

SMA4727A~SZ1390A

1.0 Watt Surface Mounted Zener Diodes

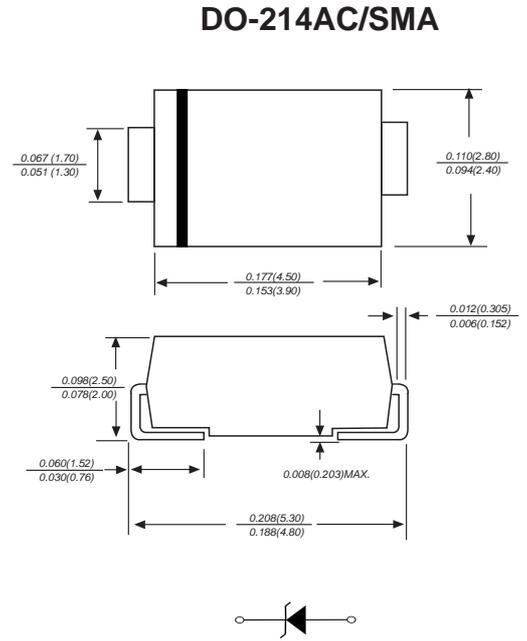


Features

- Complete voltage range 3.3 to 390 volts
- High peak reverse power dissipation
- High reliability
- Low leakage current
- Standard zener voltage tolerance is $\pm 5\%$.
- P/N suffix V means AEC-Q101 qualified, e.g: SMA4735AV

Mechanical Data

- Case** : Molded plastic body
- Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity** : Polarity symbol marking on body
- Mounting Position** : Any



Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Unit
DC Power Dissipation at $T_L = 75^\circ\text{C}$ (Note1)	P_D	1.0	W
Maximum Forward Voltage at $I_F = 200\text{ mA}$	V_F	1.2	V
Junction Temperature Range	T_J	- 55 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_s	- 55 to + 150	$^\circ\text{C}$

