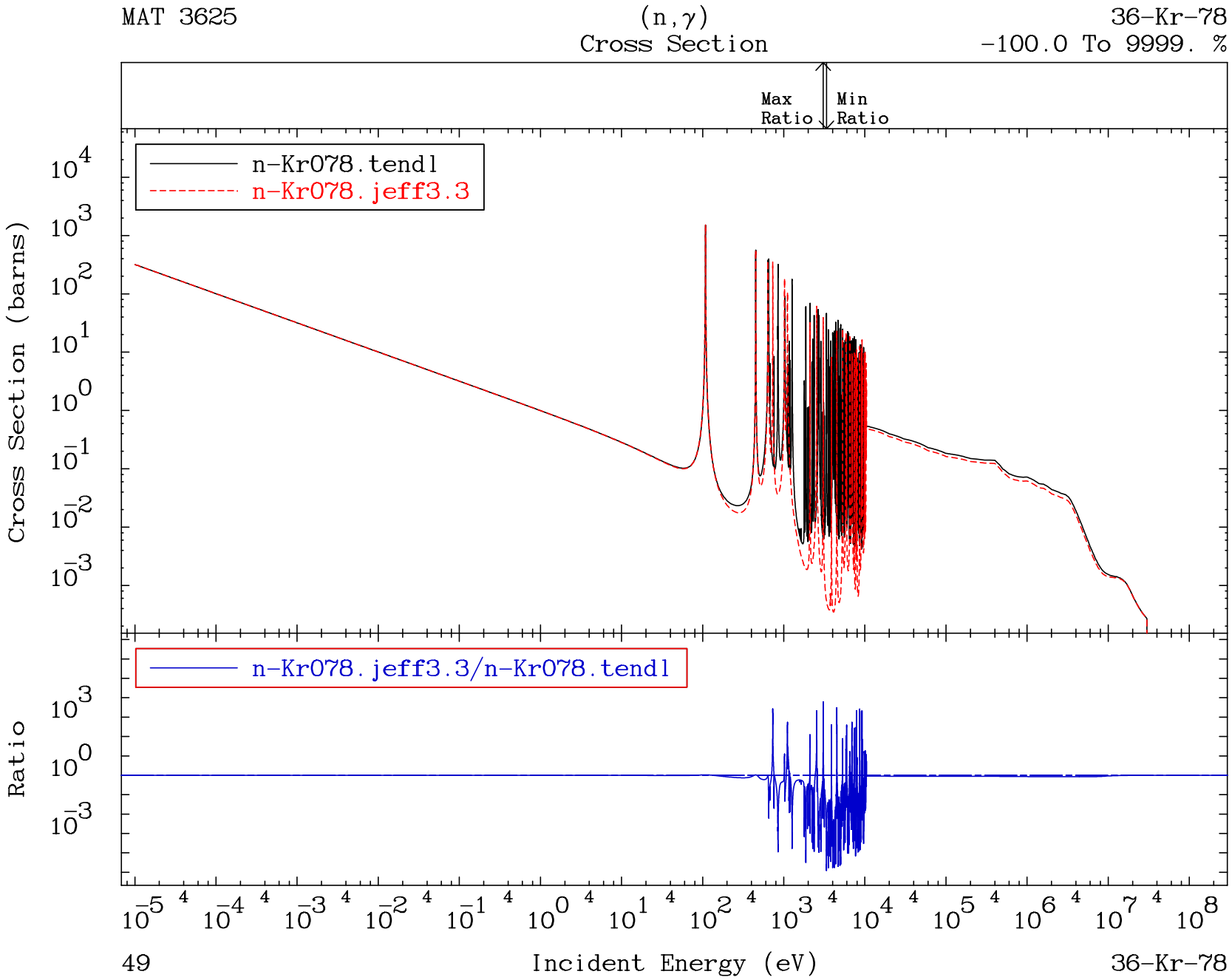

MAT 3625
MT= 77 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.919 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.9241 MeV
n-Kr078.jeff3.3 Threshold 2.9241 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
44
Incident Energy (eV)
36-Kr-78

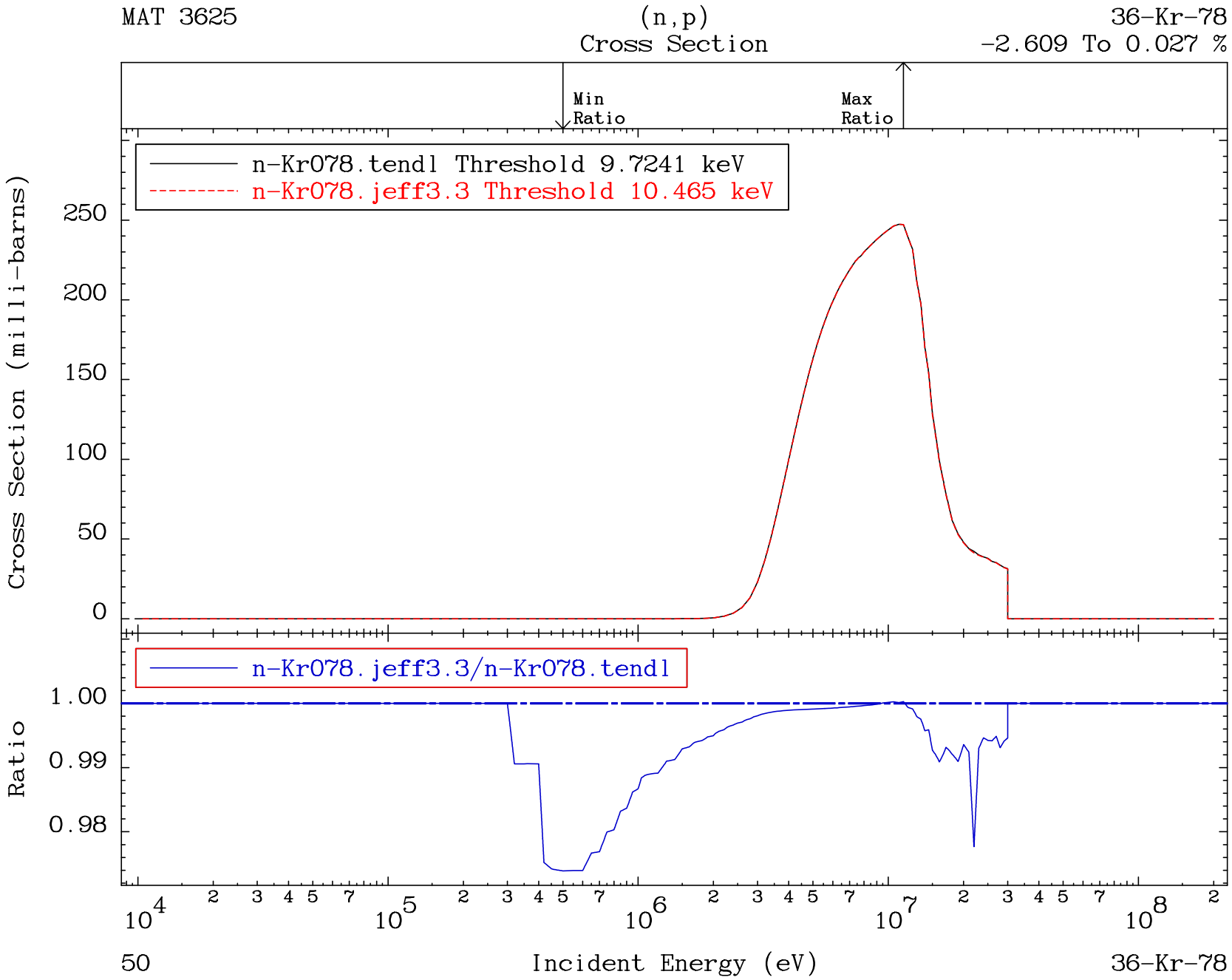

MAT 3625
MT= 78 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.923 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.9281 MeV
n-Kr078.jeff3.3 Threshold 2.9281 MeV
Cross Section (milli-barns)
20
15
10
5
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.01
1.00
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
36-Kr-78

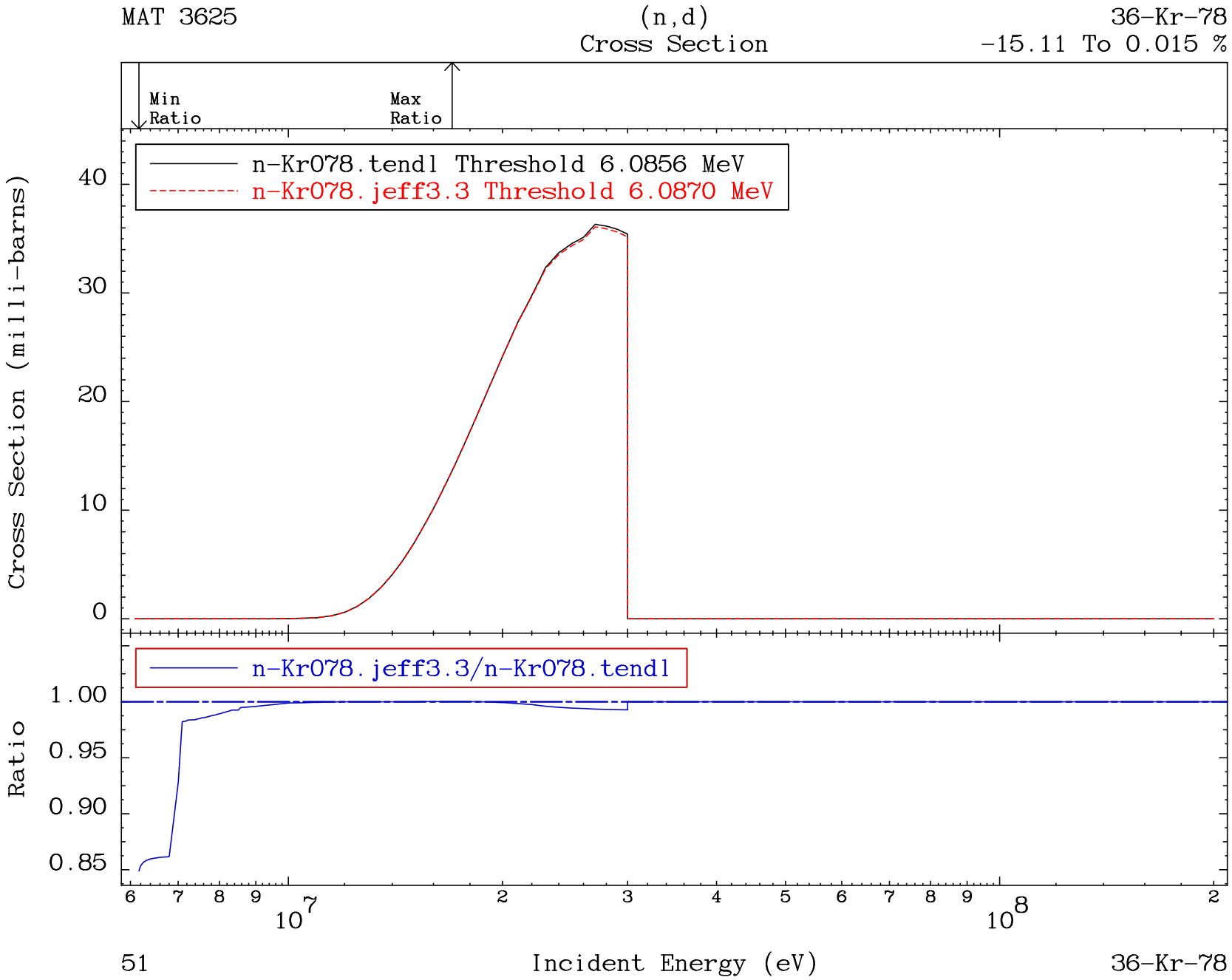

MAT 3625
MT= 79 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.299 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 2.9394 MeV
n-Kr078.jeff3.3 Threshold 2.9394 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
36-Kr-78

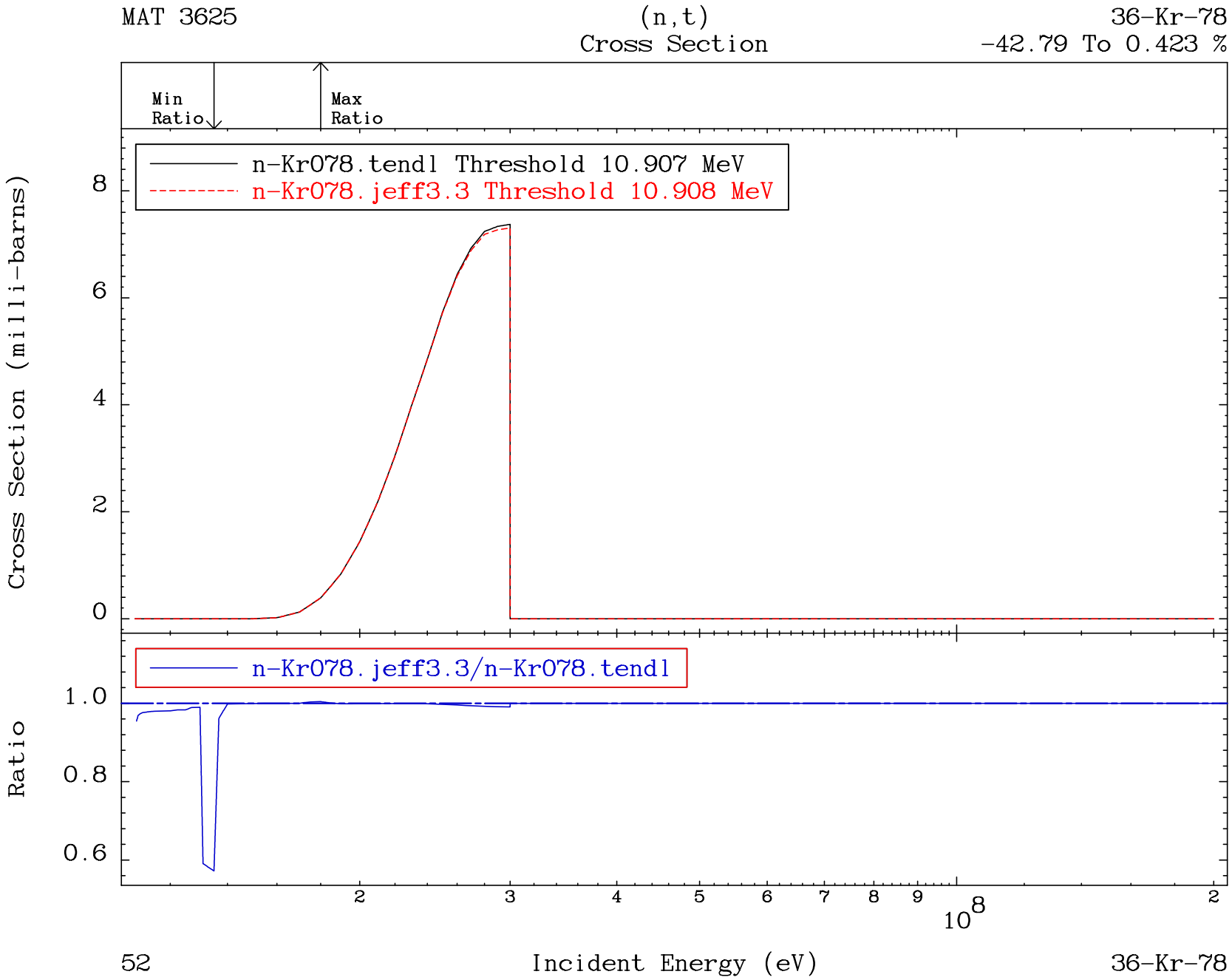

MAT 3625
MT= 80 (n,n') Level
Cross Section
36-Kr-78
0.000 To 0.283 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 3.0069 MeV
n-Kr078.jeff3.3 Threshold 3.0069 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.01
1.00
0.99
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
36-Kr-78

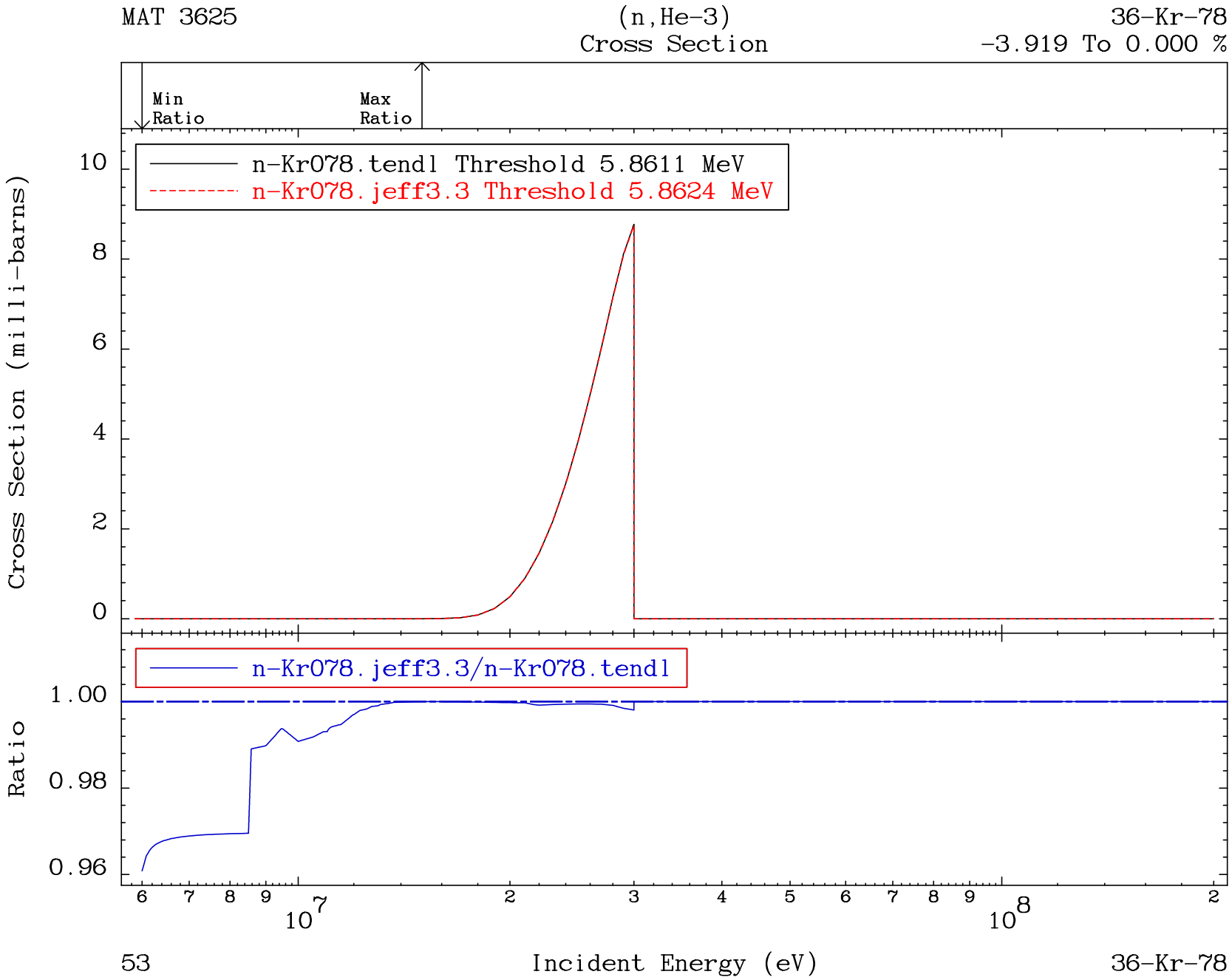

MAT 3625
(n,n') Continuum
Cross Section
36-Kr-78
-2.394 To 0.080 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 3.0069 MeV
n-Kr078.jeff3.3 Threshold 3.0069 MeV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.00
0.99
0.98
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
36-Kr-78

