

Features

- Glass Passivated Junction
- Excellent Clamping Capability
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)

Maximum Ratings

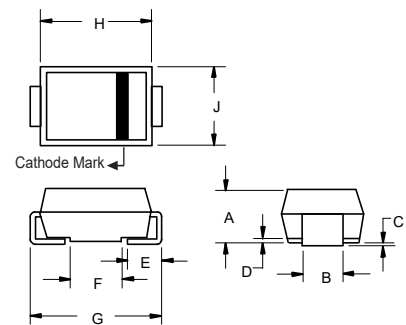
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

Parameter	Symbol	Rating	Conditions
Power Dissipation	P_D	3.0W	$T_L=75^\circ\text{C}$
Maximum Forward Voltage	V_F	1.5V	$I_F=200\text{mA}$

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

3.0 Watt Surface Mount Silicon Zener Diodes 6.2V to 270V

SMA (DO-214AC) LEAD FRAME



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.079	0.096	2.00	2.44	
B	0.050	0.064	1.27	1.63	
C	0.002	0.008	0.051	0.203	
D	---	0.020	---	0.51	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.189	0.220	4.80	5.59	
H	0.157	0.181	4.00	4.60	
J	0.090	0.115	2.25	2.92	

SUGGESTED SOLDER PAD LAYOUT



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number(2)	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Marking Code
	$V_Z @ I_{ZT}$	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{Zk} @ I_{Zk}$	I_{Zk}	I_R	V_R	
	V	mA	Ω	Ω	mA	μA	V	
SMA3EZ6.2D5	6.2	121.0	1.5	700	1.00	5.0	3.0	3A0
SMA3EZ6.8D5	6.8	110.0	2.0	700	1.00	5.0	4.0	3A1
SMA3EZ7.5D5	7.5	100.0	2.0	700	0.50	5.0	5.0	3A2
SMA3EZ8.2D5	8.2	91.0	2.3	700	0.50	5.0	6.0	3A3
SMA3EZ9.1D5	9.1	82.0	2.5	700	0.50	3.0	7.0	3A4
SMA3EZ10D5	10.0	75.0	3.5	700	0.25	3.0	7.6	3A5
SMA3EZ11D5	11.0	68.0	4.0	700	0.25	1.0	8.4	3A6
SMA3EZ12D5	12.0	63.0	4.5	700	0.25	1.0	9.1	3A7
SMA3EZ13D5	13.0	58.0	4.5	700	0.25	0.5	9.9	3A8
SMA3EZ14D5	14.0	53.0	5.0	700	0.25	0.5	10.6	3A9
SMA3EZ15D5	15.0	50.0	5.5	700	0.25	0.5	11.4	3B0
SMA3EZ16D5	16.0	47.0	5.5	700	0.25	0.5	12.2	3B1
SMA3EZ17D5	17.0	44.0	6.0	750	0.25	0.5	13.0	3B2
SMA3EZ18D5	18.0	42.0	6.0	750	0.25	0.5	13.7	3B3
SMA3EZ19D5	19.0	40.0	7.0	750	0.25	0.5	14.4	3B4
SMA3EZ20D5	20.0	37.0	7.0	750	0.25	0.5	15.2	3B5
SMA3EZ22D5	22.0	34.0	8.0	750	0.25	0.5	16.7	3B6
SMA3EZ24D5	24.0	31.0	9.0	750	0.25	0.5	18.2	3B7
SMA3EZ27D5	27.0	28.0	10.0	750	0.25	0.5	20.6	3B8
SMA3EZ28D5	28.0	27.0	12.0	750	0.25	0.5	21.0	3B9
SMA3EZ30D5	30.0	25.0	16.0	1000	0.25	0.5	22.5	3C0
SMA3EZ33D5	33.0	23.0	20.0	1000	0.25	0.5	25.1	3C1
SMA3EZ36D5	36.0	21.0	22.0	1000	0.25	0.5	27.4	3C2
SMA3EZ39D5	39.0	19.0	28.0	1000	0.25	0.5	29.7	3C3
SMA3EZ43D5	43.0	17.0	33.0	1500	0.25	0.5	32.7	3C4
SMA3EZ47D5	47.0	16.0	38.0	1500	0.25	0.5	35.6	3C5
SMA3EZ51D5	51.0	15.0	45.0	1500	0.25	0.5	38.8	3C6
SMA3EZ56D5	56.0	13.0	50.0	2000	0.25	0.5	42.6	3C7
SMA3EZ62D5	62.0	12.0	55.0	2000	0.25	0.5	47.1	3C8
SMA3EZ68D5	68.0	11.0	70.0	2000	0.25	0.5	51.7	3C9
SMA3EZ75D5	75.0	10.0	85.0	2000	0.25	0.5	56.0	3F0
SMA3EZ82D5	82.0	9.1	95.0	3000	0.25	0.5	62.2	3F1
SMA3EZ91D5	91.0	8.2	115.0	3000	0.25	0.5	69.2	3F2
SMA3EZ100D5	100.0	7.5	160.0	3000	0.25	0.5	76.0	3F3
SMA3EZ110D5	110.0	6.8	225.0	4000	0.25	0.5	83.6	3F4
SMA3EZ120D5	120.0	6.3	300.0	4500	0.25	0.5	91.2	3F5
SMA3EZ130D5	130.0	5.8	375.0	5000	0.25	0.5	98.8	3F6
SMA3EZ140D5	140.0	5.3	475.0	5000	0.25	0.5	106.4	3F7
SMA3EZ150D5	150.0	5.0	550.0	6000	0.25	0.5	114.0	3F8
SMA3EZ160D5	160.0	4.7	625.0	6500	0.25	0.5	121.6	3F9
SMA3EZ170D5	170.0	4.4	650.0	7000	0.25	0.5	130.4	3G1
SMA3EZ180D5	180.0	4.2	700.0	7000	0.25	0.5	136.8	3G2
SMA3EZ190D5	190.0	4.0	800.0	8000	0.25	0.5	144.8	3G3
SMA3EZ200D5	200.0	3.7	875.0	8000	0.25	0.5	152.0	3G4
SMA3EZ220D5	220.0	2.0	750.0	8000	0.25	1.0	160.0	3G5
SMA3EZ240D5	240.0	2.0	850.0	8500	0.25	1.0	180.0	3G6
SMA3EZ270D5	270.0	2.0	1000.0	9000	0.25	1.0	200.0	3G7

