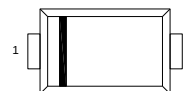


Surface Mounted Zener Diode

Features

- High peak reverse power dissipation
- High reliability and low leakage current
- Standard Zener voltage tolerance is $\pm 5\%$
- Pb / RoHS Free

Marking and Circuit



Mechanical Data

- Case: SMA Molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.060 gram (Approximately)

Circuit



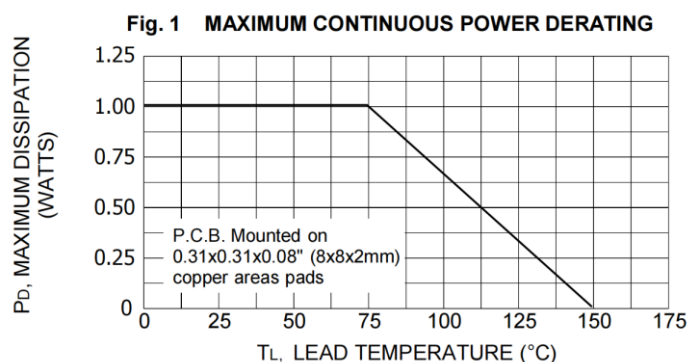
Specification Absolute Maximum Rating

Ratings at 25 °C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Unit
DC Power Dissipation at $T_L = 75\text{ }^{\circ}\text{C}$ (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 ~ 150	$^{\circ}\text{C}$
Storage Temperature Range	T_S	-55 ~ 150	$^{\circ}\text{C}$

Note:

(1) P.C.B. Mounted on 0.31x0.31x0.08" (8x8x2mm) copper areas pads.



Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified

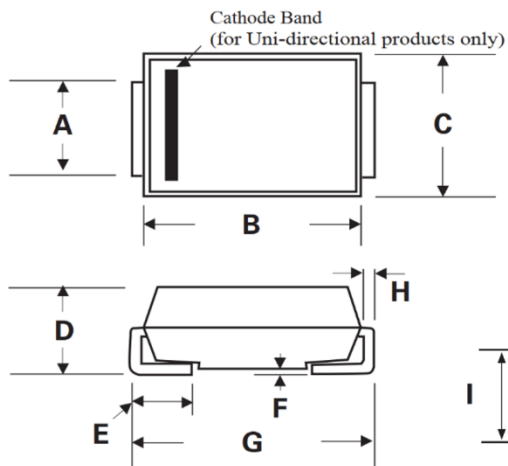
Type	Device Marking	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current	Maximum Surge Current
		V _Z @ I _{ZT}	I _{ZT}	ZZT @ I _{ZT}	ZZK @ I _{ZK}	I _{ZK}	I _R @ V _R		I _{ZM}	I _{RM} ⁽²⁾
		(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(mApk)
1SMA4728A	728A	3.3	76	10	400	1	100	1	276	1380
1SMA4729A	729A	3.6	69	10	400	1	100	1	252	1260
1SMA4730A	730A	3.9	64	9	400	1	50	1	234	1190
1SMA4731A	731A	4.3	58	9	400	1	10	1	217	1070
1SMA4732A	732A	4.7	53	8	500	1	10	1	193	970
1SMA4733A	733A	5.1	49	7	550	1	10	1	178	890
1SMA4734A	734A	5.6	45	5	600	1	10	2	162	810
1SMA4735A	735A	6.2	41	2	700	1	10	3	146	730
1SMA4736A	736A	6.8	37	3.5	700	1	10	4	133	660
1SMA4737A	737A	7.5	34	4	700	0.5	10	5	121	605
1SMA4738A	738A	8.2	31	4.5	700	0.5	10	6	110	550
1SMA4739A	739A	9.1	28	5	700	0.5	10	7	100	500
1SMA4740A	740A	10	25	7	700	0.25	10	7.6	91	454
1SMA4741A	741A	11	23	8	700	0.25	5	8.4	83	414
1SMA4742A	742A	12	21	9	700	0.25	5	9.1	76	380
1SMA4743A	743A	13	19	10	700	0.25	5	9.9	69	344
1SMA4744A	744A	15	17	14	700	0.25	5	11.4	61	305
1SMA4745A	745A	16	15.5	16	700	0.25	5	12.2	57	285
1SMA4746A	746A	18	14	20	750	0.25	5	13.7	50	250
1SMA4747A	747A	20	12.5	22	750	0.25	5	15.2	45	225
1SMA4748A	748A	22	11.5	23	750	0.25	5	16.7	41	205
1SMA4749A	749A	24	10.5	25	750	0.25	5	18.2	38	190
1SMA4750A	750A	27	9.5	35	750	0.25	5	20.6	34	170
1SMA4751A	751A	30	8.5	40	1000	0.25	5	22.8	30	150
1SMA4752A	752A	33	7.5	45	1000	0.25	5	25.1	27	135
1SMA4753A	753A	36	7	50	1000	0.25	5	27.4	25	125
1SMA4754A	754A	39	6.5	60	1000	0.25	5	29.7	23	115
1SMA4755A	755A	43	6	70	1500	0.25	5	32.7	22	110
1SMA4756A	756A	47	5.5	80	1500	0.25	5	35.8	19	95
1SMA4757A	757A	51	5	95	1500	0.25	5	38.8	18	90
1SMA4758A	758A	56	4.5	110	2000	0.25	5	42.6	16	80