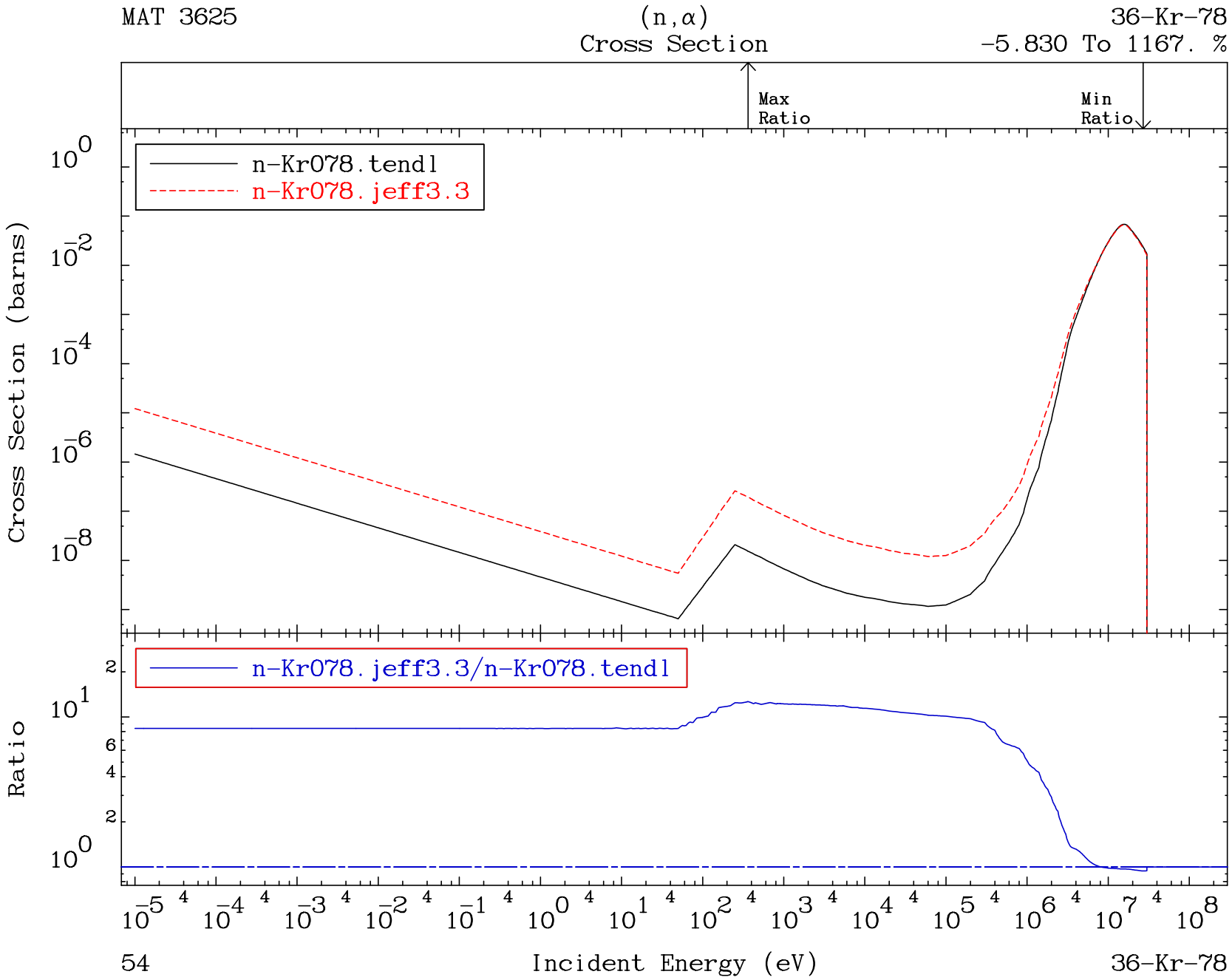

MAT 3625
(n,γ)
Cross Section
36-Kr-78
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
49
36-Kr-78

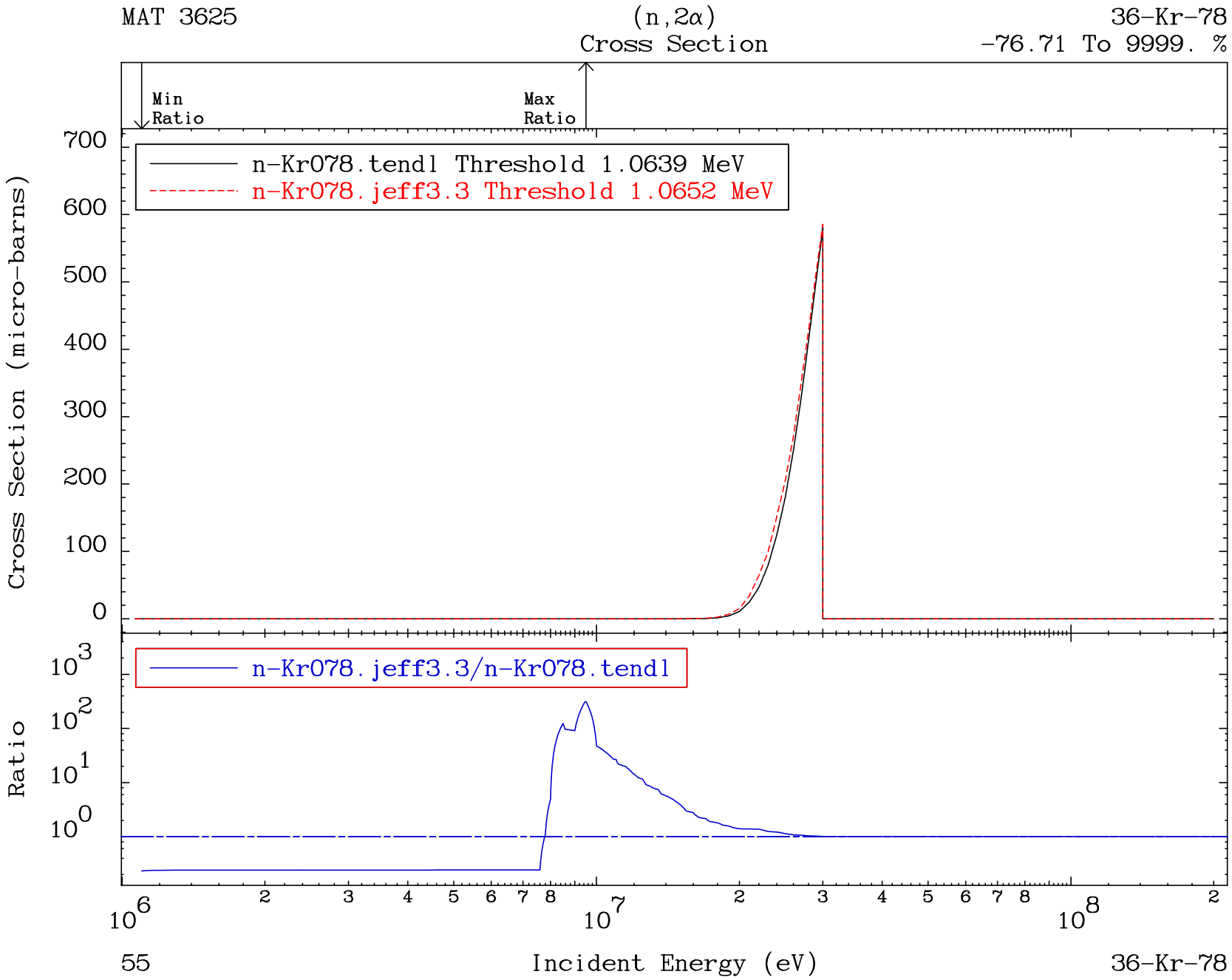

MAT 3625
(n,p)
Cross Section
36-Kr-78
-2.609 To 0.027 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 9.7241 keV
n-Kr078.jeff3.3 Threshold 10.465 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.00
0.99
0.98
10^4
10^5
10^6
10^7
10^8
50
Incident Energy (eV)
36-Kr-78

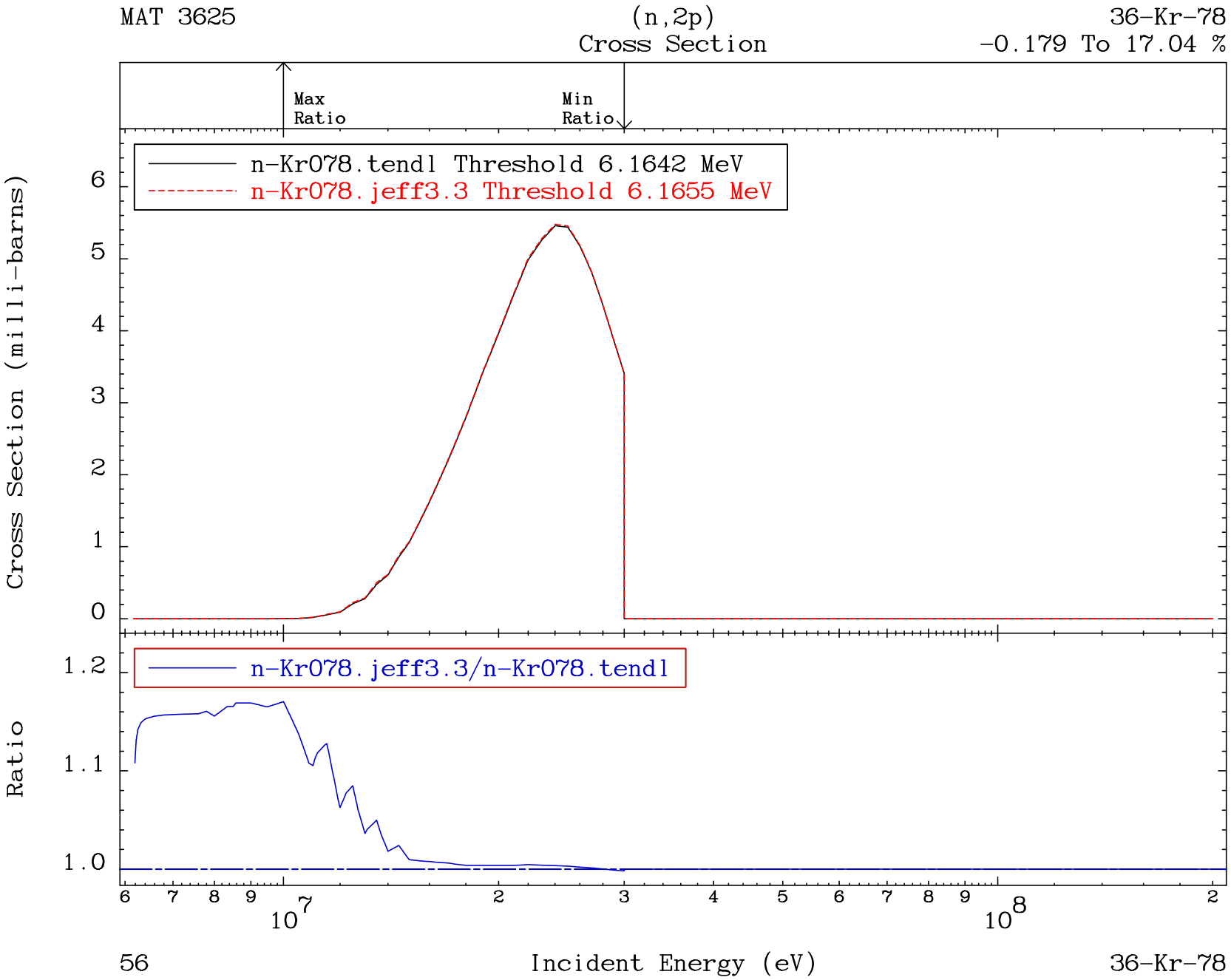

MAT 3625
(n,d)
Cross Section
36-Kr-78
-15.11 To 0.015 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 6.0856 MeV
n-Kr078.jeff3.3 Threshold 6.0870 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.00
0.95
0.90
0.85
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
36-Kr-78

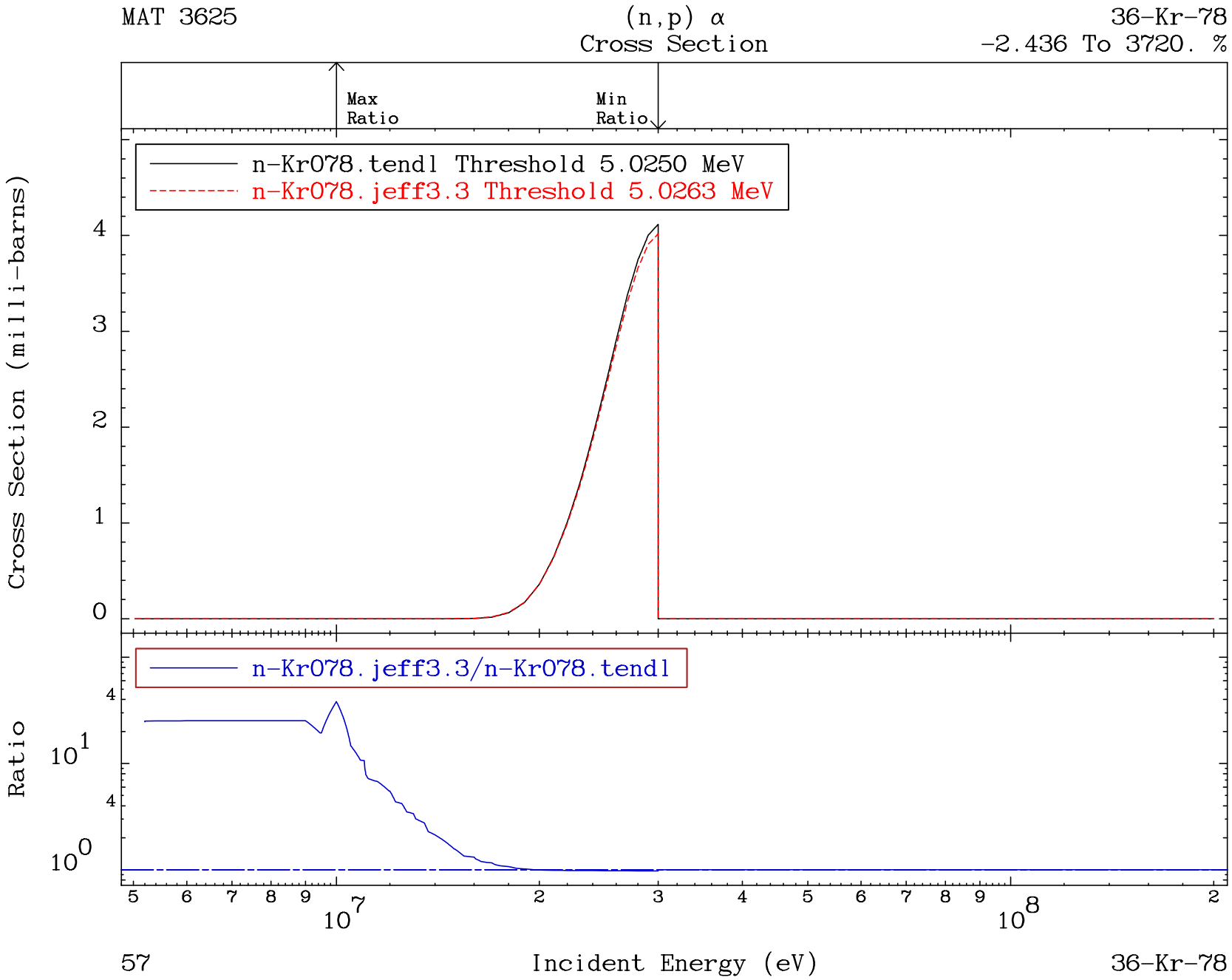

MAT 3625
(n,t)
Cross Section
36-Kr-78
-42.79 To 0.423 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 10.907 MeV
n-Kr078.jeff3.3 Threshold 10.908 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
0.6
0.8
1.0
2
3
4
5
6
7
8
9
10^8
2
52
Incident Energy (eV)
36-Kr-78

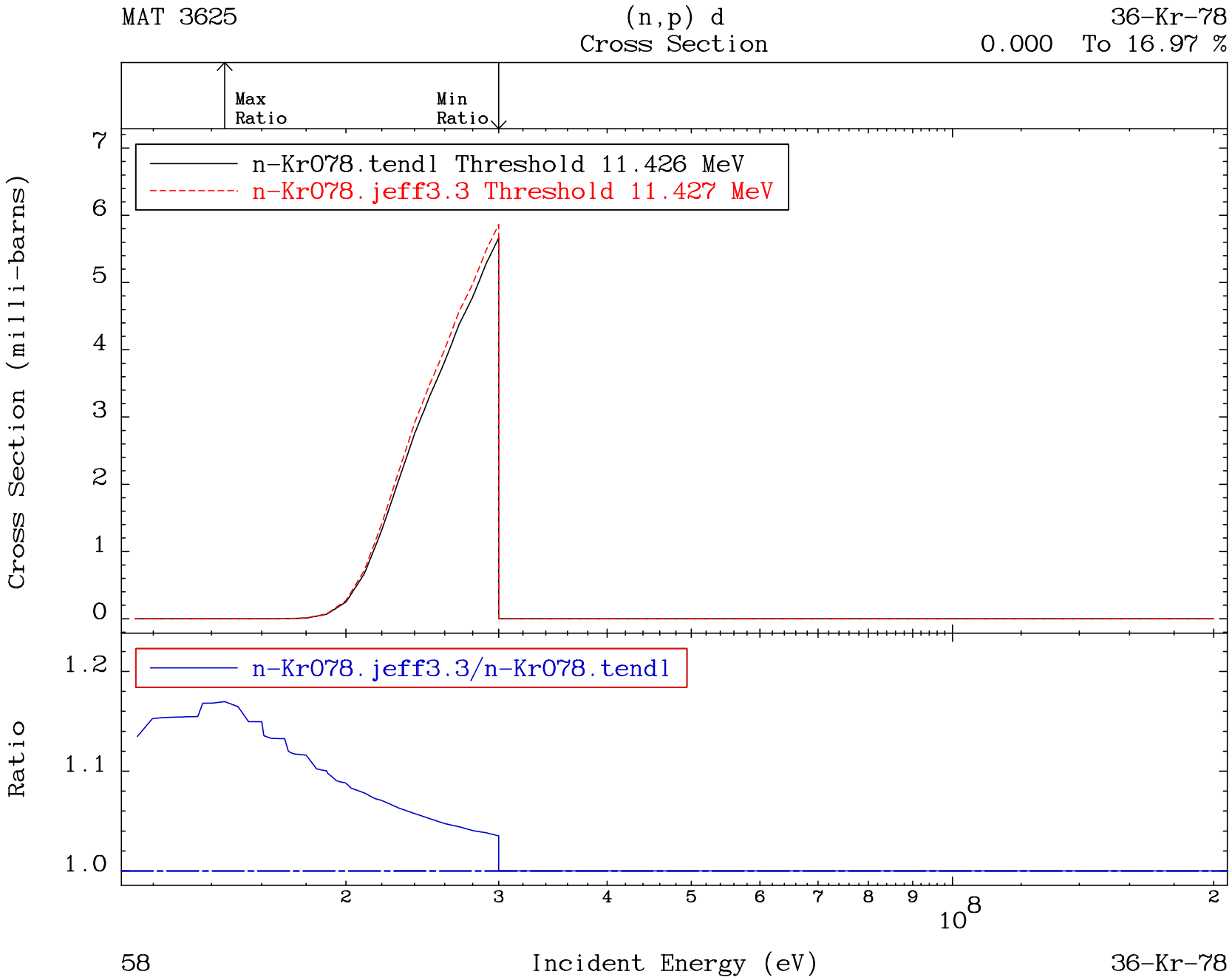

MAT 3625
(n,He-3)
Cross Section
36-Kr-78
-3.919 To 0.000 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 5.8611 MeV
n-Kr078.jeff3.3 Threshold 5.8624 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.00
0.98
0.96
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
53
Incident Energy (eV)
36-Kr-78

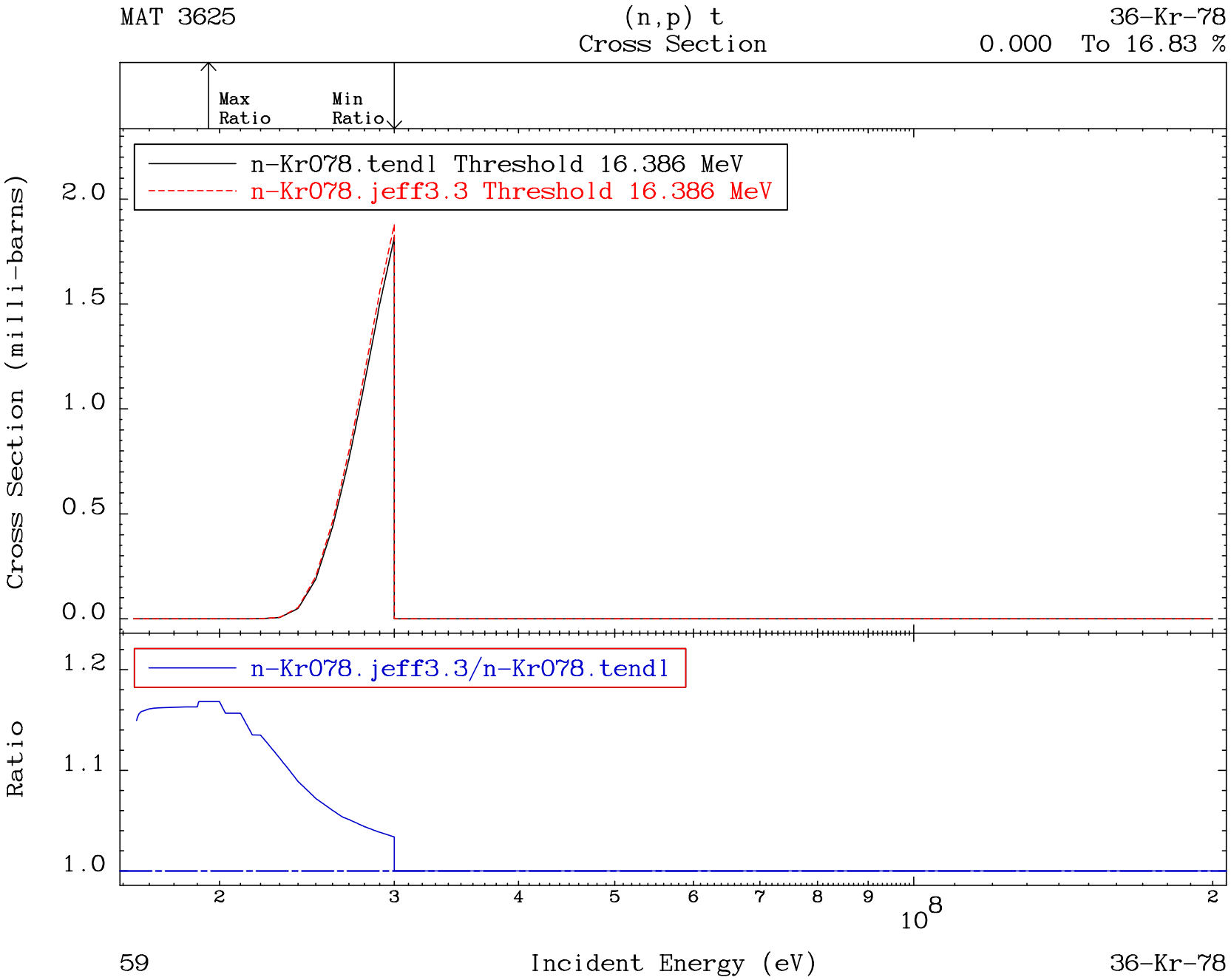

MAT 3625
(n,α)
Cross Section
36-Kr-78
-5.830 To 1167. %
Max Ratio
Min Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
54
Incident Energy (eV)
36-Kr-78