Note: 2. The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$

Curve Characteristics

Fig. 1 - Power Derating Curve

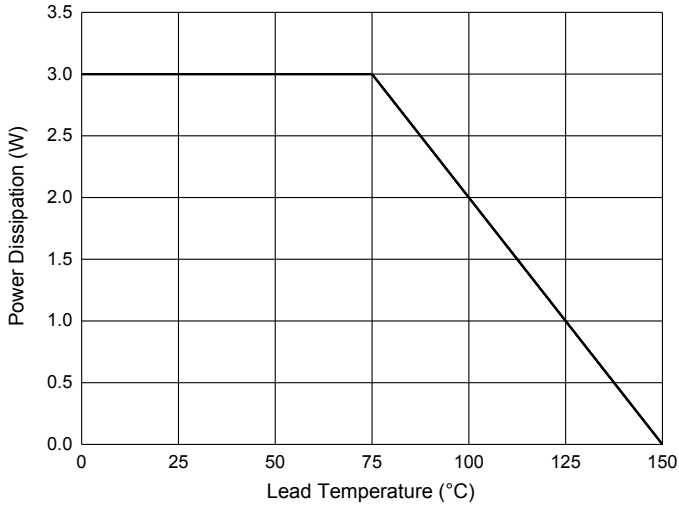


Fig. 2 - Typical Zener Breakdown Characteristics

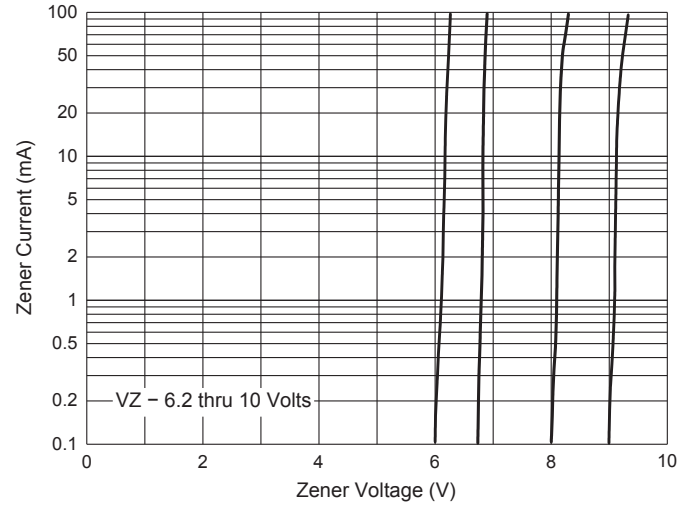


Fig. 3 - Typical Zener Breakdown Characteristics

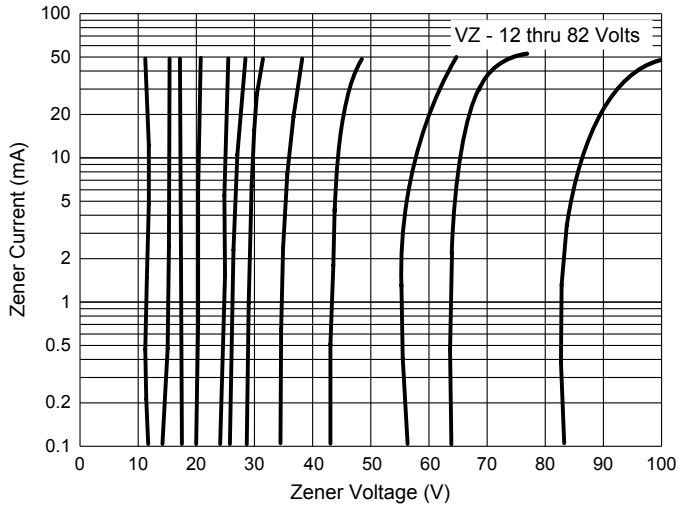
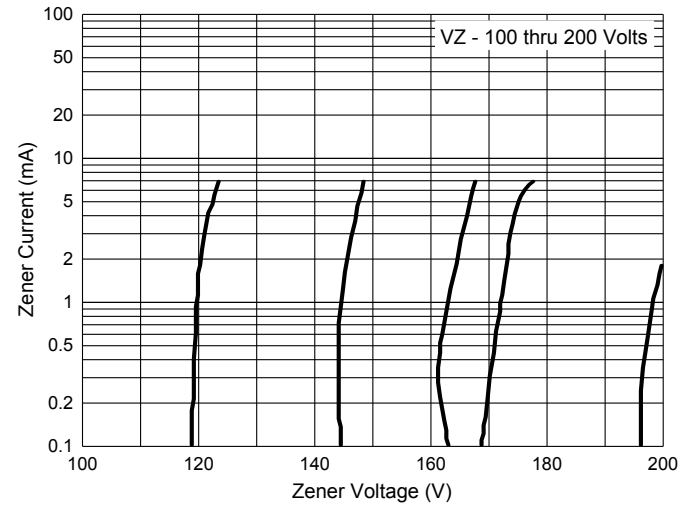


Fig. 4 - Typical Zener Breakdown Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:7.5Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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