



Micro Commercial Components



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SMA3EZ6.2D5 THRU SMA3EZ270D5

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Glass Passivated Junction
- Excellent Clamping Capability
- Built-in Strain Relief
- Low Inductance
- Halogen free available upon request by adding suffix "-HF"

Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- TERMINALS : Solder plated, solderable per MIL-STD-750, method 2026
- POLARITY : Color band denotes positive end (cathode)

Maximum Ratings @ 25°C Unless Otherwise Specified

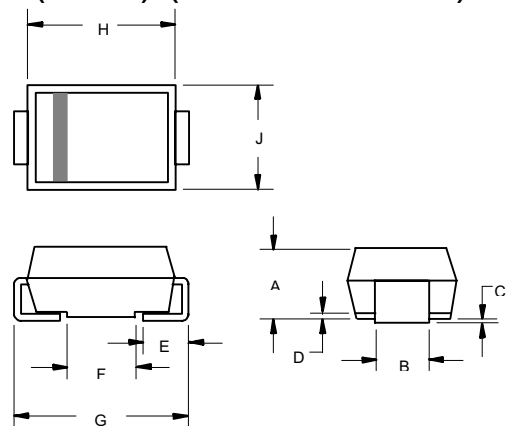
DC Power Dissipation at $T_L=75^\circ\text{C}$	P_D	3	Watts
Maximum Forward Voltage at $I_F=200\text{mA}$	V_F	1.5	Volts
Operating And Storage Temperature Range	T_J, T_{STG}	-55°C to $+150^\circ\text{C}$	

NOTES:

1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7a.

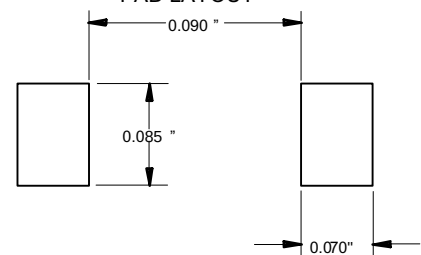
3 W Glass Passivated Junction Silicon Zener Diode 6.2-270 Volts

DO-214AC (SMA) (LEAD FRAME)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.079	.096	2.00	2.44	
B	.050	.064	1.27	1.63	
C	.002	.008	0.05	0.20	
D	---	.020	---	0.51	
E	.030	.060	0.76	1.52	
F	.065	.091	1.65	2.32	
G	.189	.220	4.80	5.59	
H	.157	.181	4.00	4.60	
J	.090	.115	2.25	2.92	

SUGGESTED SOLDER PAD LAYOUT



Electrical Characteristics(T_A=25°C unless otherwise noted)

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

Notes :

(1) The type number listed have a standard tolerance on the nominal zener voltage of ± 5 %

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

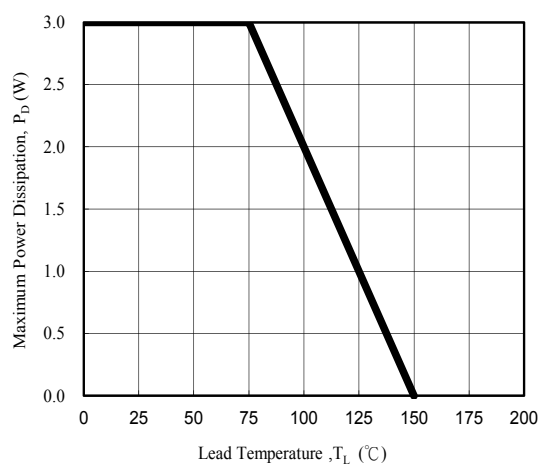


Fig. 1 - Power Temperature Derating Curve

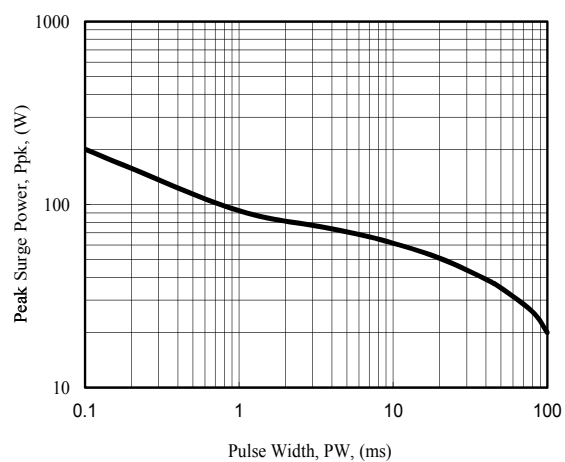


Fig. 2 - Maximum Surge Power

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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