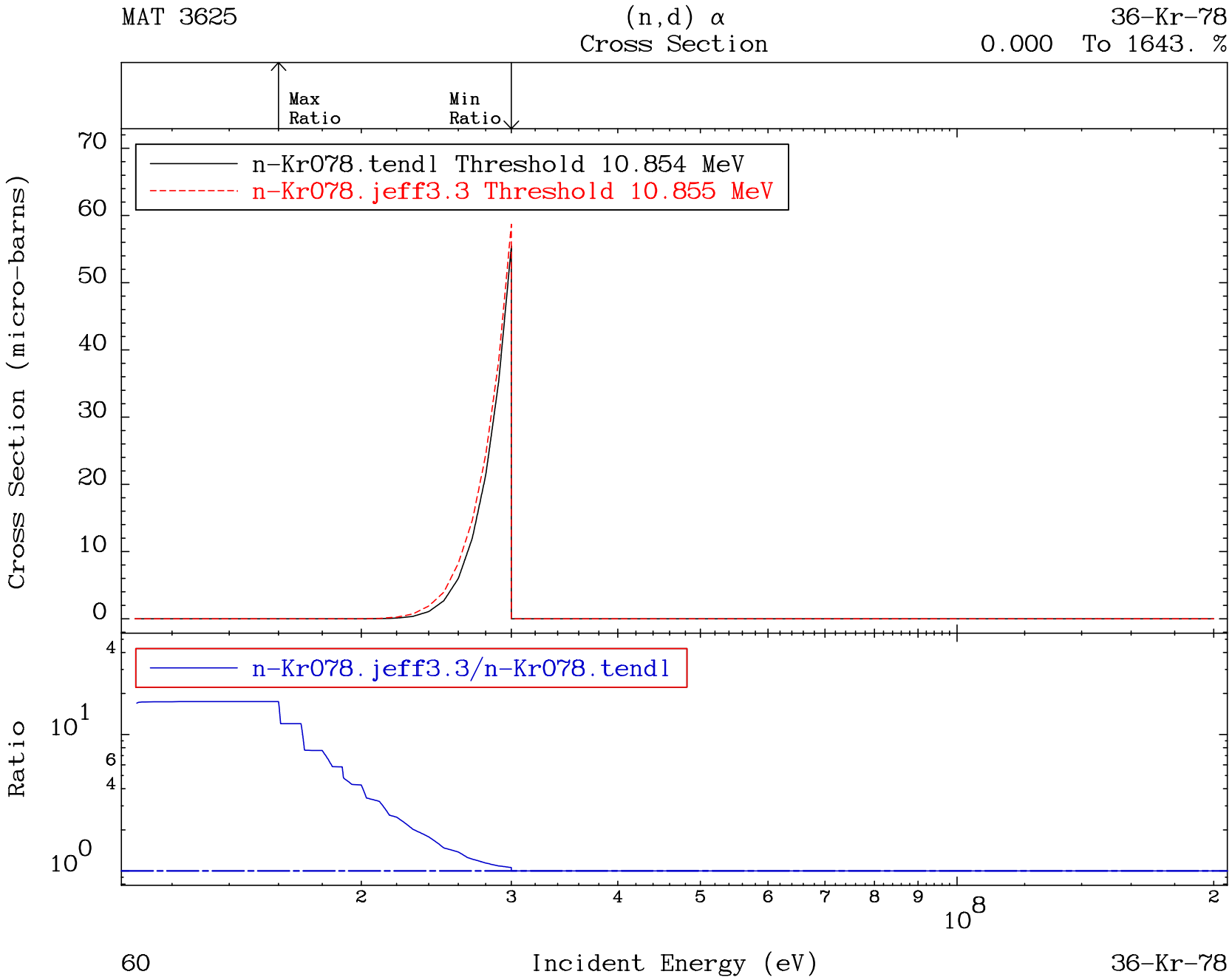

MAT 3625
(n,2α)
Cross Section
36-Kr-78
-76.71 To 9999. %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 1.0639 MeV
n-Kr078.jeff3.3 Threshold 1.0652 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
10^3
10^2
10^1
10^0
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
55
Incident Energy (eV)
36-Kr-78

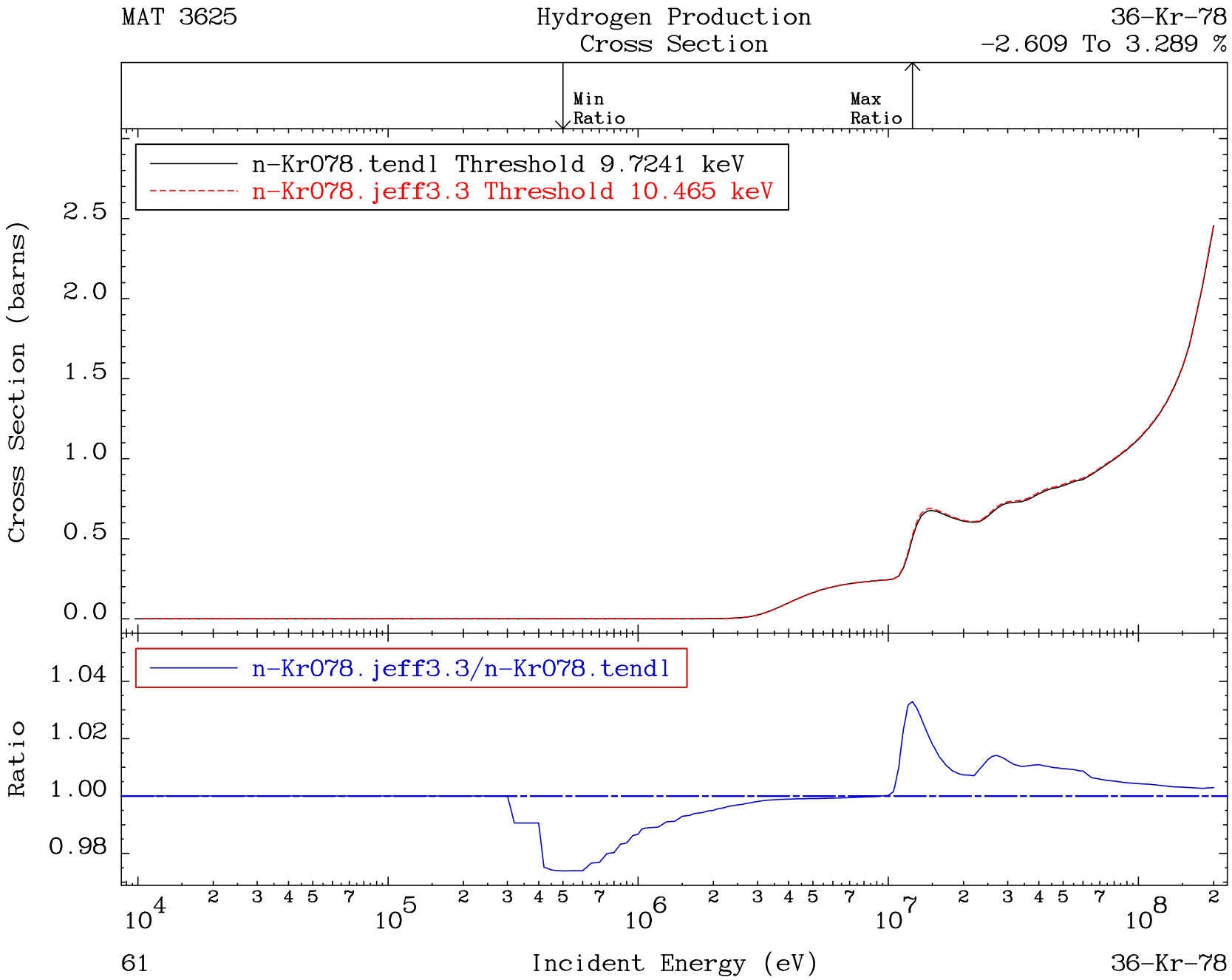

MAT 3625
(n,2p)
Cross Section
36-Kr-78
-0.179 To 17.04 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 6.1642 MeV
n-Kr078.jeff3.3 Threshold 6.1655 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.0
1.1
1.2
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
56
Incident Energy (eV)
36-Kr-78

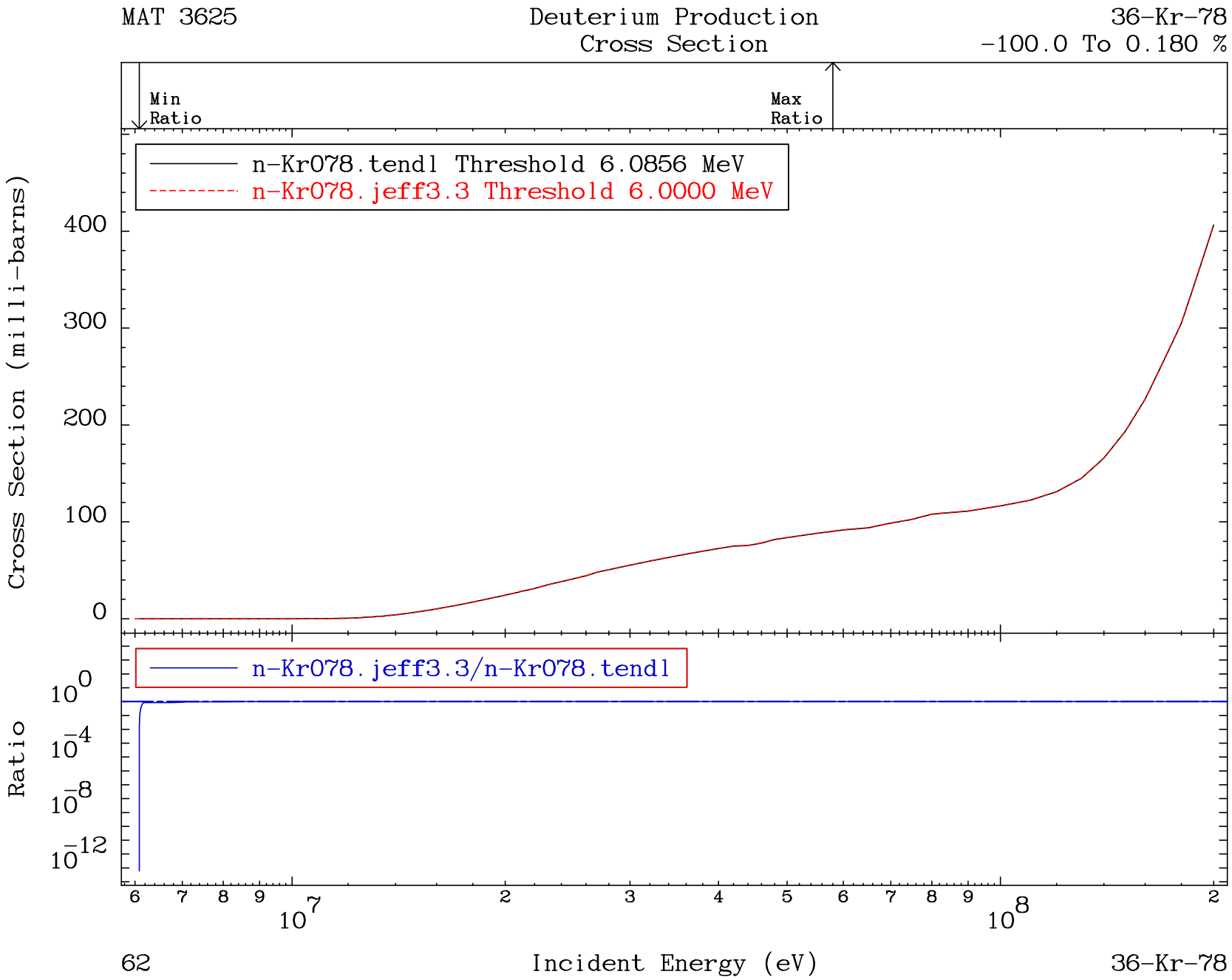

MAT 3625
(n,p) α
Cross Section
36-Kr-78
-2.436 To 3720. %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 5.0250 MeV
n-Kr078.jeff3.3 Threshold 5.0263 MeV
Cross Section (milli-barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
57
36-Kr-78

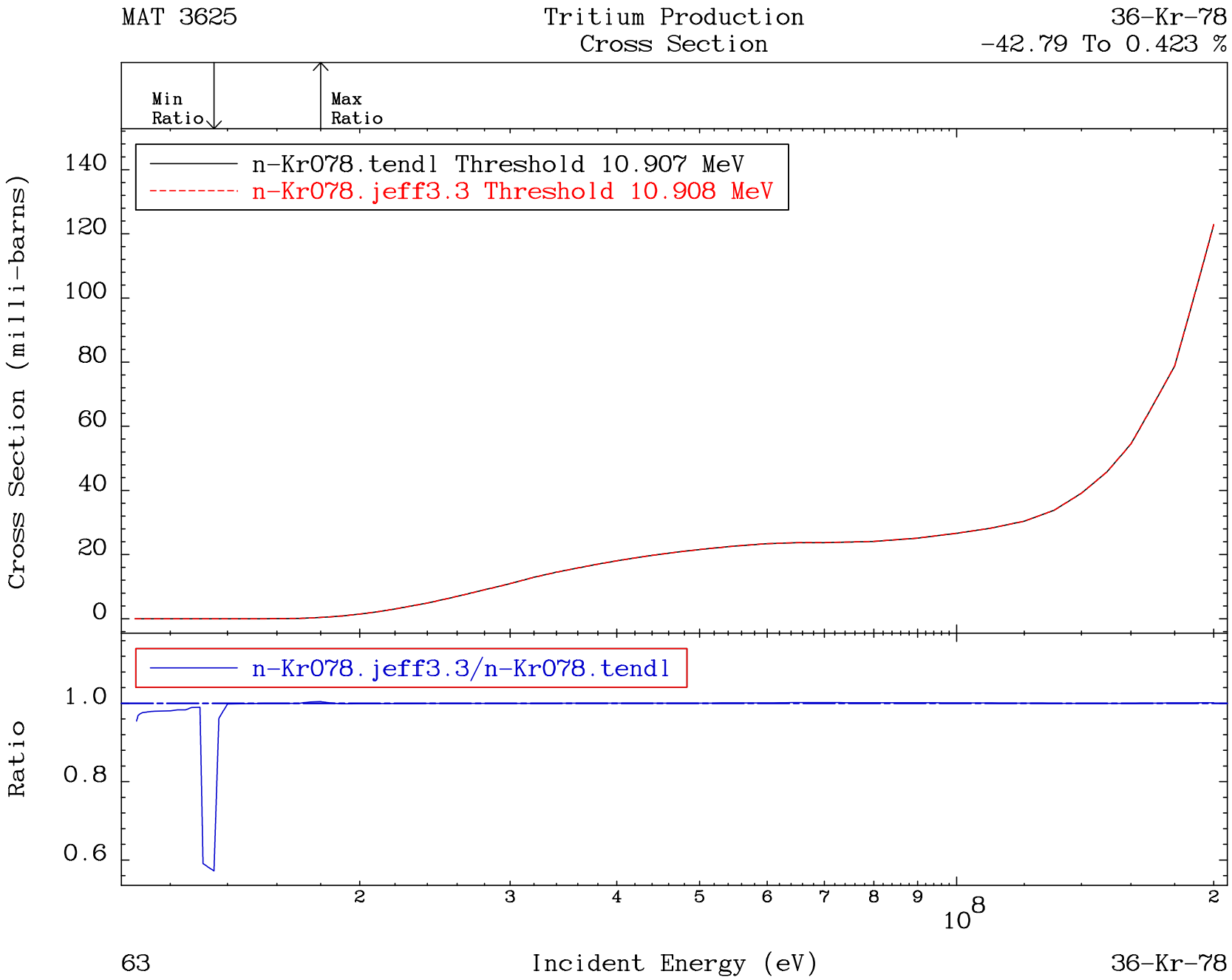

MAT 3625
(n,p) d
Cross Section
36-Kr-78
0.000 To 16.97 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 11.426 MeV
n-Kr078.jeff3.3 Threshold 11.427 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.0
1.1
1.2
2
3
4
5
6
7
8
9
10^8
2
58
Incident Energy (eV)
36-Kr-78

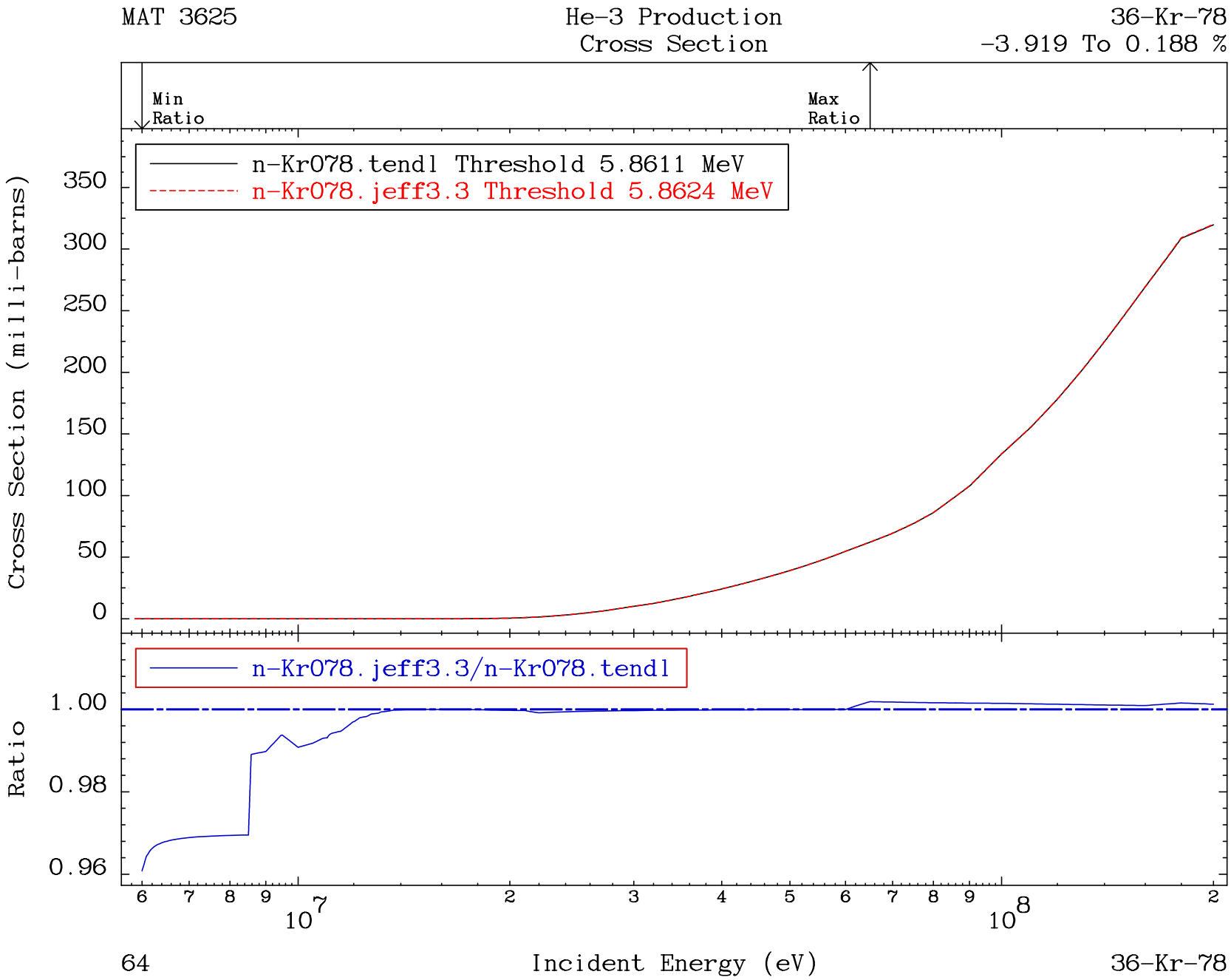

MAT 3625
(n,p) t
Cross Section
36-Kr-78
0.000 To 16.83 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 16.386 MeV
n-Kr078.jeff3.3 Threshold 16.386 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.2
1.1
1.0
2
3
4
5
6
7
8
9
10^8
2
59
Incident Energy (eV)
36-Kr-78

