

Surface Mount Silicon Zener Diodes

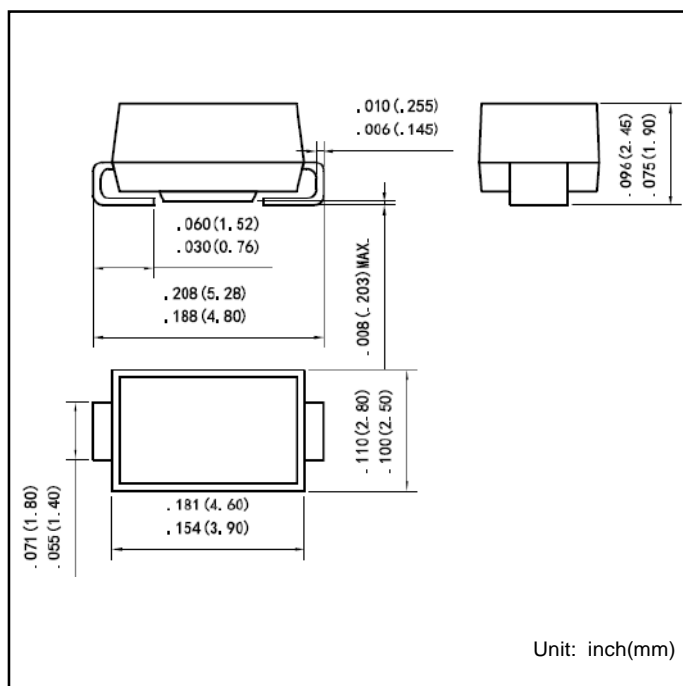
Features:

- Glass passivated chip
- Built-in strainrelief
- Low inductance
- High peak reverse power dissipation
- Low reverse leakage
- For use in stabilizing and clipping with high power rating
- RoHS compliant

Mechanical Data:

- Case: DO-214AC Molded plastic
- Lead: Solderable per MIL-STD-750, method 2026
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Mounting position: Any

DO-214AC(SMA)



Parameter	Symbols	Value	Unit
DC Power dissipation at $T_L = 75\text{ }^\circ\text{C}^{(1)}$	P_D	3.0	W
Maximum forward voltage at $I_F=200\text{mA}$	V_F	1.2	V
Junction temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$
Storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Note :