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Part Number	Device Marking Code	Nominal Zener Voltage @I _T			I _{ZT} (mA)	Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
		V _{Z AVE.} (V)	V _{Z MIN.} (V)	V _{Z MAX.} (V)		Z _{ZT MAX.} (Ω) @I _{ZT}	Z _{ZK MAX.} (Ω) @I _{ZK}	I _{ZK} (mA)	I _R (uA)@V _R	V _R (V)	
SMA4727A	727A	3.0	2.85	3.15	80.0	10.0	400.0	1.00	100.0	1.0	288.0
SMA4728A	728A	3.3	3.14	3.47	76.0	10.0	400.0	1.00	100.0	1.0	274.0
SMA4729A	729A	3.6	3.42	3.78	69.0	10.0	400.0	1.00	100.0	1.0	251.0
SMA4730A	730A	3.9	3.71	4.10	64.0	9.0	400.0	1.00	50.0	1.0	232.0
SMA4731A	731A	4.3	4.09	4.52	58.0	9.0	400.0	1.00	10.0	1.0	210.0
SMA4732A	732A	4.7	4.47	4.94	53.0	8.0	500.0	1.00	10.0	1.0	192.0
SMA4733A	733A	5.1	4.85	5.36	49.0	7.0	550.0	1.00	10.0	1.0	177.0
SMA4734A	734A	5.6	5.32	5.88	45.0	5.0	600.0	1.00	10.0	2.0	161.0
SMA4735A	735A	6.2	5.89	6.51	41.0	2.0	700.0	1.00	10.0	3.0	146.0
SMA4736A	736A	6.8	6.46	7.14	37.0	3.5	700.0	1.00	10.0	4.0	133.0
SMA4737A	737A	7.5	7.13	7.88	34.0	4.0	700.0	0.50	10.0	5.0	121.0
SMA4738A	738A	8.2	7.79	8.61	31.0	4.5	700.0	0.50	10.0	6.0	110.0
SMA4739A	739A	9.1	8.65	9.56	28.0	5.0	700.0	0.50	10.0	7.0	100.0
SMA4740A	740A	10.0	9.50	10.50	25.0	7.0	700.0	0.25	10.0	7.6	91.0
SMA4741A	741A	11.0	10.45	11.55	23.0	8.0	700.0	0.25	0.5	8.4	83.0
SMA4742A	742A	12.0	11.40	12.60	21.0	9.0	700.0	0.25	0.5	9.1	76.0
SMA4743A	743A	13.0	12.35	13.65	19.0	10.0	700.0	0.25	0.5	9.9	69.0
SMA4744A	744A	15.0	14.25	15.75	17.0	14.0	700.0	0.25	0.5	11.4	61.0
SMA4745A	745A	16.0	15.20	16.80	15.5	16.0	700.0	0.25	0.5	12.2	57.0
SMA4746A	746A	18.0	17.10	18.90	14.0	20.0	750.0	0.25	0.5	13.7	50.0
SMA4747A	747A	20.0	19.00	21.00	12.5	22.0	750.0	0.25	0.5	15.2	45.0
SMA4748A	748A	22.0	20.90	23.10	11.5	23.0	750.0	0.25	0.5	16.7	41.0
SMA4749A	749A	24.0	22.80	25.20	10.5	25.0	750.0	0.25	0.5	18.2	38.0
SMA4750A	750A	27.0	25.65	28.35	9.5	35.0	750.0	0.25	0.5	20.6	34.0
SMA4751A	751A	30.0	28.50	31.50	8.5	40.0	1000.0	0.25	0.5	22.8	30.0
SMA4752A	752A	33.0	31.35	34.65	7.5	45.0	1000.0	0.25	0.5	25.1	27.0
SMA4753A	753A	36.0	34.20	37.80	7.0	50.0	1000.0	0.25	0.5	27.4	25.0
SMA4754A	754A	39.0	37.05	40.95	6.5	60.0	1000.0	0.25	0.5	29.7	23.0
SMA4755A	755A	43.0	40.85	45.15	6.0	70.0	1500.0	0.25	0.5	32.7	22.0
SMA4756A	756A	47.0	44.65	49.35	5.5	80.0	1500.0	0.25	0.5	35.8	19.0
SMA4757A	757A	51.0	48.45	53.55	5.0	95.0	1500.0	0.25	0.5	38.8	18.0
SMA4758A	758A	56.0	53.20	58.80	4.5	110.0	2000.0	0.25	0.5	42.6	16.0
SMA4759A	759A	62.0	58.90	65.10	4.0	125.0	2000.0	0.25	0.5	47.1	14.0
SMA4760A	760A	68.0	64.60	71.40	3.7	150.0	2000.0	0.25	0.5	51.7	13.0
SMA4761A	761A	75.0	71.25	78.75	3.3	175.0	2000.0	0.25	0.5	56.0	12.0
SMA4762A	762A	82.0	77.90	86.10	3.0	200.0	3000.0	0.25	0.5	62.2	11.0
SMA4763A	763A	91.0	86.45	95.55	2.8	250.0	3000.0	0.25	0.5	69.2	10.0
SMA4764A	764A	100.0	95.00	105.00	2.5	350.0	3000.0	0.25	0.5	76.0	9.0
SZ1110A	711Z	110.0	104.50	115.50	2.3	450.0	4000.0	0.25	0.5	83.6	8.6
SZ1120A	712Z	120.0	114.00	126.00	2.0	550.0	4500.0	0.25	0.5	91.2	7.8
SZ1130A	713Z	130.0	123.50	136.50	1.9	700.0	5000.0	0.25	0.5	98.8	7.0
SZ1150A	715Z	150.0	142.50	157.50	1.7	1000.0	6000.0	0.25	0.5	114.0	6.4
SZ1160A	716Z	160.0	152.00	168.00	1.6	1100.0	6500.0	0.25	0.5	121.6	5.8
SZ1180A	718Z	180.0	171.00	189.00	1.4	1200.0	7000.0	0.25	0.5	136.8	5.2
SZ1200A	720Z	200.0	190.00	210.00	1.2	1900.0	9990.0	0.25	0.5	152.0	4.7
SZ1220A	722Z	220.0	209.00	231.00	1.0	1600.0	8000.0	0.25	0.5	167.2	4.0
SZ1240A	724Z	240.0	228.00	252.00	0.9	1800.0	8500.0	0.25	0.5	182.4	3.8
SZ1250A	725Z	250.0	237.50	262.50	0.9	2000.0	9000.0	0.25	0.5	190.0	3.6
SZ1270A	727Z	270.0	256.50	283.50	0.8	2100.0	9000.0	0.25	0.5	205.0	3.3
SZ1300A	730Z	300.0	285.00	315.00	0.8	2300.0	9500.0	0.25	0.5	228.0	3.0
SZ1330A	733Z	330.0	313.50	346.50	0.7	2500.0	9500.0	0.25	0.5	250.2	2.7
SZ1360A	736Z	360.0	342.00	378.00	0.7	2700.0	10000.0	0.25	0.5	275.0	2.5
SZ1390A	739Z	390.0	370.50	409.50	0.7	3000.0	10000.0	0.25	0.5	300.0	2.2

Notes : (1) The type number listed have a standard tolerance on the nominal zener voltage of ± 5%.
 (2) The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per JEDEC Method

Ratings And Characteristic Curves