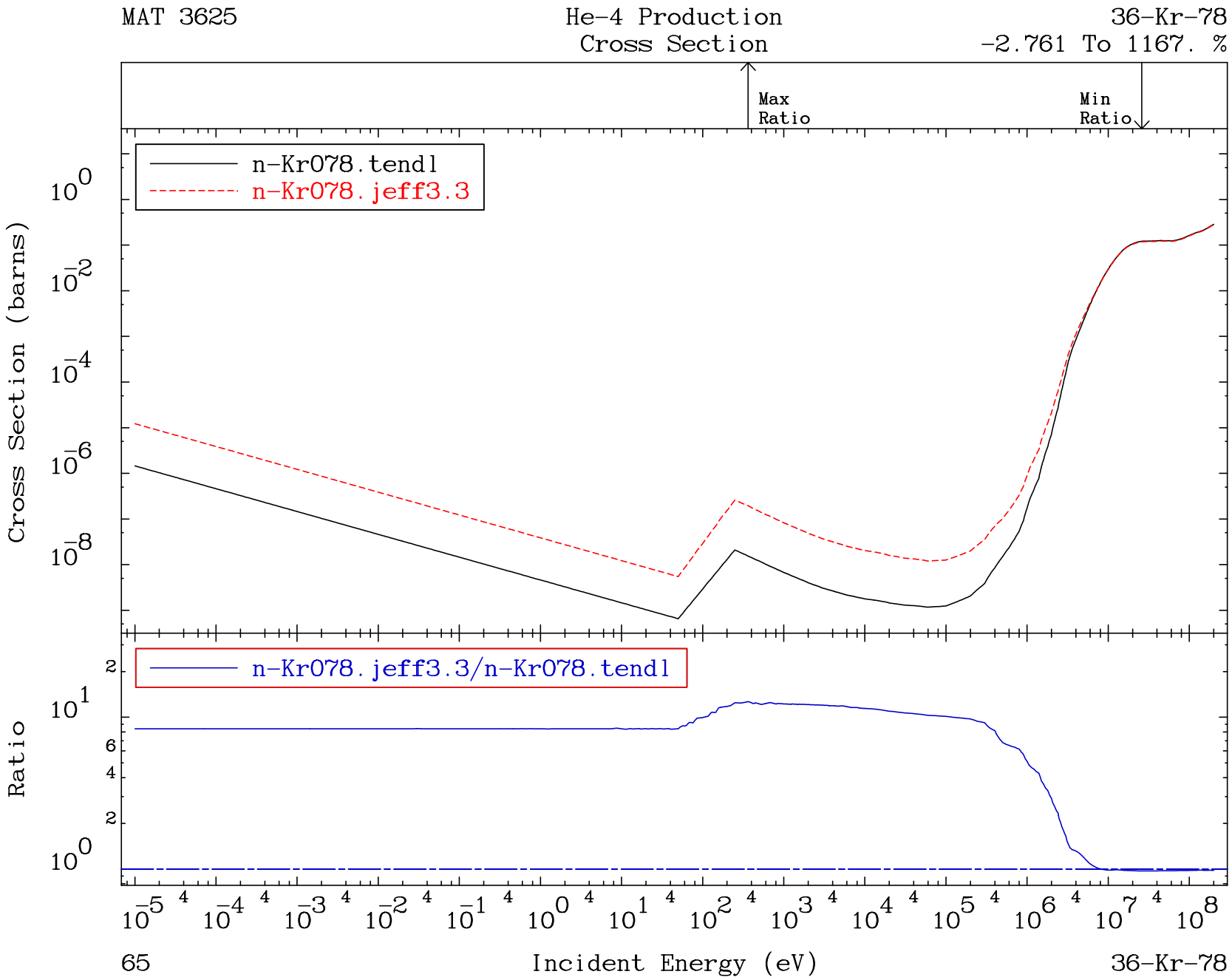

MAT 3625
(n,d) α
Cross Section
36-Kr-78
0.000 To 1643. %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 10.854 MeV
n-Kr078.jeff3.3 Threshold 10.855 MeV
Cross Section (micro-barns)
70
60
50
40
30
20
10
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
4
10^1
6
4
10^0
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
36-Kr-78

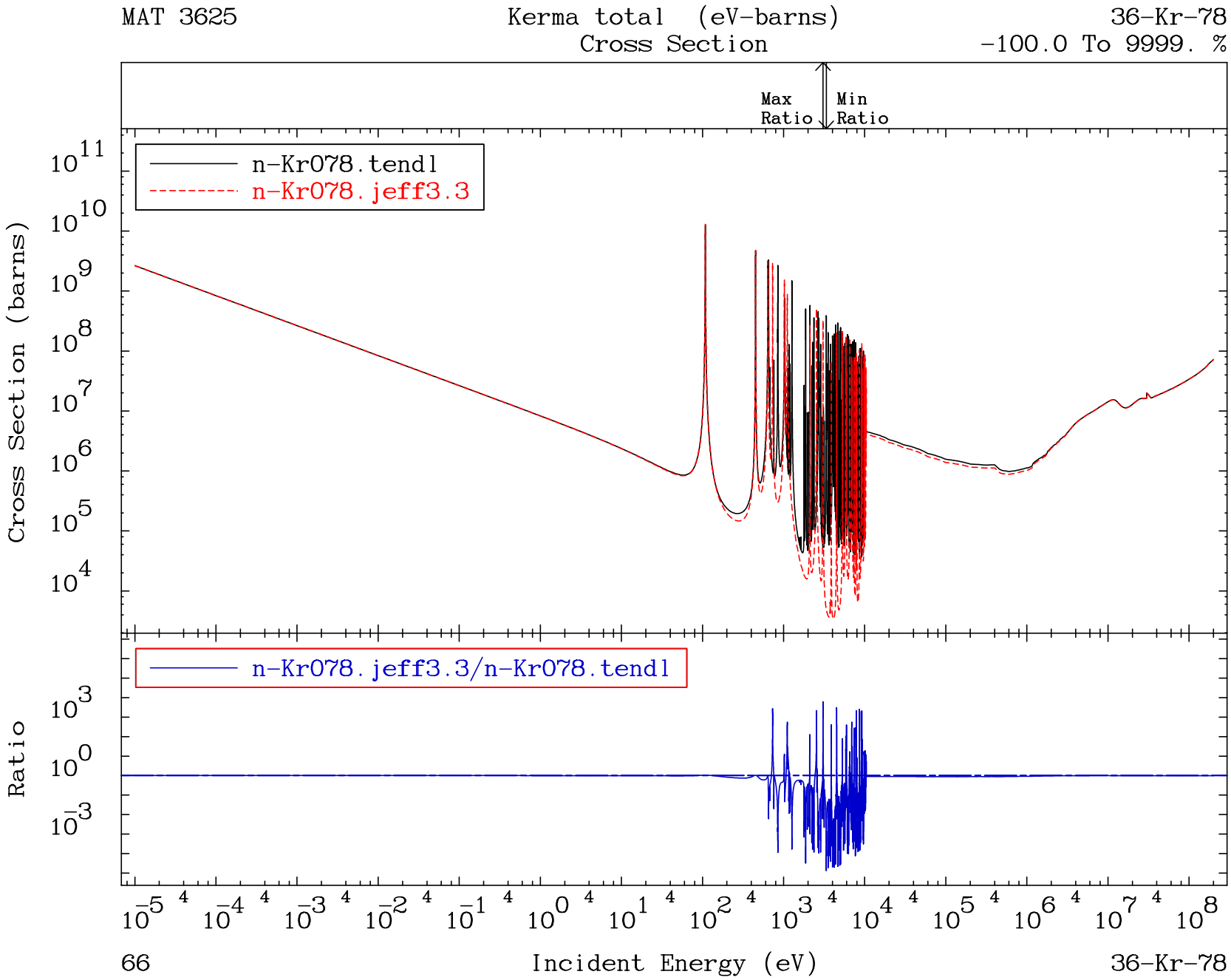

MAT 3625
Hydrogen Production
Cross Section
36-Kr-78
-2.609 To 3.289 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 9.7241 keV
n-Kr078.jeff3.3 Threshold 10.465 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.04
1.02
1.00
0.98
10^4
10^5
10^6
10^7
10^8
61
Incident Energy (eV)
36-Kr-78

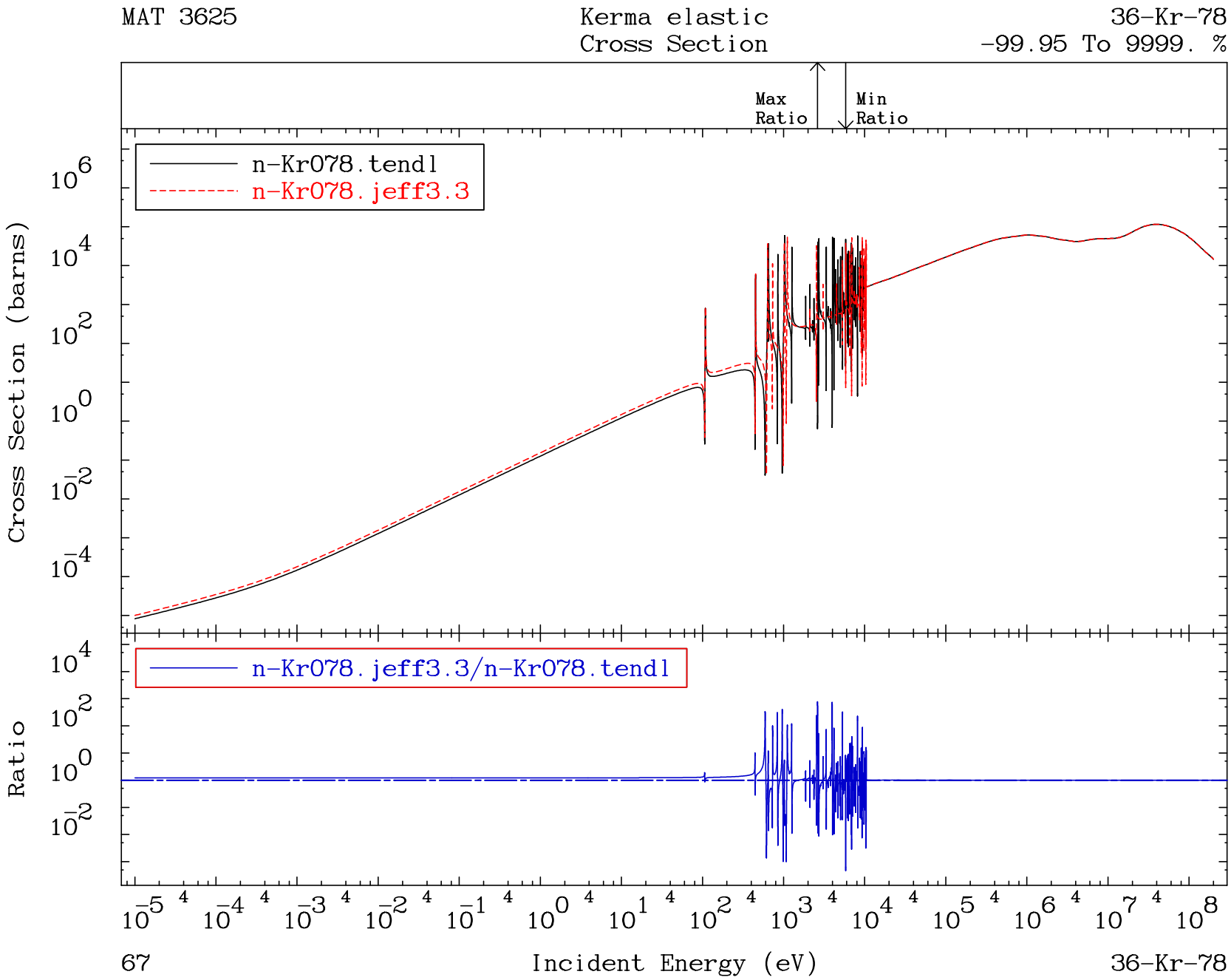

MAT 3625
Deuterium Production
Cross Section
36-Kr-78
-100.0 To 0.180 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 6.0856 MeV
n-Kr078.jeff3.3 Threshold 6.0000 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
10^0
10^-4
10^-8
10^-12
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
62
Incident Energy (eV)
36-Kr-78

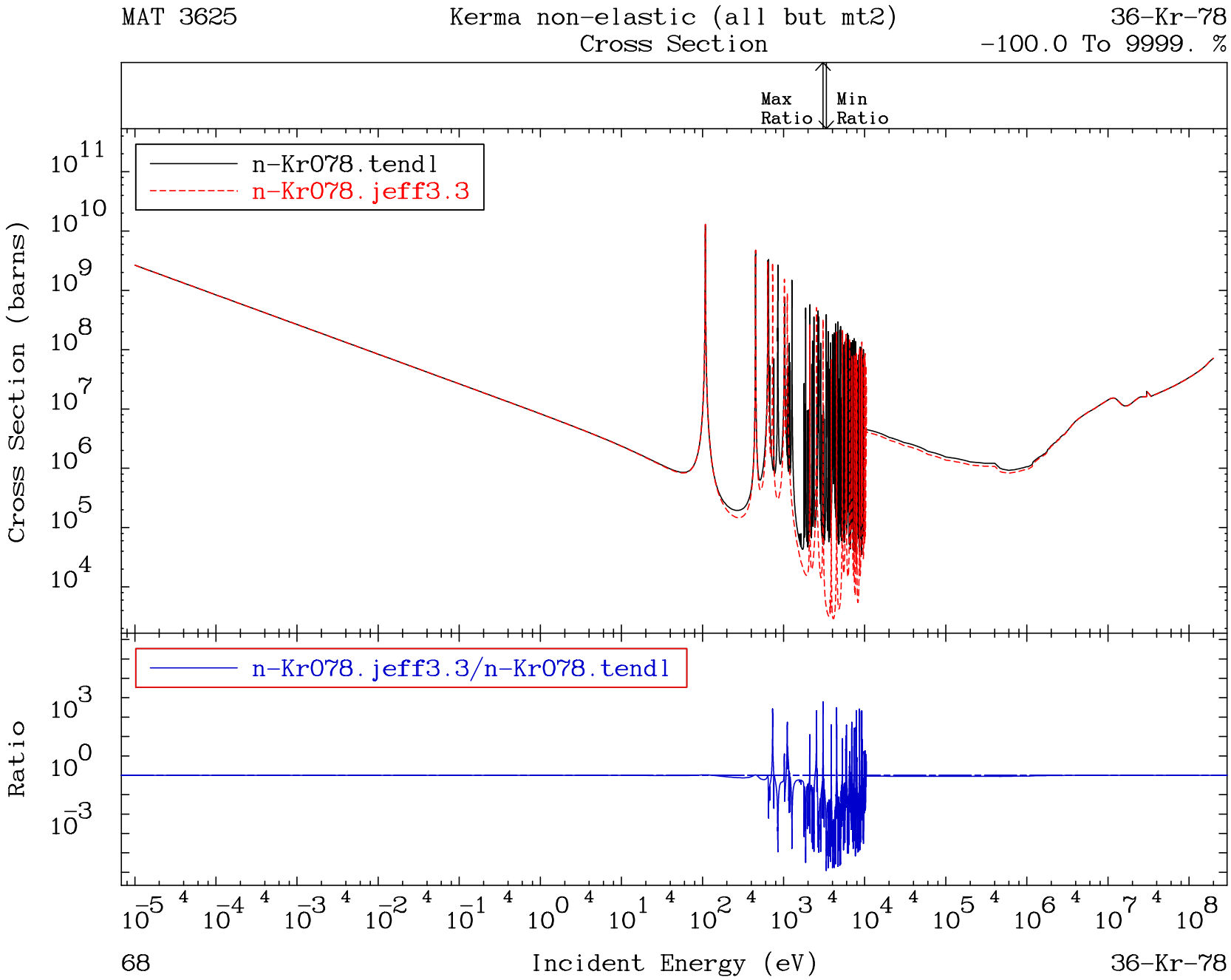

MAT 3625
Tritium Production
Cross Section
36-Kr-78
-42.79 To 0.423 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 10.907 MeV
n-Kr078.jeff3.3 Threshold 10.908 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
63
Incident Energy (eV)
36-Kr-78

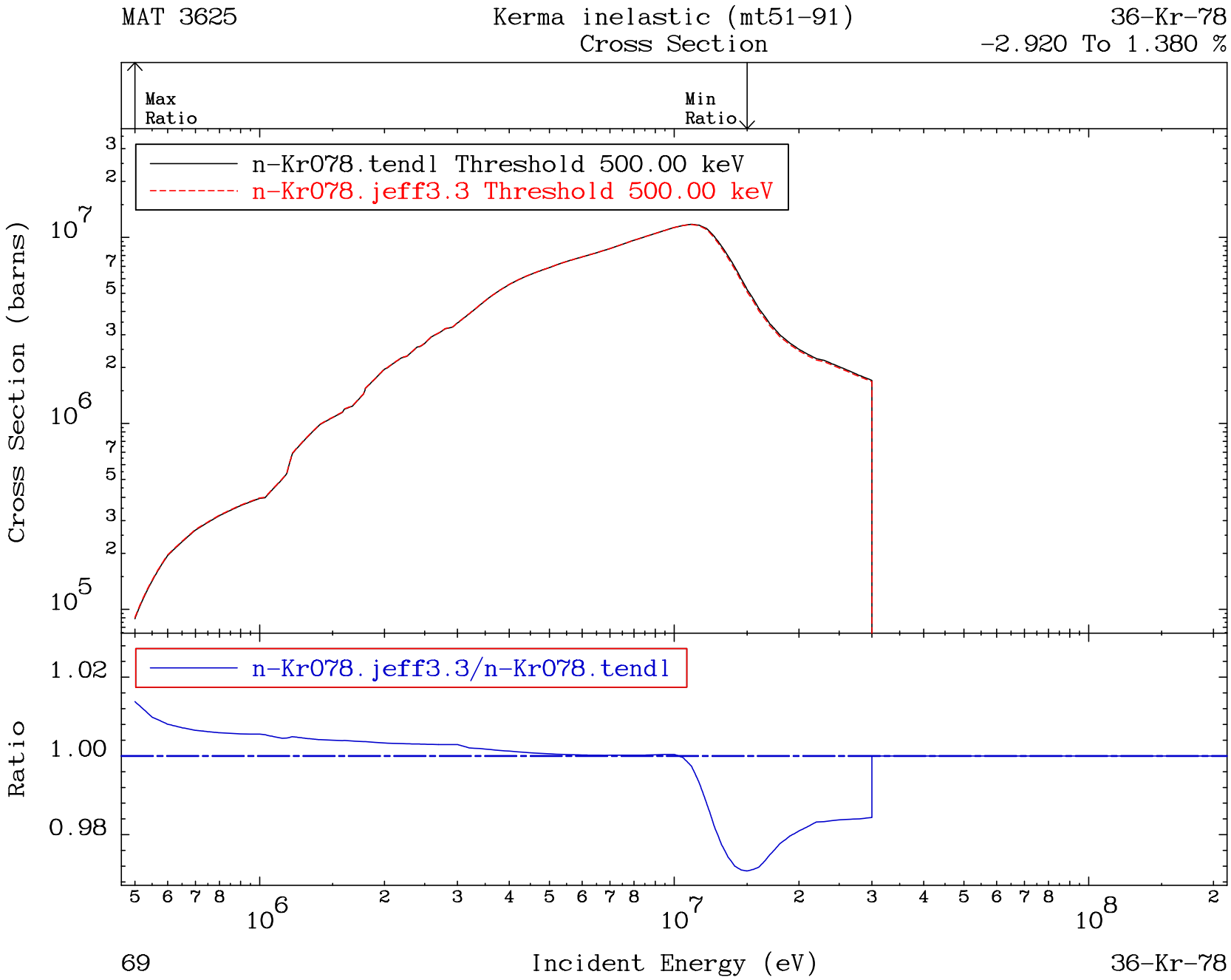

MAT 3625
He-3 Production
Cross Section
36-Kr-78
-3.919 To 0.188 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 5.8611 MeV
n-Kr078.jeff3.3 Threshold 5.8624 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.00
0.98
0.96
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
64
Incident Energy (eV)
36-Kr-78

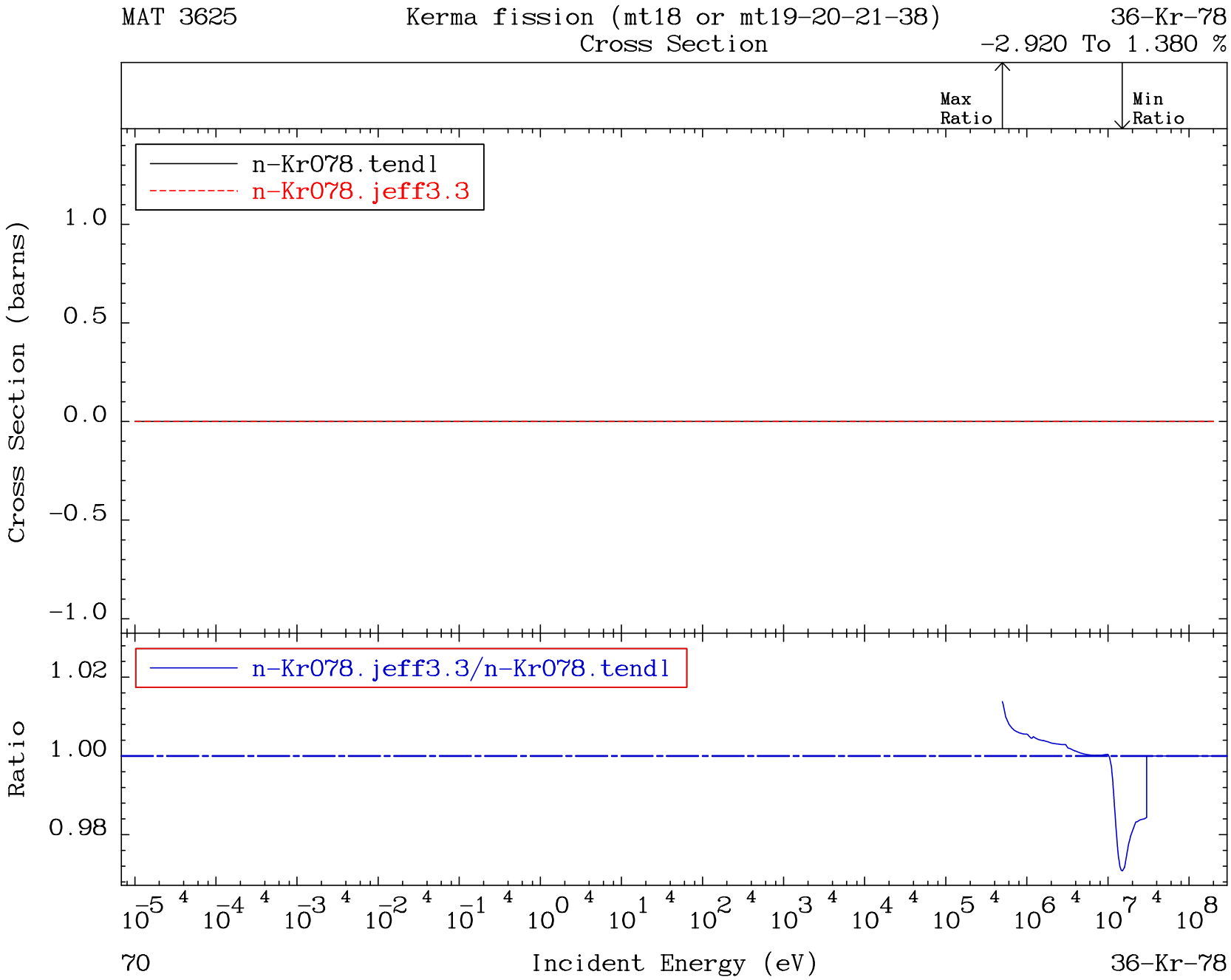

MAT 3625
He-4 Production
Cross Section
36-Kr-78
-2.761 To 1167. %
Max
Ratio
Min
Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
65
36-Kr-78