(1) T_L =Lead temperature at 3/8" (9.5mm)from body

Ratings and Characteristics Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

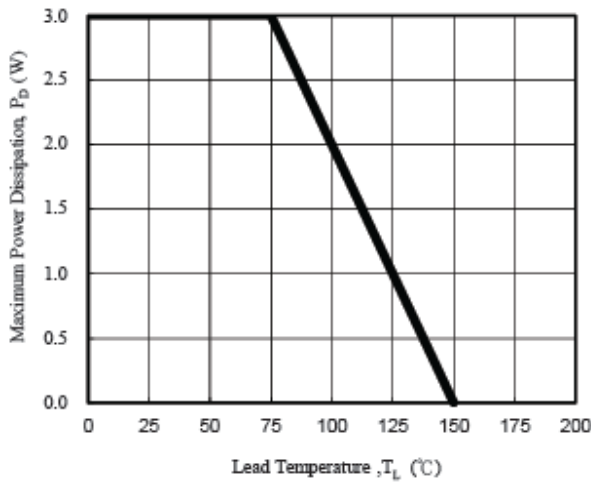


Fig. 1 - Power Temperature Derating Curve

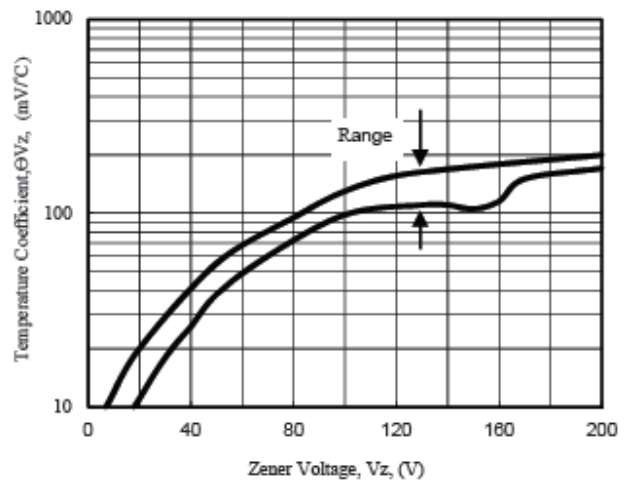


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

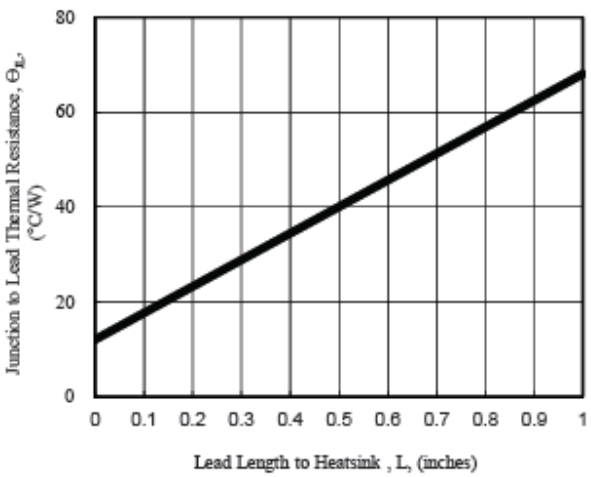


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

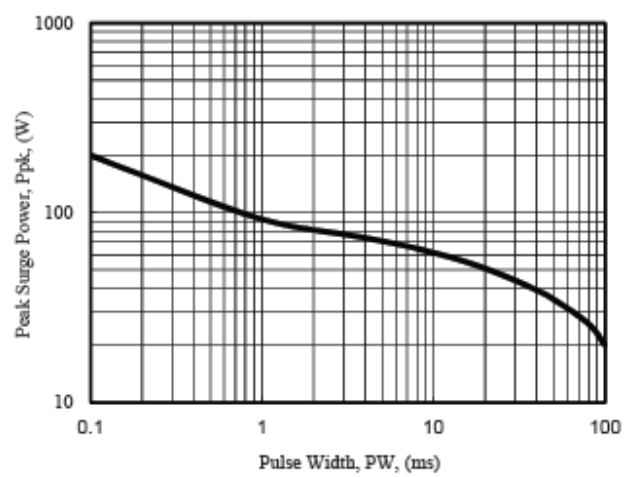


Fig. 4 - Maximum Surge Power

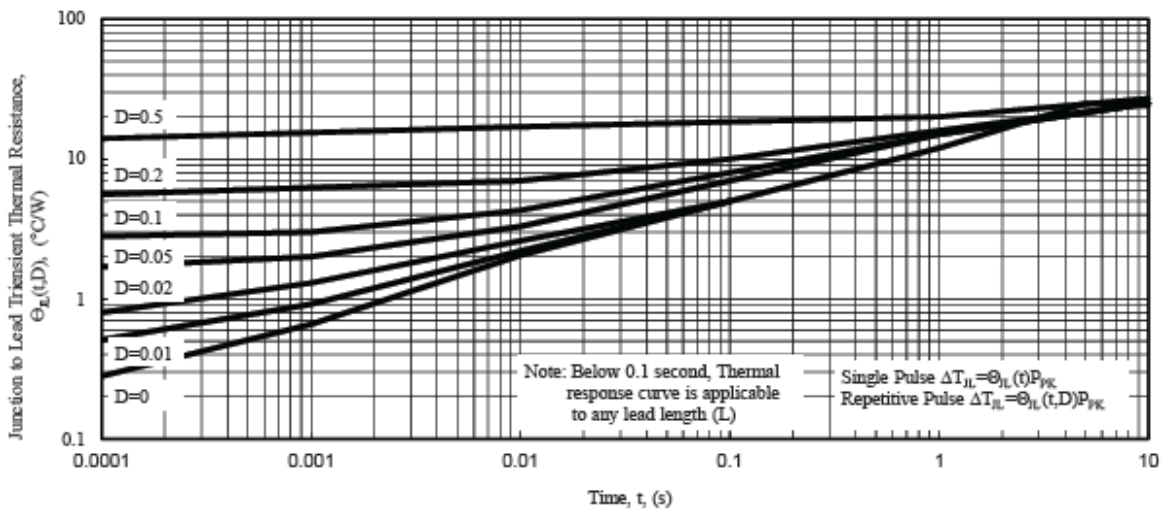


Fig. 5 - Typical Thermal Response L, Lead Length=3/8inch

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 (μA) @V _R	V _R (V)	
SMA3Z3.3A	3H0	3.3	3.14	3.47	227.3	10.0	500	1.00	100	1.0	817.0
SMA3Z3.6A	3H1	3.6	3.42	3.78	208.3	9.0	500	1.00	100	1.0	749.0
SMA3Z3.9A	3H2	3.9	3.71	4.10	192.0	4.5	400	1.00	100	1.0	691.0
SMA3Z4.3A	3H3	4.3	4.09	4.52	174.0	4.5	400	1.00	50	1.0	627.0
SMA3Z4.7A	3H4	4.7	4.47	4.94	160.0	4.0	500	1.00	50	1.0	573.0
SMA3Z5.1A	3H5	5.1	4.85	5.36	147.0	3.5	550	1.00	10.0	1.0	528.0
SMA3Z5.6A	3H6	5.6	5.32	5.88	134.0	2.5	600	1.00	10.0	2.0	481.0
SMA3Z6.2A	3A0	6.2	5.89	6.51	121.0	1.5	700	1.00	10.0	3.0	435.0
SMA3Z6.8A	3A1	6.8	6.46	7.14	110.0	2.0	700	1.00	10.0	4.0	393.0
SMA3Z7.5A	3A2	7.5	7.13	7.88	100.0	2.0	700	0.50	10.0	5.0	360.0
SMA3Z8.2A	3A3	8.2	7.79	8.61	91.0	2.3	700	0.50	10.0	6.0	330.0
SMA3Z9.1A	3A4	9.1	8.65	9.56	82.0	2.5	700	0.50	10.0	7.0	297.0