1SMA4759A	759A	62	4	125	2000	0.25	5	47.1	14	70
1SMA4760A	760A	68	3.7	150	2000	0.25	5	51.7	13	65
1SMA4761A	761A	75	3.3	175	2000	0.25	5	56	12	60
1SMA4762A	762A	82	3	200	3000	0.25	5	62.2	11	55
1SMA4763A	763A	91	2.8	250	3000	0.25	5	69.2	10	50
1SMA4764A	764A	100	2.5	350	3000	0.25	5	76	9	45
1SMA4765A	765A	110	2.3	450	4000	0.25	5	83.6	8.6	40
1SMA4766A	766A	120	2	550	4500	0.25	5	91.2	7.8	37
1SMAZ130A	Z130A	130	1.9	700	5000	0.25	5	98.8	7	34
1SMAZ150A	Z150A	150	1.7	1000	6000	0.25	5	114	6.4	30
1SMAZ160A	Z160A	160	1.6	1100	6500	0.25	5	121.6	5.8	28
1SMAZ180A	Z180A	180	1.4	1200	7000	0.25	5	136.8	5.2	25
1SMAZ200A	Z200A	200	1.2	1900	9990	0.25	5	152	4.7	22
1SMAZ220A	Z220A	220	1	1600	8000	0.25	5	167.2	4	20
1SMAZ240A	Z240A	240	0.9	1800	8500	0.25	5	182.4	3.8	19
1SMAZ250A	Z250A	250	0.9	2000	9000	0.25	5	190	3.6	18
1SMAZ270A	Z270A	270	0.8	2100	9000	0.25	5	205	3.3	16
1SMAZ300A	Z300A	300	0.8	2300	9500	0.25	5	228	3	15

Notes:

- (1) The type number listed have a standard tolerance on the nominal Zener voltage of $\pm 10\%$. Suffix "A" indicates $\pm 5\%$ tolerance, suffix "C" indicates $\pm 2\%$ tolerance.
- (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

Dimension (SMA/DO-214AC)



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.049	0.065	1.25	1.65
B	0.157	0.177	3.99	4.5
C	0.1	0.11	2.54	2.79
D	0.078	0.09	1.98	2.29
E	0.03	0.06	0.78	1.52
F	-	0.008	-	0.203
G	0.194	0.208	4.93	5.28
H	0.006	0.012	0.152	0.305
I	0.07	-	1.8	-
J	0.082	-	2.1	-
K	-	0.09	-	2.3
L	0.082	-	2.1	-