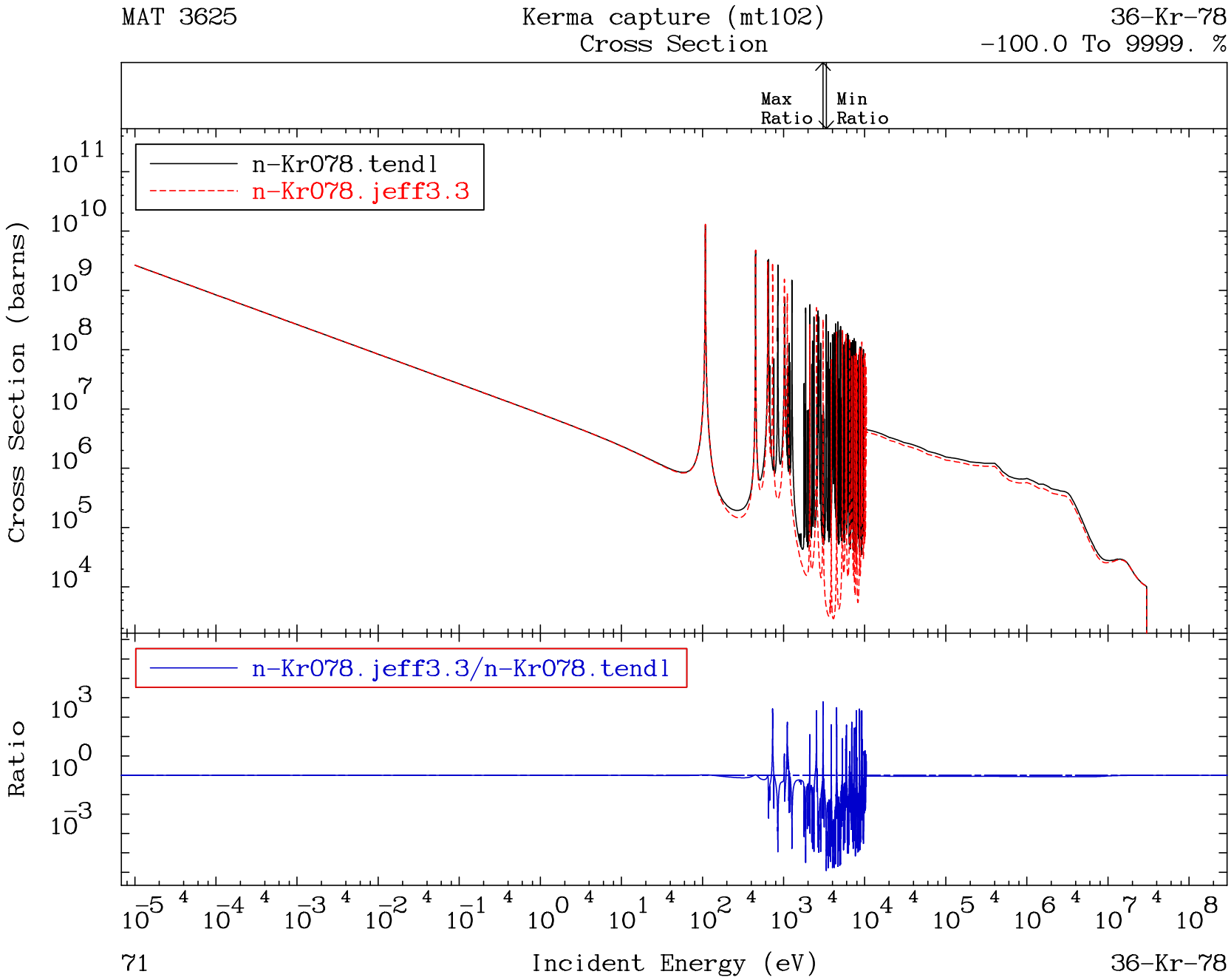

MAT 3625
Kerma total (eV-barns)
Cross Section
36-Kr-78
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
66
36-Kr-78

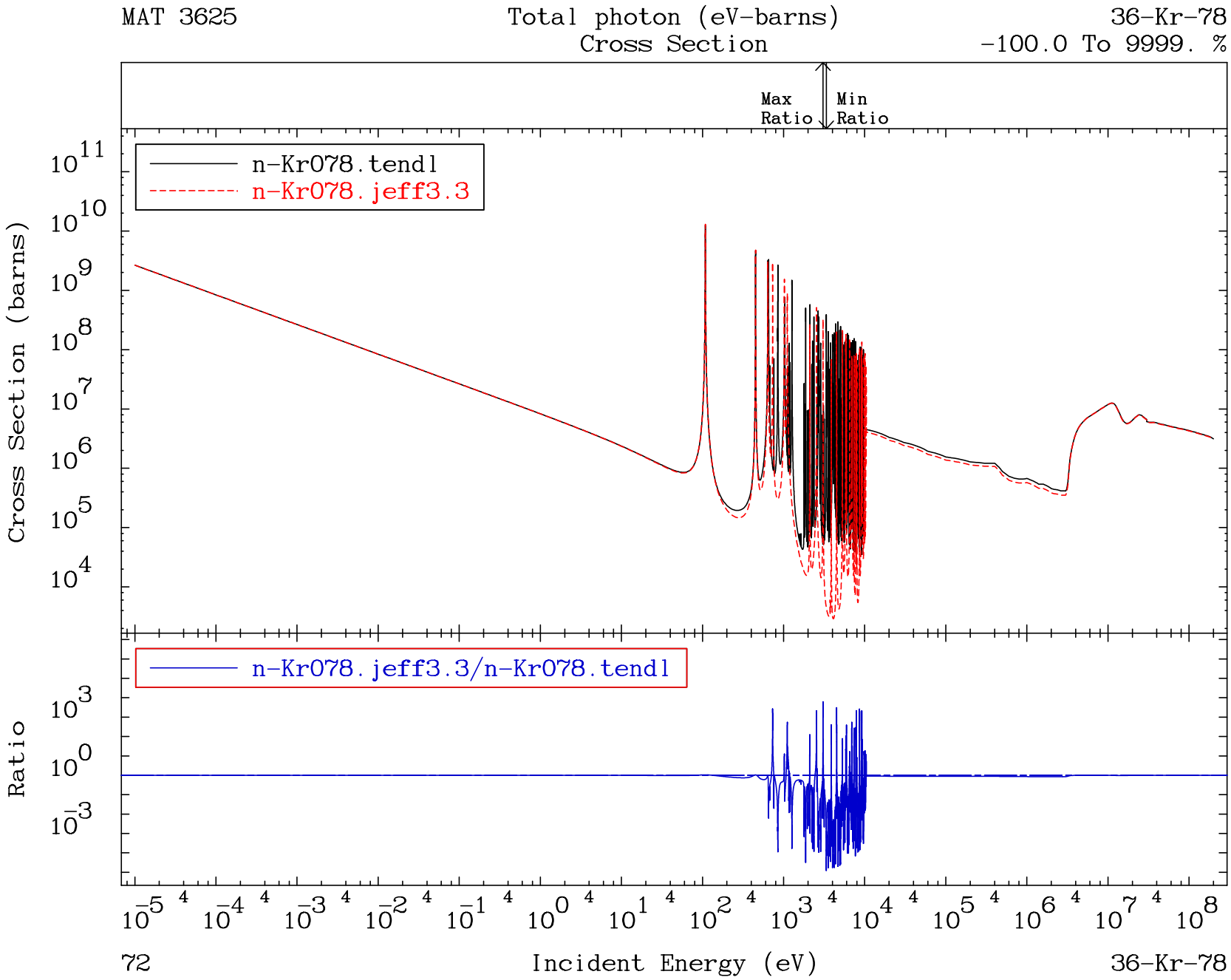

MAT 3625
Kerma elastic
Cross Section
36-Kr-78
-99.95 To 9999. %
Max
Ratio
Min
Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
67
36-Kr-78

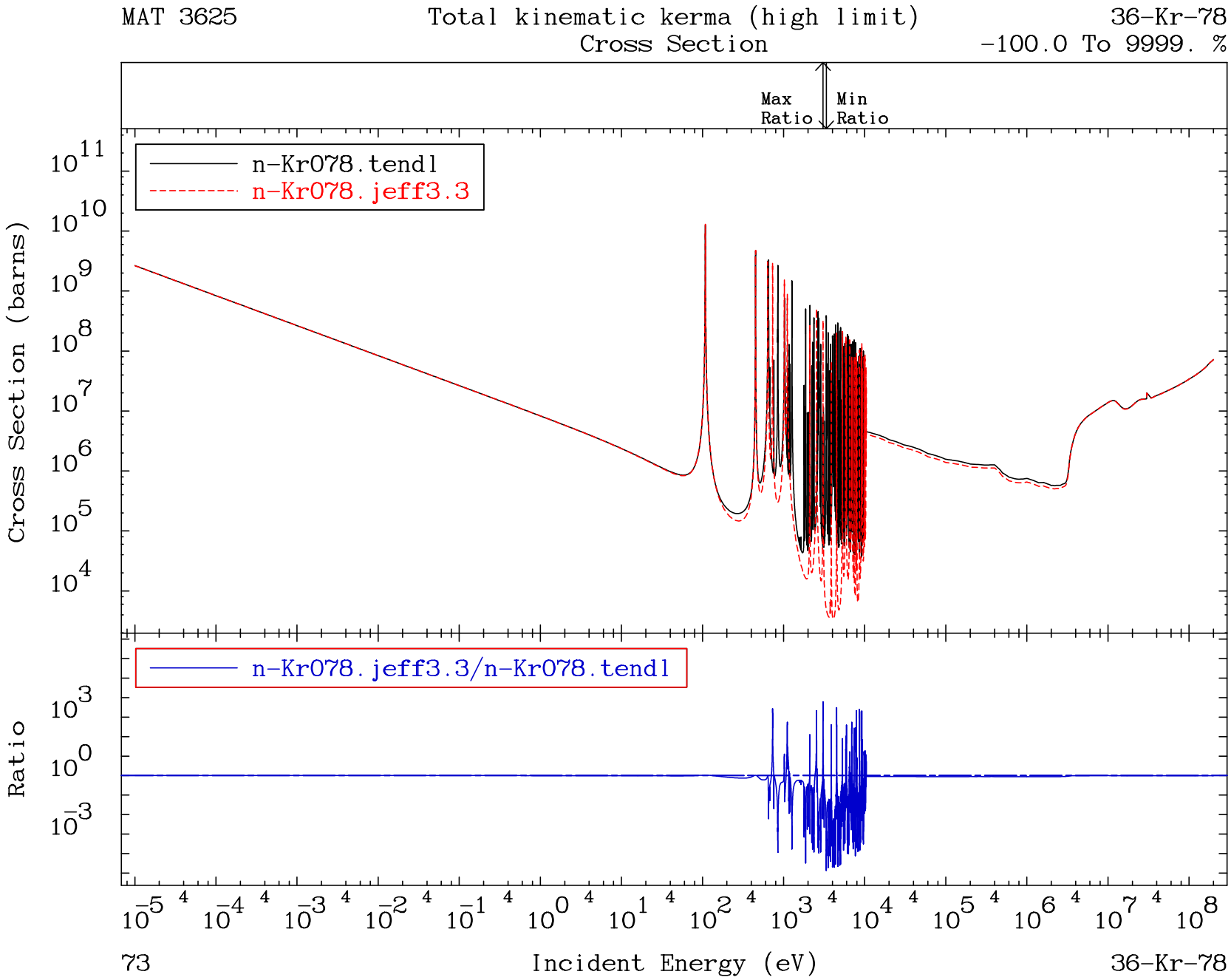

MAT 3625
Kerma non-elastic (all but mt2)
Cross Section
36-Kr-78
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
68
36-Kr-78

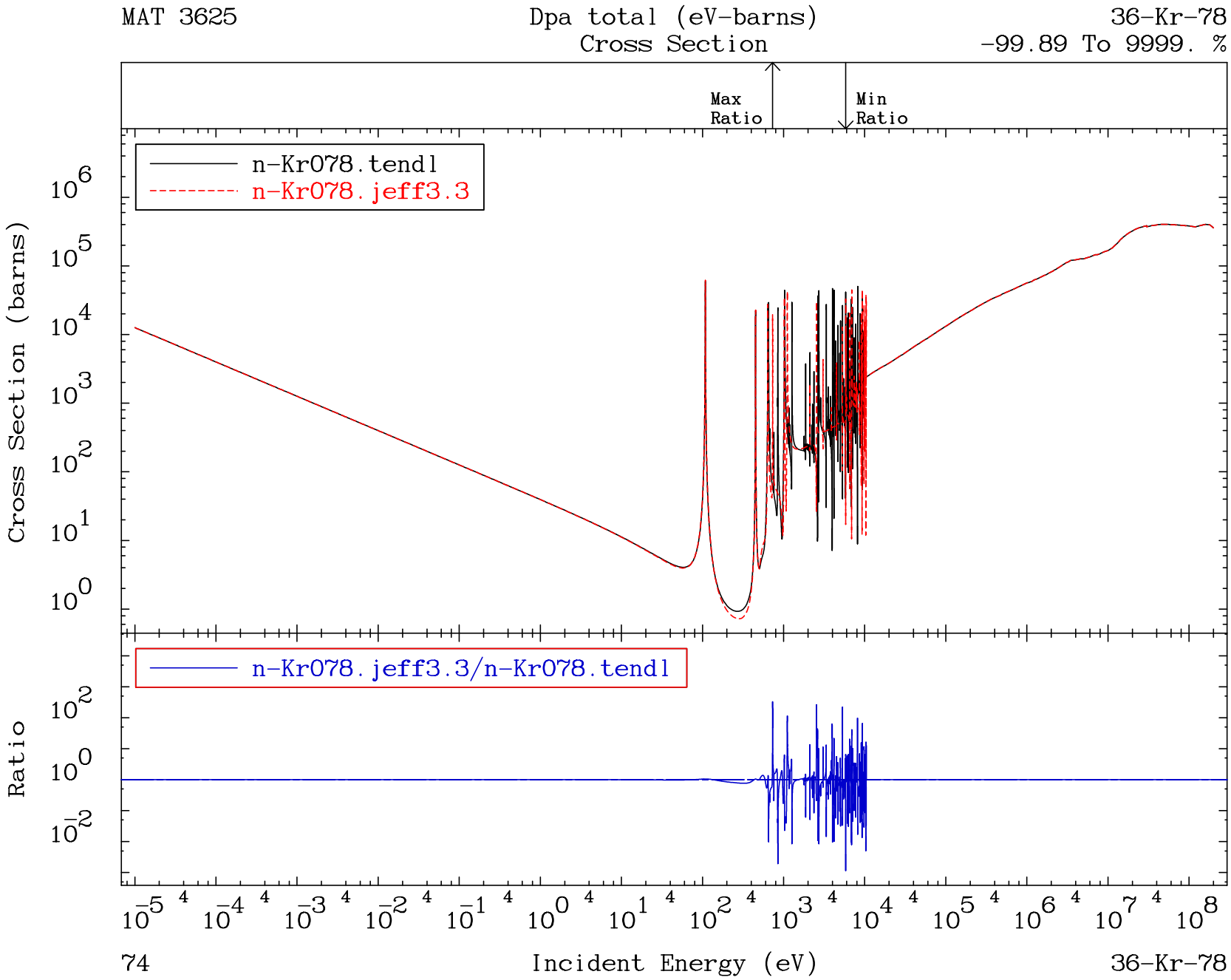

MAT 3625
Kerma inelastic (mt51-91)
Cross Section
36-Kr-78
-2.920 To 1.380 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 500.00 keV
n-Kr078.jeff3.3 Threshold 500.00 keV
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
69
36-Kr-78

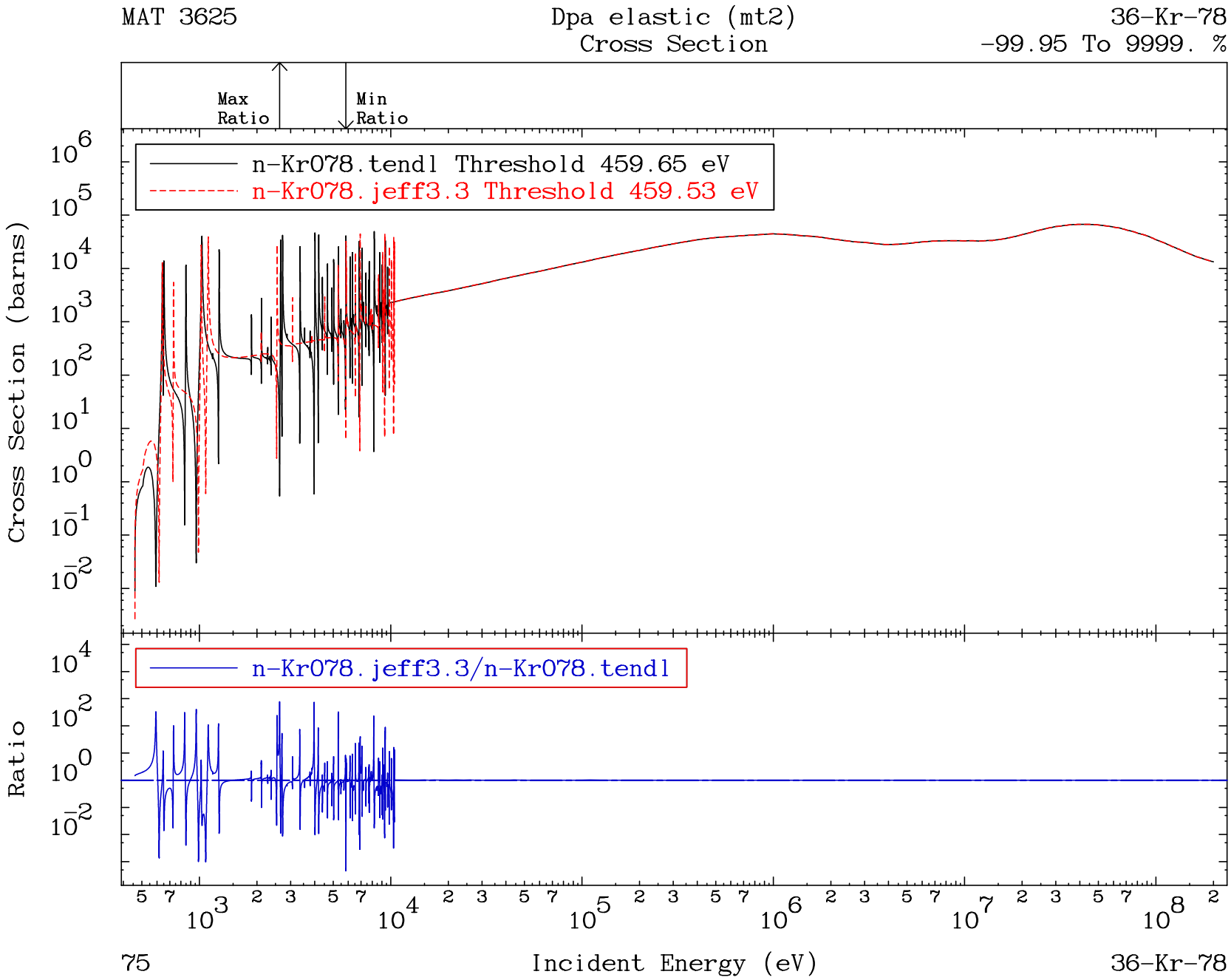

MAT 3625
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
36-Kr-78
-2.920 To 1.380 %
Max Ratio
Min Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.00
0.98
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
70
Incident Energy (eV)
36-Kr-78