SMA3Z10A	3A5	10.0	9.50	10.50	75.0	3.5	700	0.25	10.0	7.6	270.0
SMA3Z11A	3A6	11.0	10.45	11.55	68.0	4.0	700	0.25	0.5	8.4	225.0
SMA3Z12A	3A7	12.0	11.40	12.60	63.0	4.5	700	0.25	0.5	9.1	246.0
SMA3Z13A	3A8	13.0	12.35	13.65	58.0	4.5	700	0.25	0.5	9.9	208.0
SMA3Z14A	3A9	14.0	13.30	14.70	53.0	5.0	700	0.25	0.5	10.6	193.0
SMA3Z15A	3B0	15.0	14.25	15.75	50.0	5.5	700	0.25	0.5	11.4	180.0
SMA3Z16A	3B1	16.0	15.20	16.80	47.0	5.5	700	0.25	0.5	12.2	169.0
SMA3Z17A	3B2	17.0	16.15	17.85	44.0	6.0	750	0.25	0.5	13.0	159.0
SMA3Z18A	3B3	18.0	17.10	18.90	42.0	6.0	750	0.25	0.5	13.7	150.0
SMA3Z19A	3B4	19.0	18.05	19.95	40.0	7.0	750	0.25	0.5	14.4	142.0
SMA3Z20A	3B5	20.0	19.00	21.00	37.0	7.0	750	0.25	0.5	15.2	135.0
SMA3Z22A	3B6	22.0	20.90	23.10	34.0	8.0	750	0.25	0.5	16.7	123.0
SMA3Z24A	3B7	24.0	22.80	25.20	31.0	9.0	750	0.25	0.5	18.2	112.0
SMA3Z27A	3B8	27.0	25.65	28.35	28.0	10.0	750	0.25	0.5	20.6	100.0
SMA3Z30A	3B9	30.0	28.50	31.50	25.0	16.0	1000	0.25	0.5	22.5	90.0
SMA3Z33A	3C0	33.0	31.35	34.65	23.0	20.0	1000	0.25	0.5	25.1	82.0
SMA3Z36A	3C1	36.0	34.20	37.80	21.0	22.0	1000	0.25	0.5	27.4	75.0
SMA3Z39A	3C2	39.0	37.05	40.95	19.0	28.0	1000	0.25	0.5	29.7	69.0
SMA3Z43A	3C3	43.0	40.85	45.15	17.0	33.0	1500	0.25	0.5	32.7	63.0
SMA3Z47A	3C4	47.0	44.65	49.35	16.0	38.0	1500	0.25	0.5	35.6	57.0
SMA3Z51A	3C5	51.0	48.45	53.55	15.0	45.0	1500	0.25	0.5	38.8	53.0
SMA3Z56A	3C6	56.0	53.20	58.80	13.0	50.0	2000	0.25	0.5	42.6	48.0
SMA3Z62A	3C7	62.0	58.90	65.10	12.0	55.0	2000	0.25	0.5	47.1	44.0
