

$^{52}\text{Mn}$        $Z = 25$        $N = 27$       [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 450.857 ( 0.002) MeV

Qbeta+ = 4.712 ( 0.002) MeV

	Energy T	J+	J-	J-other	T1/2
52MN	1   0.000	6+			1 5.591 D 3
52MN	2   0.378	2+			2 21.1 M 2
52MN	3   0.546	1+			3 1.85 NS 7
52MN	4   0.732	4+			4 3.6 PS 14
52MN	5   0.825	3+			5 0.17 PS +4-3
52MN	6   0.870	7+			6 0.12 PS +6-8
52MN	7			0.884 3,4+	7 1.4 PS
52MN	8			0.887 1+,2+	8 0.06 PS +3-4
52MN	9			1.232 2+,3	9 0.14 PS +19-8
52MN	10   1.254	5+			10 0.018 PS 55
52MN	11			1.279 3+,4+,5+	11 0.25 PS +17-8
52MN	12			1.418	12
52MN	13			1.647 1+,2+,3+	13 0.37 PS +24-17
52MN	14			1.684 3+,4+,5+	14 0.25 PS +17-8
52MN	15			1.956 5+,6+,7+	15
52MN	16			2.044 3+,4+,5+	16
52MN	17			2.130 4+,5+	17
52MN	18			2.253 4+,5+	18
52MN	19   2.286	8+			19 0.069 PS LT
52MN	20			2.337 (+)	20 0.05 PS +2-4
52MN	21   2.474	0+			21 0.32 PS +16-4
52MN	22   2.631	1+			22
52MN	23			2.645	23
52MN	24			2.677	24
52MN	25   2.710	7+			25
52MN	26			2.771	26
52MN	27			2.785 (3+,4+,5+)	27
52MN	28			2.796 +	28
52MN	29			2.815	29
52MN	30			2.848	30
52MN	31			2.858	31
52MN	32			2.872	32
52MN	33			2.903 +	33
52MN	34   2.908	9+			34 0.08 PS 6
52MN	35   2.926 2	0+			35
52MN	36			2.955	36
52MN	37			2.973 (5+,6+,7+)	37

52MN	38				2.982		38
52MN	39				3.022	3+,4+,5+	39
52MN	40				3.077		40
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52MN	41				3.097	3+,4+,5+	41
52MN	42				3.106		42
52MN	43				3.130		43
52MN	44				3.199	5+,6+,7+	44
52MN	45				3.213	0+,1+	45
52MN	46				3.226	3+,4+,5+	46
52MN	47				3.245	(1+)	47
52MN	48				3.297	(1+,2+,3+)	48
52MN	49				3.333	(2-,3-,4-)	49
52MN	50				3.351		50
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52MN	51				3.386	(3+)	51
52MN	52				3.423		52
52MN	53				3.476	(3+,4+,5+)	53
52MN	54				3.506	3+,4+,5+	54
52MN	55	3.573	1+				55
52MN	56	3.602	8+				56
52MN	57				3.620		57
52MN	58				3.640		58
52MN	59				3.655		59
52MN	60				3.706	(2-,3-,4-)	60
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52MN	61				3.738	3+,4+,5+	61
52MN	62				3.776	1+,2+,3+	62
52MN	63				3.798	(9+)	63
52MN	64	3.837	11+				64 15.1 PS 10
52MN	65				3.884		65
52MN	66	3.891	8+				66
52MN	67				3.898		67
52MN	68				3.936		68
52MN	69	3.974	1+				69
52MN	70				3.987		70
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52MN	71				4.040		71
52MN	72				4.061		72
52MN	73				4.129		73
52MN	74				4.136		74
52MN	75	4.164	10+				75 0.12 PS 4
52MN	76				4.198	(9+)	76
52MN	77				4.236		77
52MN	78				4.281	1+,2+,3+	78
52MN	79				4.314		79
52MN	80	4.376	1+				80
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52MN	81				4.390	(2+)	81
52MN	82	4.439	3+				82

52MN 83						4.461				83
52MN 84						4.500				84
52MN 85						4.540				85
52MN 86						4.620		2-,3-,4-		86
52MN 87				4.680		9-				87
52MN 88						4.697				88
52MN 89						4.837		0+,1+		89
52MN 90		4.953		1+						90
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52MN 91						5.043				91
52MN 92						5.051		(10+)		92
52MN 93						5.069		(2+)		93
52MN 94						5.313				94
52MN 95						5.403				95
52MN 96						5.412		(10+)		96
52MN 97						5.466		(2)		97
52MN 98						5.491		(2) 0+,1+		98
52MN 99				5.520		8-				99
52MN 100						5.751				100
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52MN 101						5.782				101
52MN 102						5.809				102
52MN 103						5.840				103
52MN 104		5.858		11+						104
52MN 105						5.874		1+,2+,3+		105
52MN 106				6.061		11-				106
52MN 107				6.260		6-				107
52MN 108						6.483		(11+)		108
S-p =		6.545		( 0.002)	-----					
52MN 109				6.990		6-				109
52MN 110		7.467		12+						110
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52MN 111						7.702		(12+)		111
52MN 112		8.153		13+						112
52MN 113						8.384		(13+)		113
52MN 114						8.582		(13-)		114
S-alpha=		8.655		( 0.002)	-----					
52MN 115						8.787		(13+)		115
52MN 116		8.894		14+						116
52MN 117				9.372		13-				117
52MN 118		9.906		15+						118
52MN 119						10.178		(14-)		119
S-n =		10.535		( 0.002)	-----					
52MN 120						11.132		(16+)		120
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52MN 121						11.186		(14-)		121
52MN 122						11.194				122
52MN 123						11.278		(14-)		123
52MN 124						12.010		(15-)		124
52MN 125						12.061		(17+)		125
									76 FS	21

52MN 126				12.066	(16+)	126
52MN 127				13.616	(15-)	127
52MN 128				15.569	(16-)	128

S-p = 6.545 ( 0.002)-----  
 S-n = 10.535 ( 0.002)-----  
 S-2p = 16.061 ( 0.002)-----  
 S-2n = 24.222 ( 0.002)-----  
 S-alpha= 8.655 ( 0.002)-----

S+p = -7.529 ( 0.002)  
 S+n = -12.054 ( 0.002)  
 S+2p = -11.881 ( 0.002)  
 S+2n = -20.993 ( 0.002)  
 S+alpha = -7.758 ( 0.002)

gap p = -0.984 ( 0.003)  
 gap n = -1.519 ( 0.003)  
 gap 2p = 4.181 ( 0.003)  
 gap 2n = 3.229 ( 0.003)  
 gap alpha = 0.896 ( 0.003)