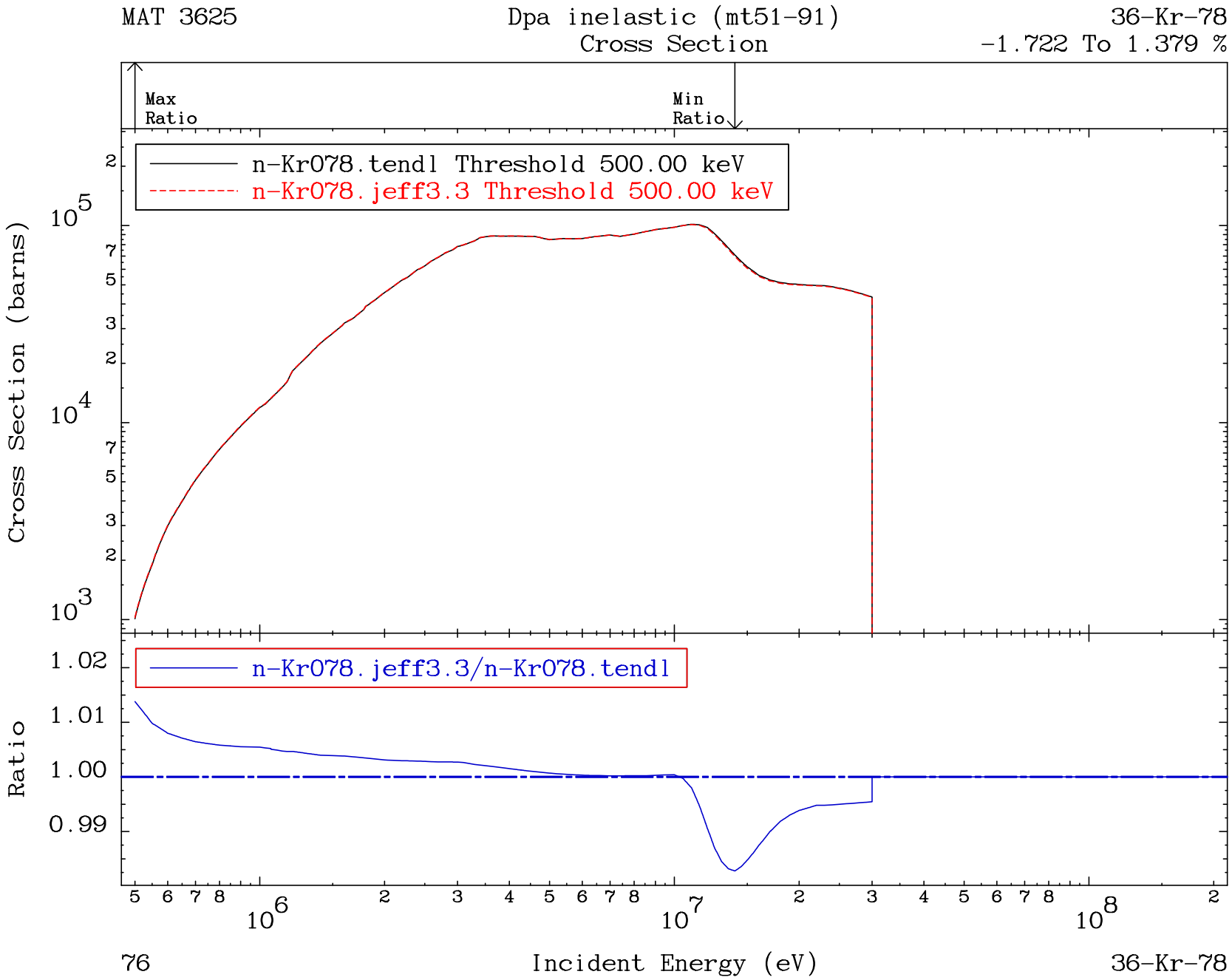

MAT 3625
Kerma capture (mt102)
Cross Section
36-Kr-78
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
71
36-Kr-78

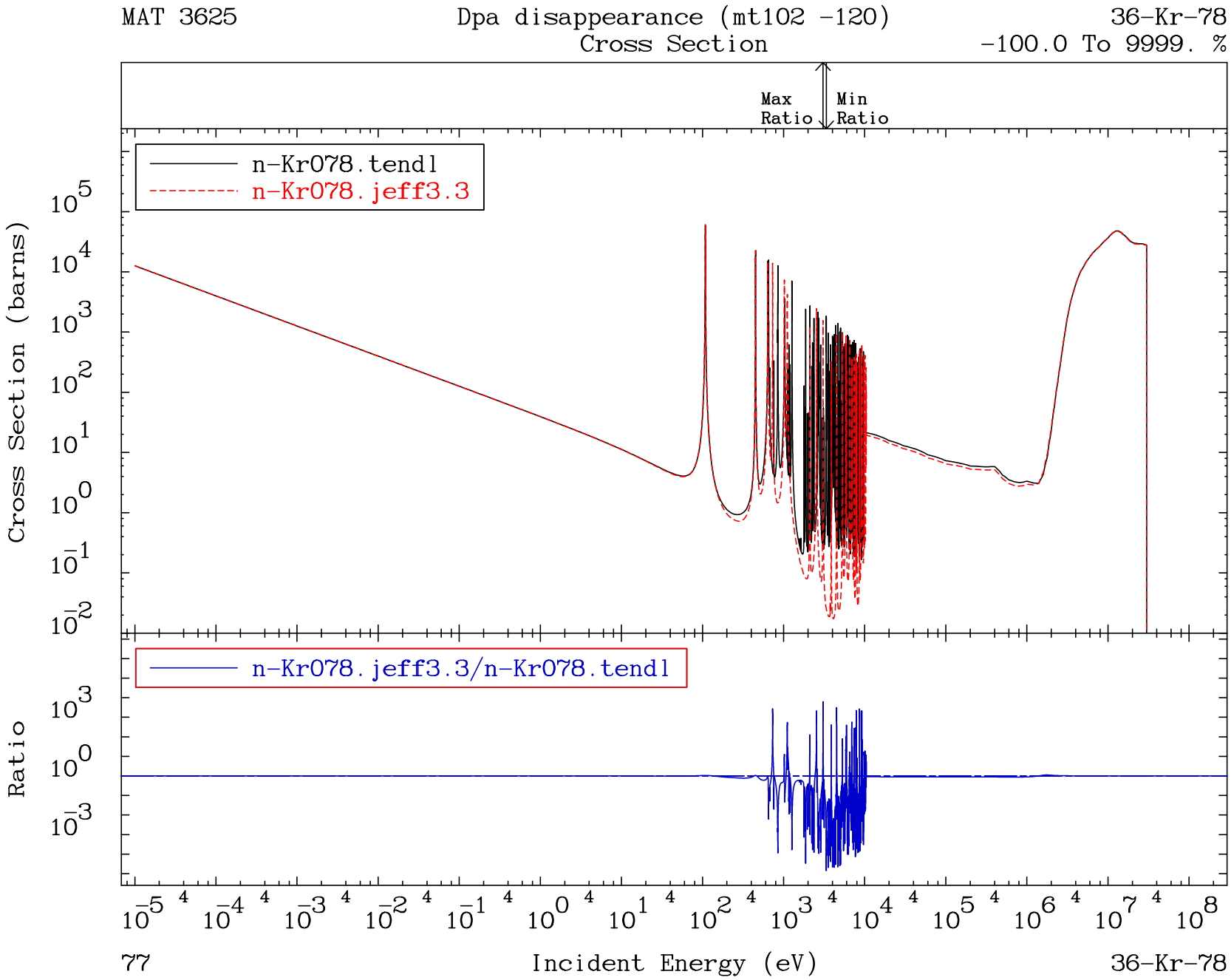

MAT 3625
Total photon (eV-barns)
Cross Section
36-Kr-78
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
72
36-Kr-78

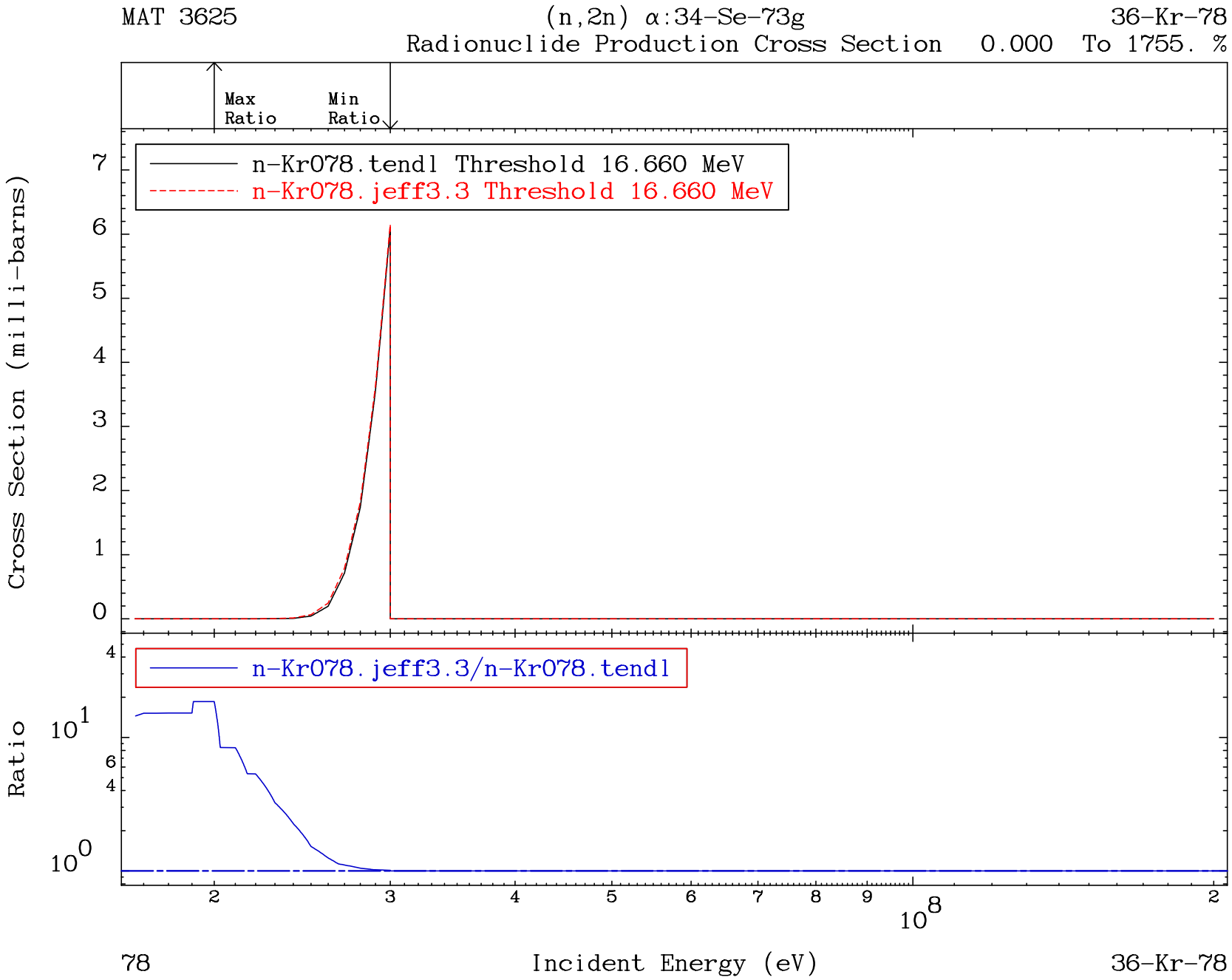

MAT 3625
Total kinematic kerma (high limit)
Cross Section
36-Kr-78
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
73
36-Kr-78

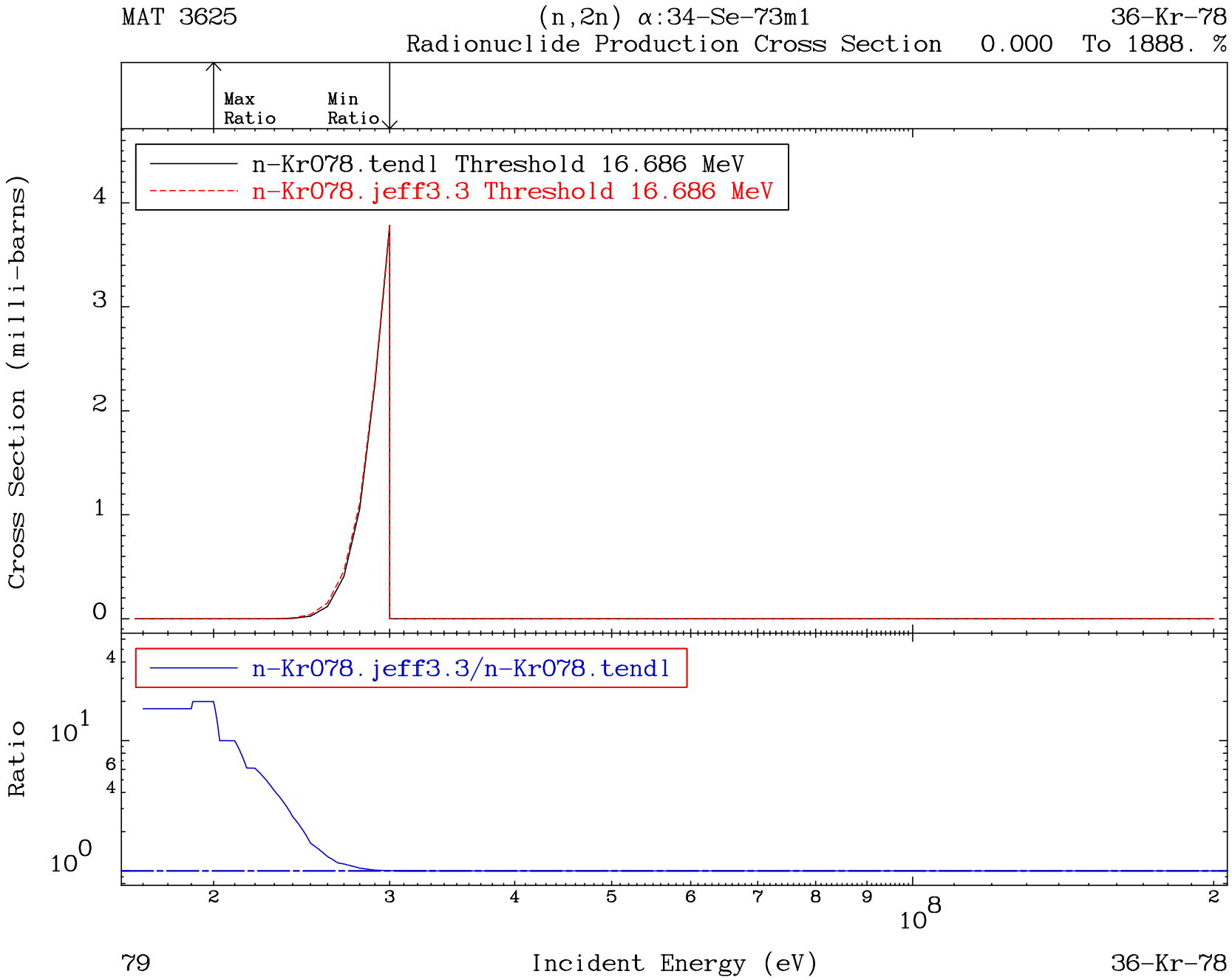

MAT 3625
Dpa total (eV-barns)
Cross Section
36-Kr-78
-99.89 To 9999. %
Max Ratio
Min Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
74
Incident Energy (eV)
36-Kr-78

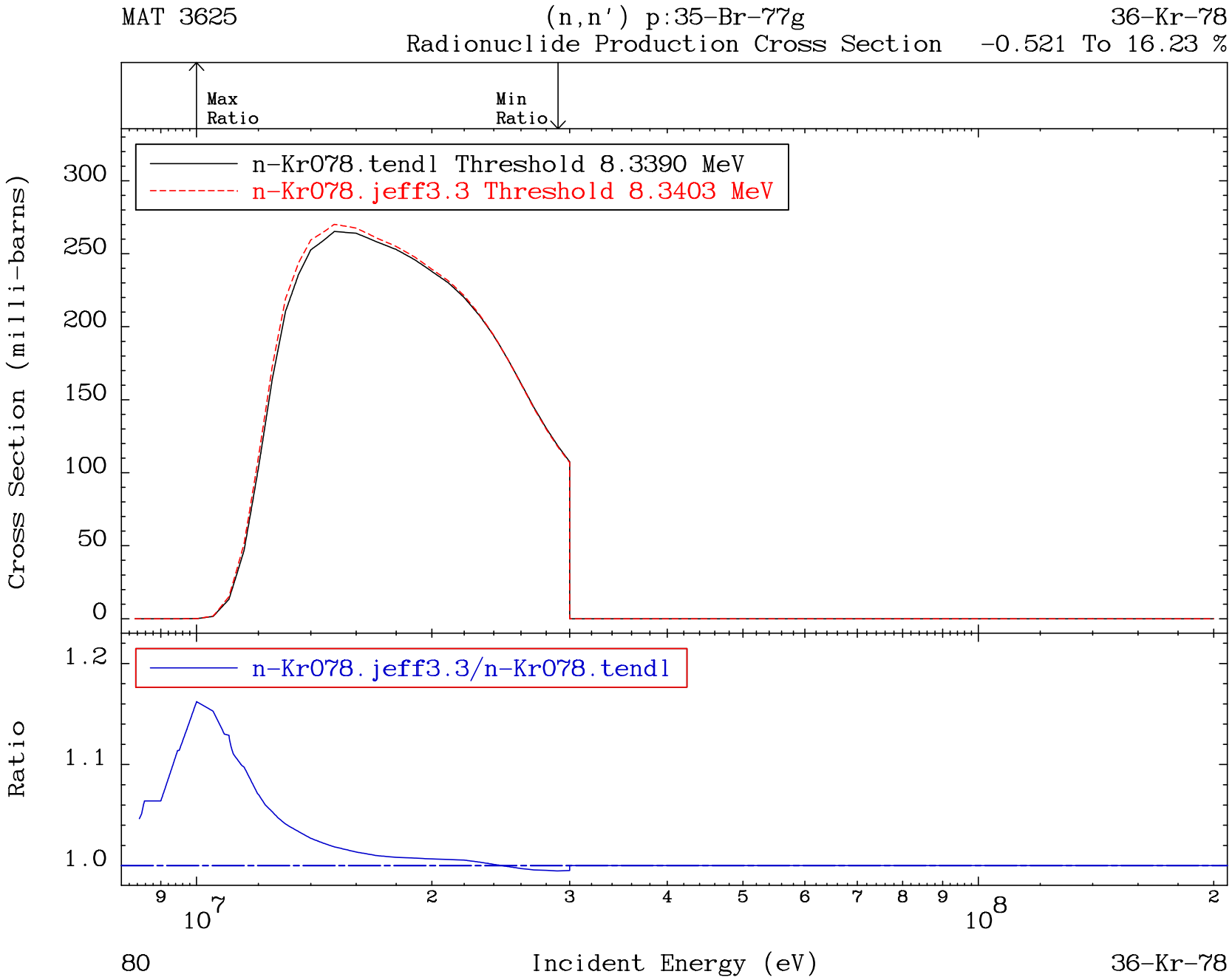

MAT 3625
Dpa elastic (mt2)
Cross Section
36-Kr-78
-99.95 To 9999. %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 459.65 eV
n-Kr078.jeff3.3 Threshold 459.53 eV
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
75
36-Kr-78

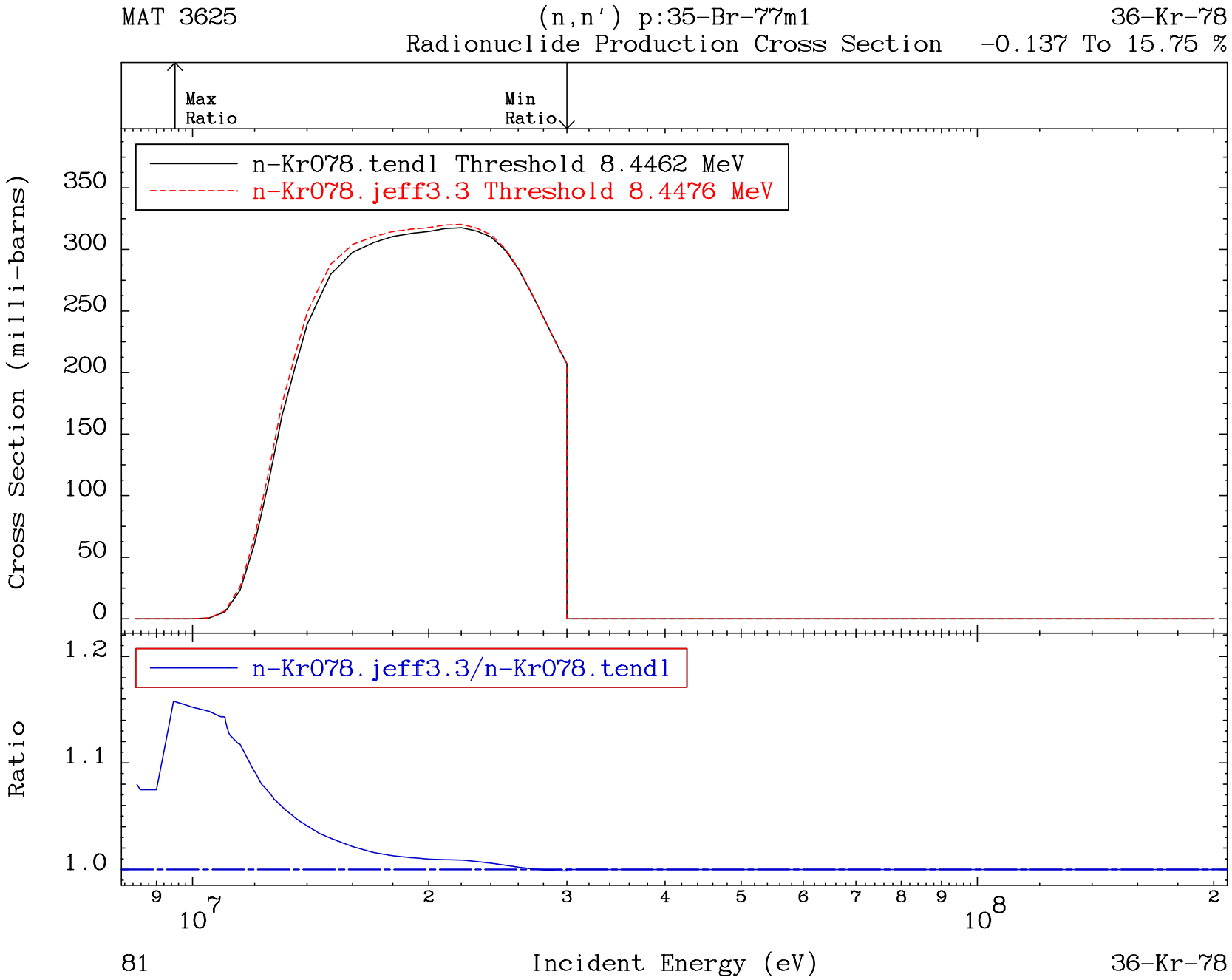

MAT 3625
Dpa inelastic (mt51-91)
Cross Section
36-Kr-78
-1.722 To 1.379 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 500.00 keV
n-Kr078.jeff3.3 Threshold 500.00 keV
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
76
36-Kr-78