SMA3Z68A	3C8	68.0	64.60	71.40	11.0	70.0	2000	0.25	0.5	51.7	40.0
SMA3Z75A	3C9	75.0	71.25	78.75	10.0	85.0	2000	0.25	0.5	56.0	36.0
SMA3Z82A	3F0	82.0	77.90	86.10	9.1	95.0	3000	0.25	0.5	62.2	33.0
SMA3Z91A	3F1	91.0	86.45	95.55	8.2	115.0	3000	0.25	0.5	69.2	30.0
SMA3Z100A	3F2	100.0	95.00	105.00	7.5	160.0	3000	0.25	0.5	76.0	27.0
SMA3Z110A	3F3	110.0	104.50	115.50	6.8	225.0	4000	0.25	0.5	83.6	25.0
SMA3Z120A	3F4	120.0	114.00	126.00	6.3	300.0	4500	0.25	0.5	91.2	22.0
SMA3Z130A	3F5	130.0	123.50	136.50	5.8	375.0	5000	0.25	0.5	98.8	21.0
SMA3Z140A	3F6	140.0	133.00	147.00	5.3	475.0	5000	0.25	0.5	106.4	19.0
SMA3Z150A	3F7	150.0	142.50	157.50	5.0	550.0	6000	0.25	0.5	114.0	18.0
SMA3Z160A	3F8	160.0	152.00	168.00	4.7	625.0	6500	0.25	0.5	121.6	17.0
SMA3Z170A	3F9	170.0	161.50	178.50	4.4	650.0	7000	0.25	0.5	130.4	16.0
SMA3Z180A	3G1	180.0	171.00	189.00	4.2	700.0	7000	0.25	0.5	136.8	15.0
SMA3Z190A	3G2	190.0	180.50	199.50	4.0	800.0	8000	0.25	0.5	144.8	14.0
SMA3Z200A	3G3	200.0	190.00	210.00	3.7	875.0	8000	0.25	0.5	152.0	13.0
SMA3Z210A	3G4	210.0	199.50	220.50	3.5	950.0	8300	0.25	0.5	169.0	12.3
SMA3Z220A	3G5	220.0	209.00	231.00	3.3	1600.0	8500	0.25	0.5	178.0	11.6
SMA3Z230A	3G6	230.0	218.50	241.50	3.1	2000.0	9000	0.25	0.5	186.0	10.9
SMA3Z240A	3G7	240.0	228.00	252.00	2.9	2500.0	9000	0.25	0.5	195.0	10.2
SMA3Z250A	3G8	250.0	237.50	262.50	2.7	3000.0	9500	0.25	0.5	205.0	9.5
SMA3Z300A	3G9	300.0	285.00	315.00	2.5	3500.0	9500	0.25	0.5	255.0	9.0