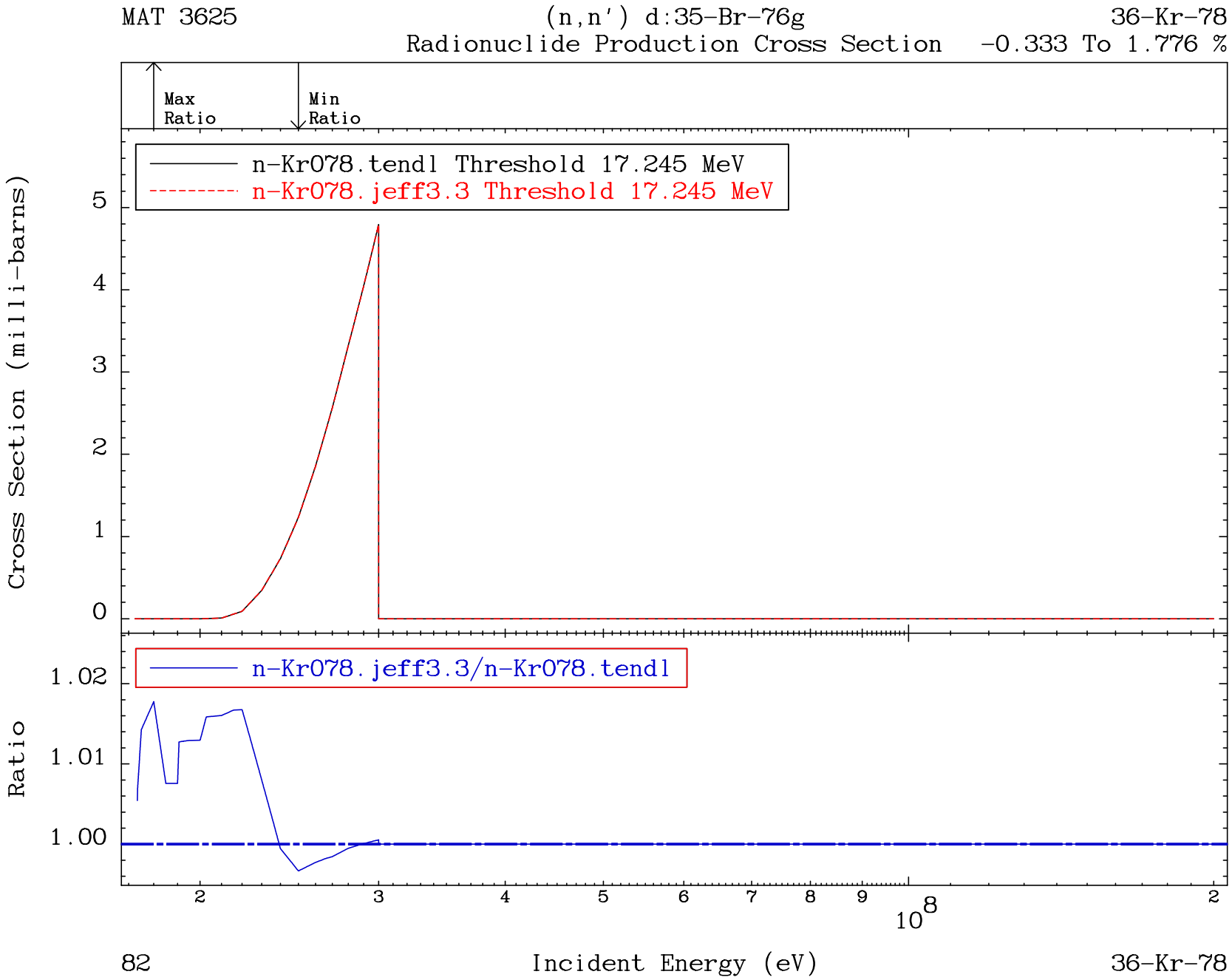

MAT 3625
Dpa disappearance (mt102 -120)
Cross Section
36-Kr-78
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Kr078.tendl
n-Kr078.jeff3.3
Cross Section (barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
77
36-Kr-78

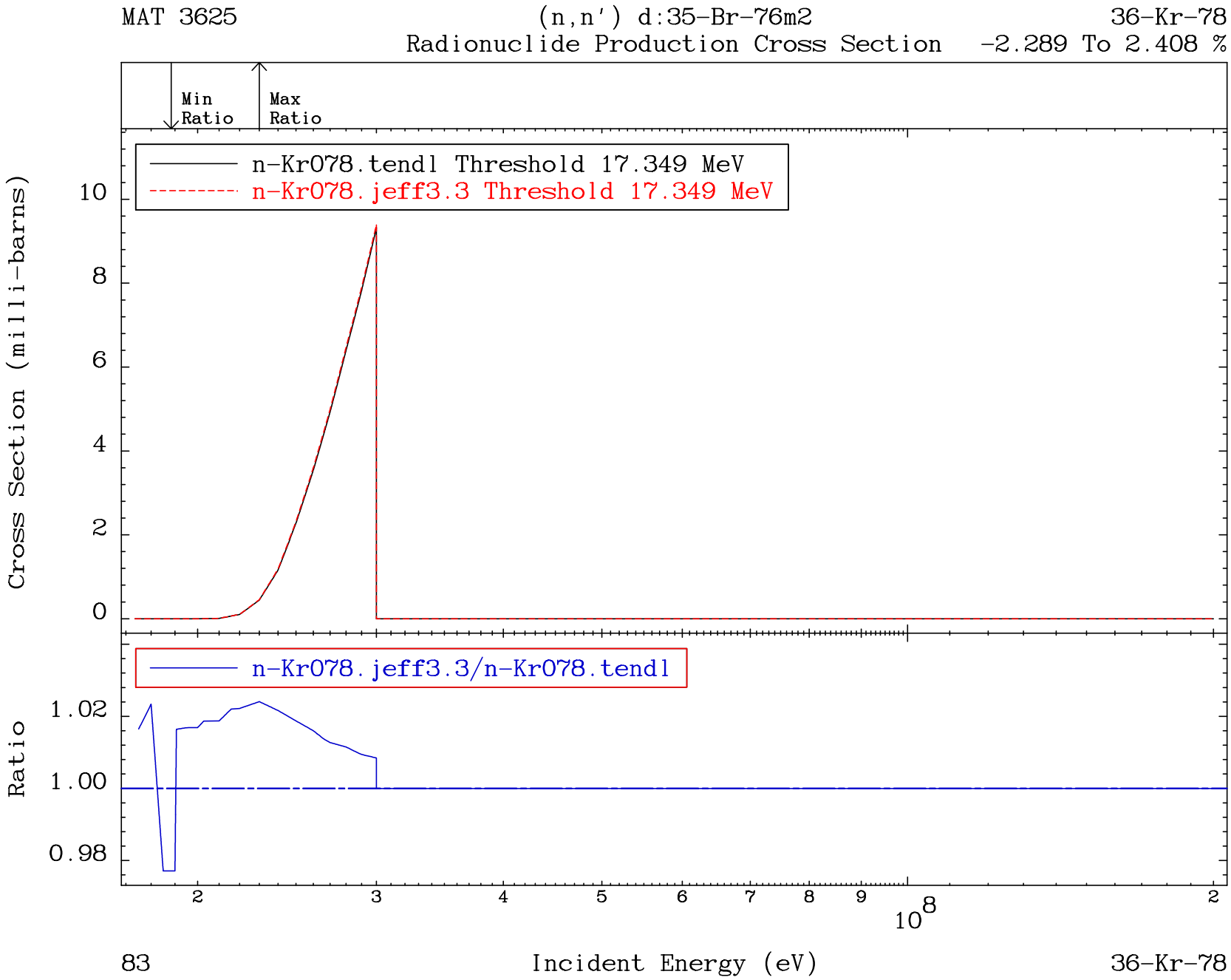

MAT 3625
(n,2n) α:34-Se-73g
36-Kr-78
Radionuclide Production Cross Section 0.000 To 1755. %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 16.660 MeV
n-Kr078.jeff3.3 Threshold 16.660 MeV
Cross Section (milli-barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
78
36-Kr-78

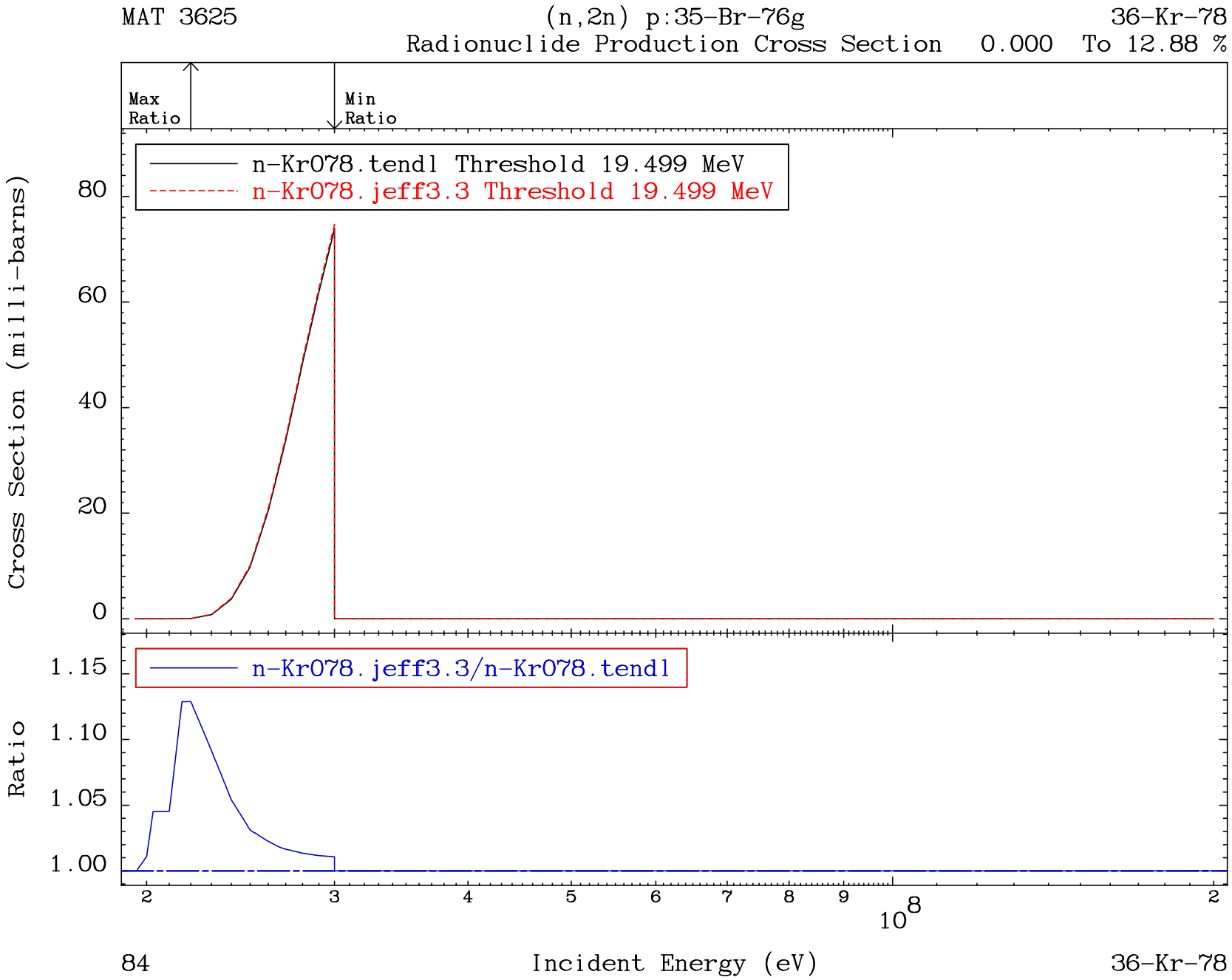

MAT 3625
(n,2n) α:34-Se-73m1
36-Kr-78
Radionuclide Production Cross Section 0.000 To 1888. %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 16.686 MeV
n-Kr078.jeff3.3 Threshold 16.686 MeV
Cross Section (milli-barns)
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
Incident Energy (eV)
79
36-Kr-78

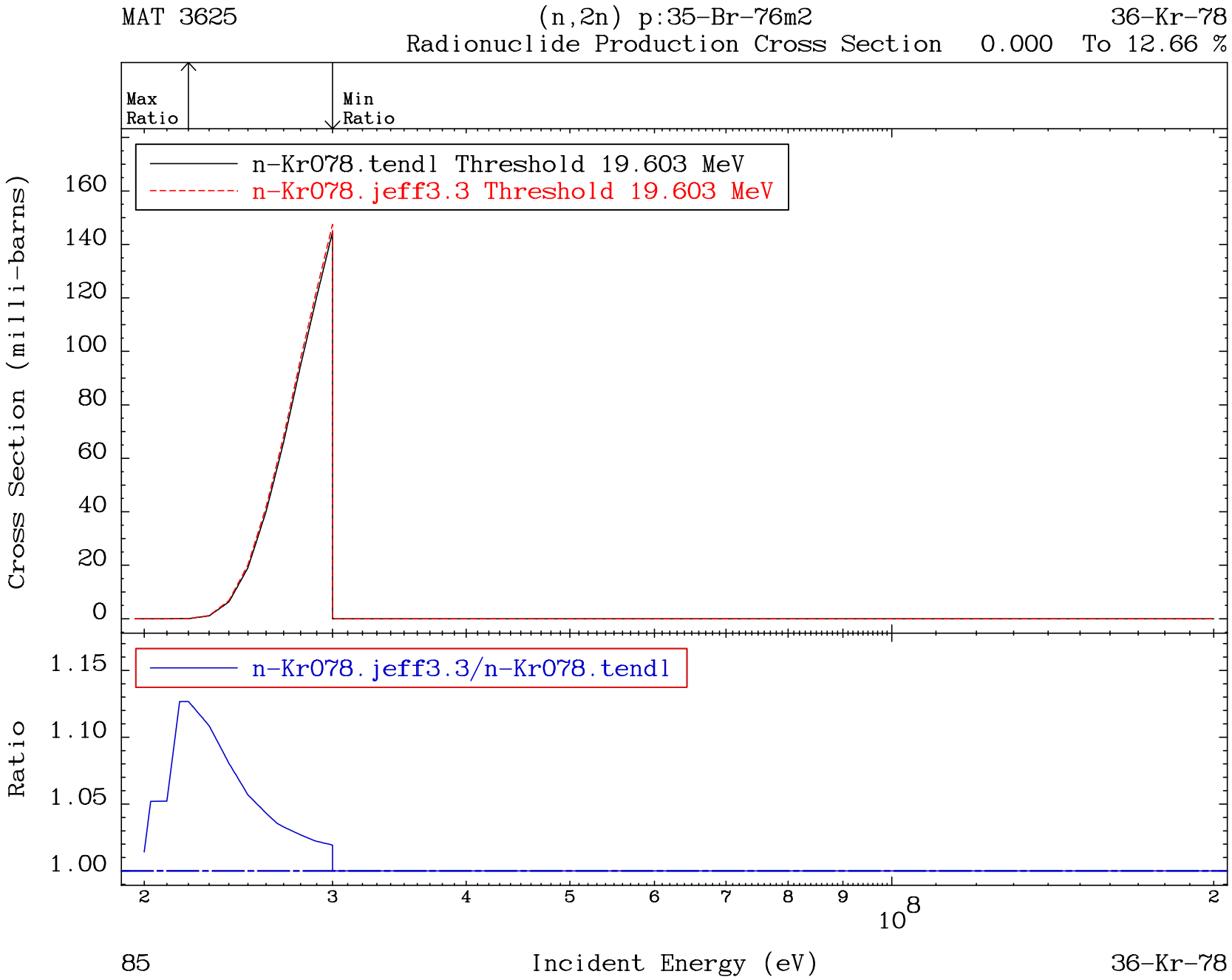

MAT 3625
(n,n') p:35-Br-77g
36-Kr-78
Radionuclide Production Cross Section -0.521 To 16.23 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 8.3390 MeV
n-Kr078.jeff3.3 Threshold 8.3403 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.2
1.1
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
36-Kr-78

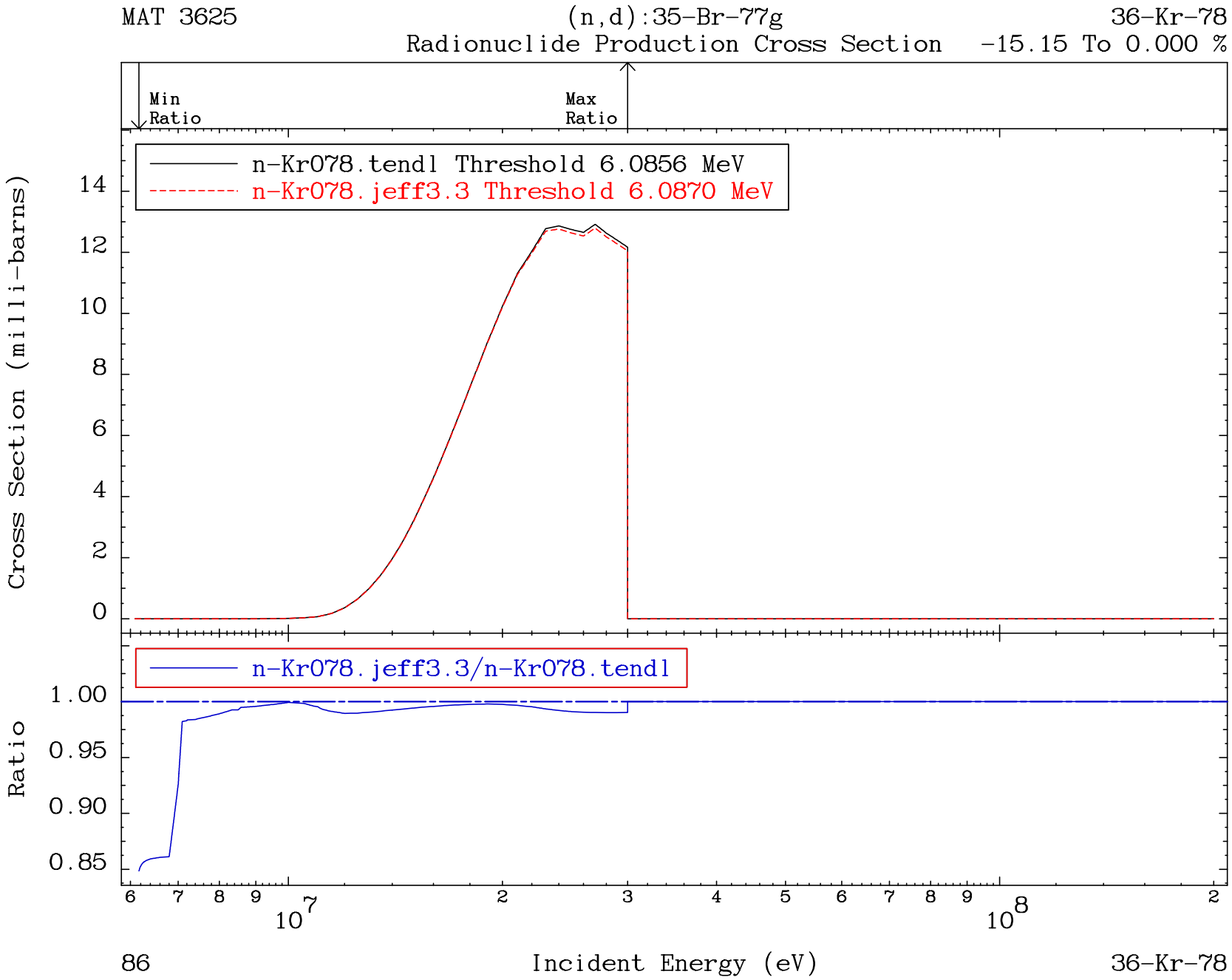

MAT 3625
(n,n') p:35-Br-77m1
36-Kr-78
Radionuclide Production Cross Section -0.137 To 15.75 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 8.4462 MeV
n-Kr078.jeff3.3 Threshold 8.4476 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.2
1.1
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
36-Kr-78

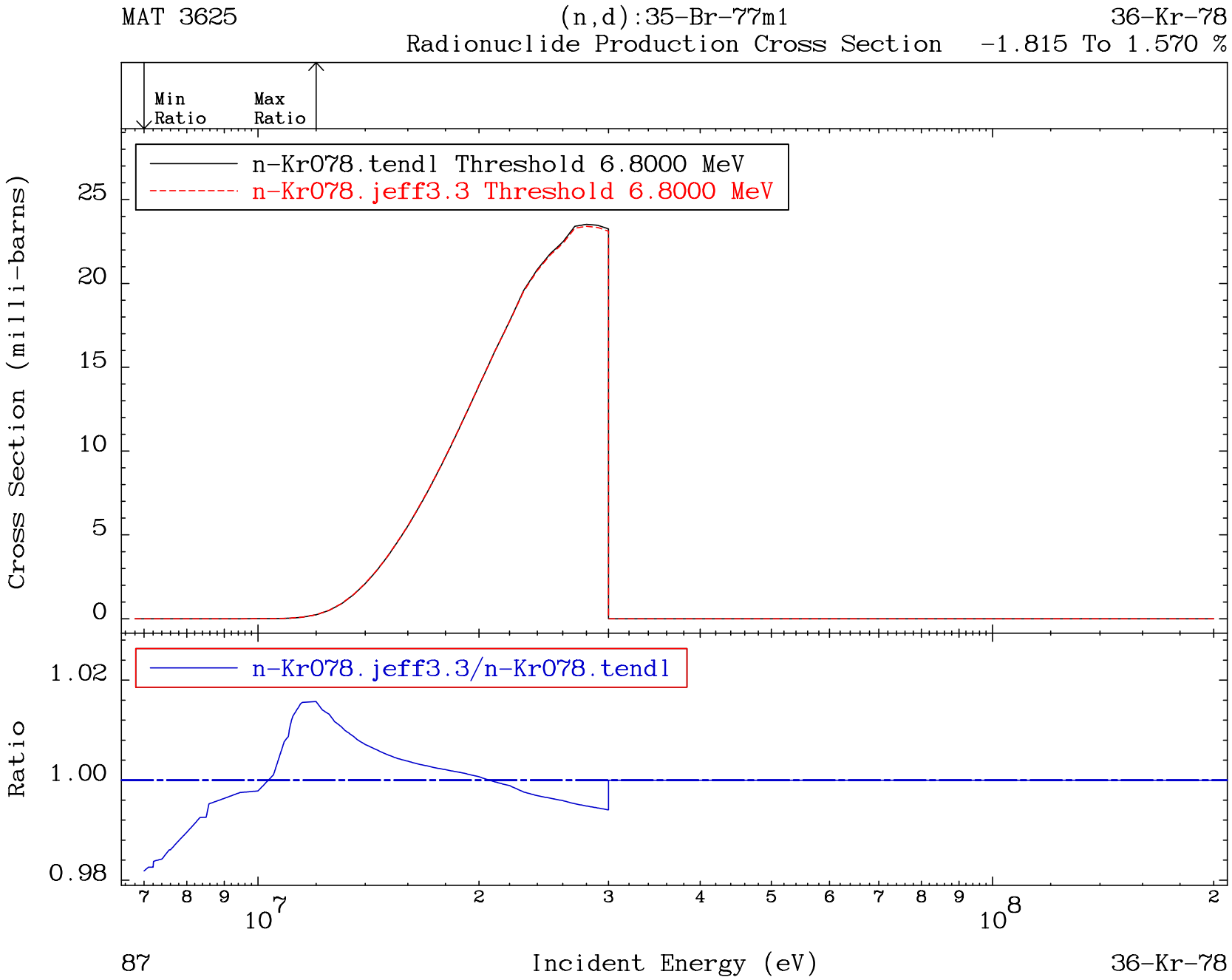

MAT 3625
(n,n') d:35-Br-76g
36-Kr-78
Radionuclide Production Cross Section
-0.333 To 1.776 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 17.245 MeV
n-Kr078.jeff3.3 Threshold 17.245 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.00
1.01
1.02
2
3
4
5
6
7
8
9
2
10^8
82
Incident Energy (eV)
36-Kr-78

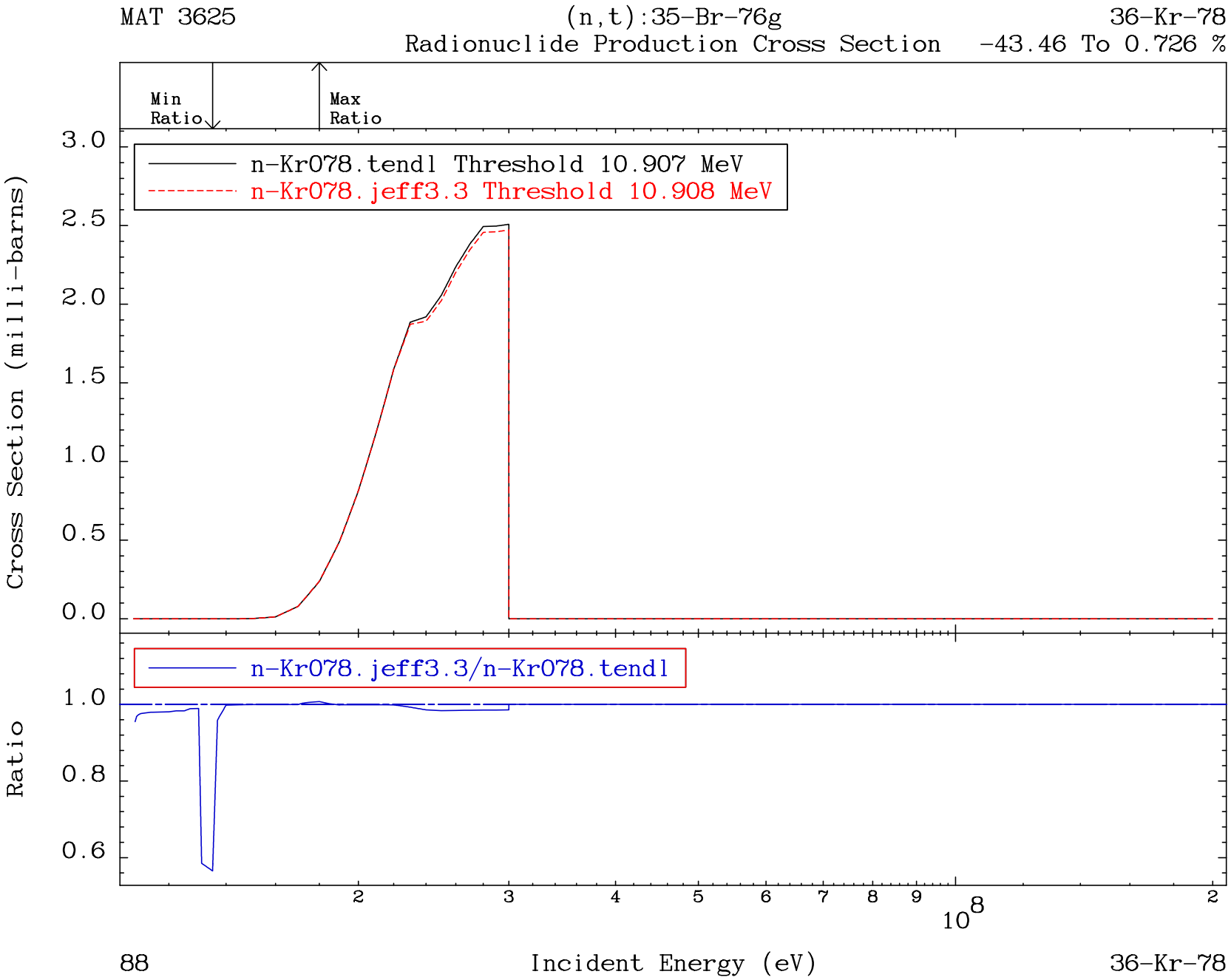

MAT 3625
(n,n') d:35-Br-76m2
36-Kr-78
Radionuclide Production Cross Section -2.289 To 2.408 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 17.349 MeV
n-Kr078.jeff3.3 Threshold 17.349 MeV
Cross Section (milli-barns)
10
8
6
4
2
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.00
0.98
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
36-Kr-78

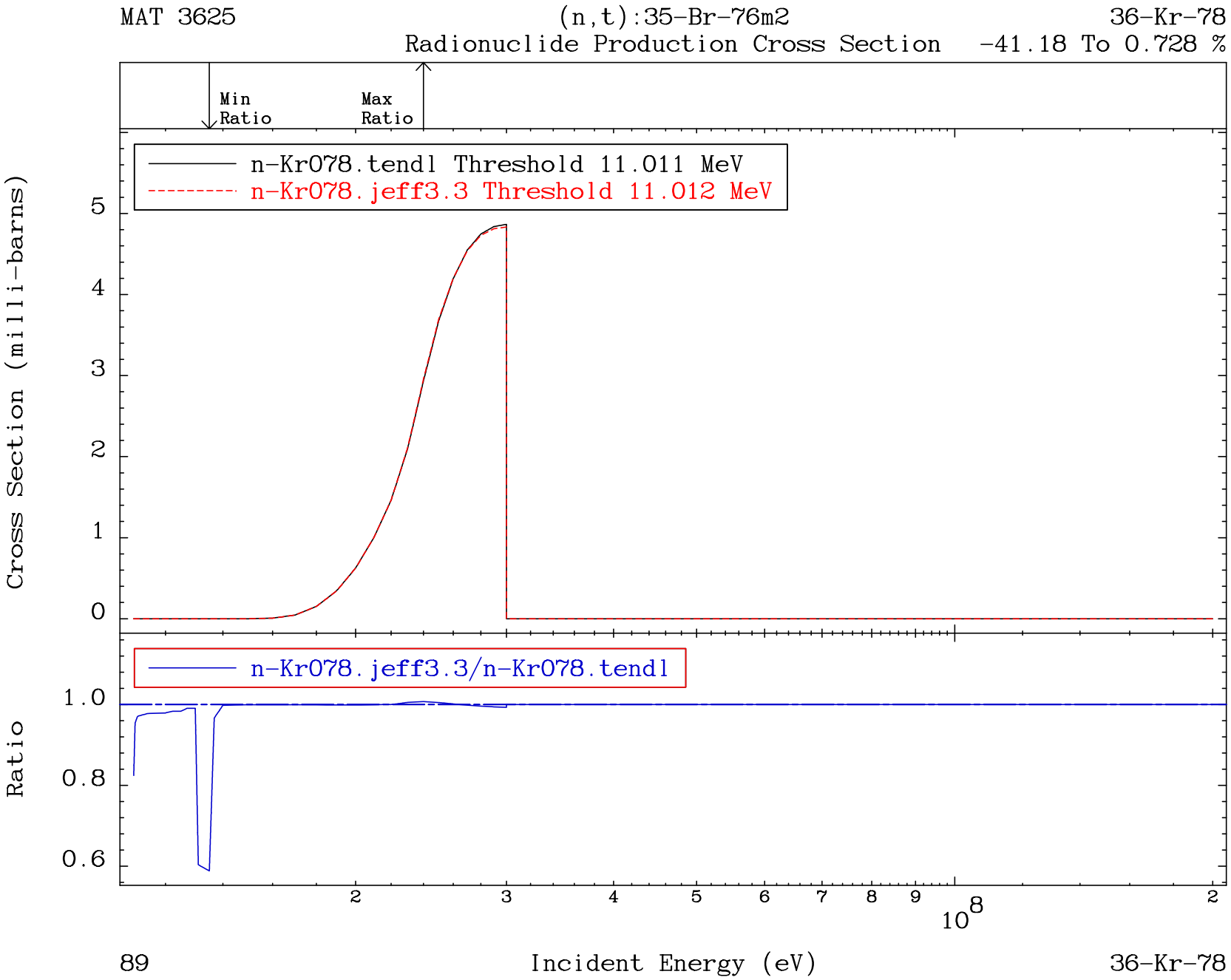

MAT 3625
(n,2n) p:35-Br-76g
36-Kr-78
Radionuclide Production Cross Section 0.000 To 12.88 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 19.499 MeV
n-Kr078.jeff3.3 Threshold 19.499 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
36-Kr-78

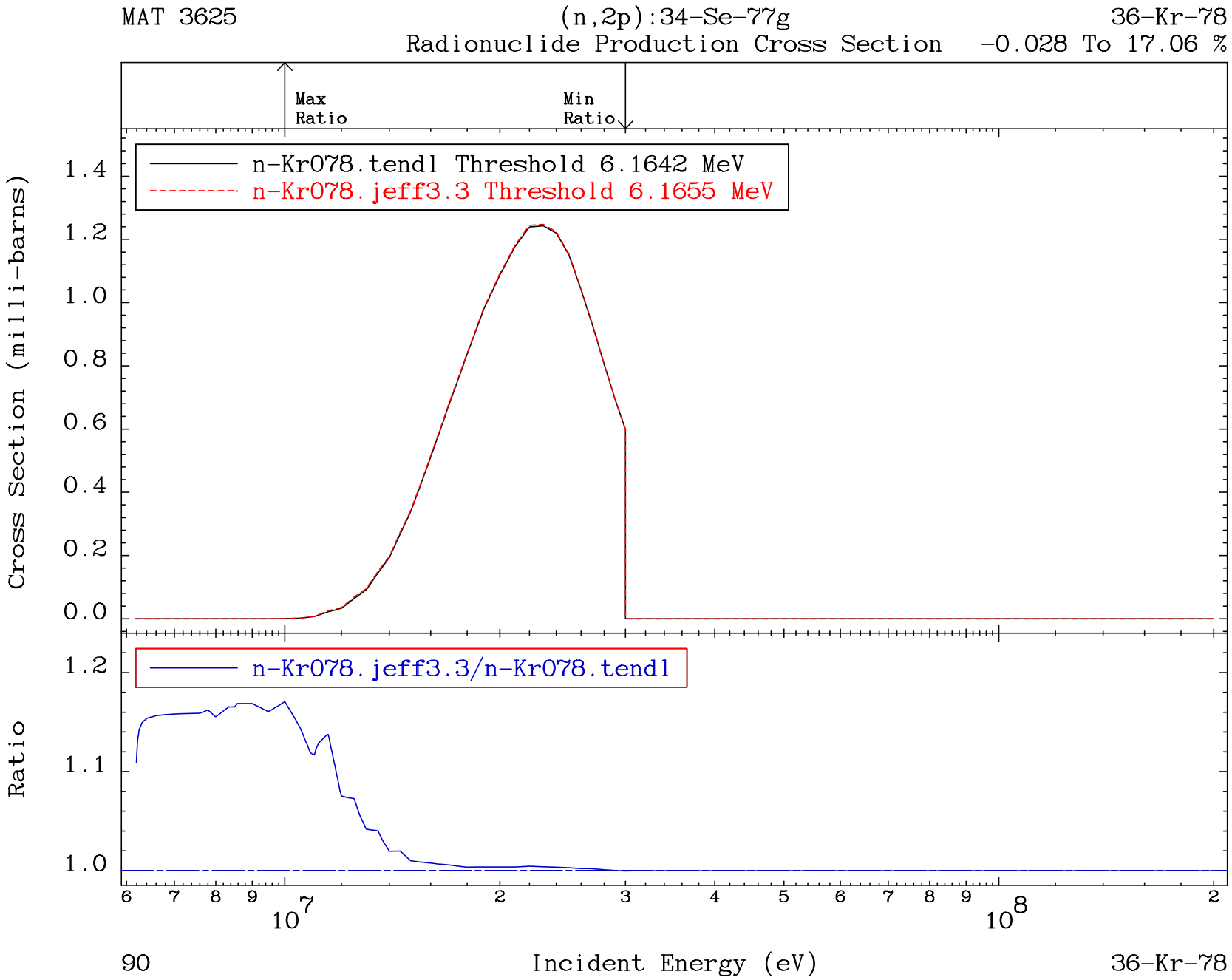

MAT 3625
(n,2n) p:35-Br-76m2
36-Kr-78
Radionuclide Production Cross Section 0.000 To 12.66 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 19.603 MeV
n-Kr078.jeff3.3 Threshold 19.603 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
36-Kr-78

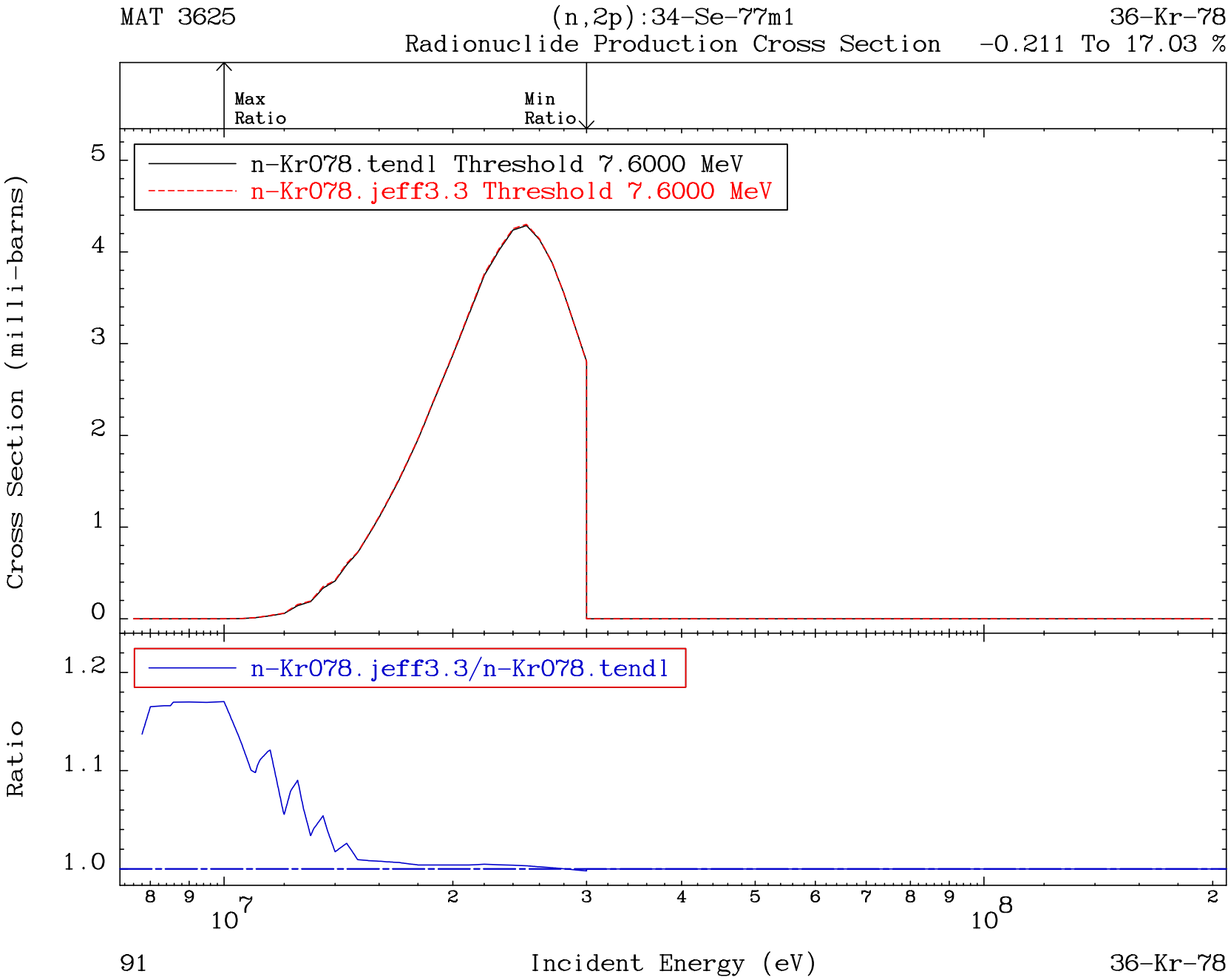

MAT 3625
(n,d):35-Br-77g
36-Kr-78
Radionuclide Production Cross Section -15.15 To 0.000 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 6.0856 MeV
n-Kr078.jeff3.3 Threshold 6.0870 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
0.85
0.90
0.95
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
86
Incident Energy (eV)
36-Kr-78


MAT 3625
(n,d):35-Br-77m1
36-Kr-78
Radionuclide Production Cross Section -1.815 To 1.570 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 6.8000 MeV
n-Kr078.jeff3.3 Threshold 6.8000 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.02
1.00
0.98
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
87
Incident Energy (eV)
36-Kr-78


MAT 3625
(n,t):35-Br-76g
36-Kr-78
Radionuclide Production Cross Section -43.46 To 0.726 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 10.907 MeV
n-Kr078.jeff3.3 Threshold 10.908 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
88
Incident Energy (eV)
36-Kr-78


MAT 3625
(n,t):35-Br-76m2
36-Kr-78
Radionuclide Production Cross Section -41.18 To 0.728 %
Min Ratio
Max Ratio
n-Kr078.tendl Threshold 11.011 MeV
n-Kr078.jeff3.3 Threshold 11.012 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
0.6
0.8
1.0
2
3
4
5
6
7
8
9
10^8
2
89
Incident Energy (eV)
36-Kr-78


MAT 3625
(n,2p):34-Se-77g
36-Kr-78
Radionuclide Production Cross Section
-0.028 To 17.06 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 6.1642 MeV
n-Kr078.jeff3.3 Threshold 6.1655 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.2
1.1
1.0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
90
Incident Energy (eV)
36-Kr-78


MAT 3625
(n,2p):34-Se-77m1
36-Kr-78
Radionuclide Production Cross Section -0.211 To 17.03 %
Max Ratio
Min Ratio
n-Kr078.tendl Threshold 7.6000 MeV
n-Kr078.jeff3.3 Threshold 7.6000 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Kr078.jeff3.3/n-Kr078.tendl
Ratio
1.0
1.1
1.2
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
91
Incident Energy (eV)
36-Kr-78