



Micro Commercial Components



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SMA1EZ110D5
THRU
SMA1EZ330D5

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

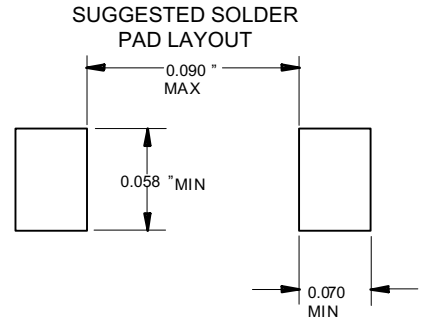
Table with 4 columns: Parameter, Symbol, Value, Units. Rows include DC Power Dissipation (PD, 1.0 Watts), Maximum forward voltage (VF, 1.2 Volts), Maximum thermal resistance junction to ambient air (RthJA, 170 K/W), and Operating And Storage Temperature Range (TJ, TSTG, -55°C to +175°C).

- NOTES: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.
2. TL=Lead temperature at 3/8"(9.5mm) from body
3. Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case

1 W Glass Passivated Junction Silicon Zener Diode 110-330 Volts

DO-214AC (SMA) (LEAD FRAME)
Technical drawing showing top, side, and perspective views with dimensions A-J. Includes a DIMENSIONS table and a SUGGESTED SOLDER PAD LAYOUT diagram.

DIMENSIONS table with columns for DIM, INCHES (MIN, MAX), MM (MIN, MAX), and NOTE. Rows A through J provide specific measurements.



SMA1EZ110D5 THRU SMA1EZ330D5

ELECTRICAL CHARACTERISTICS($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Type No. (Note 1.)	Nominal Zener Voltage V_Z @ I_{ZT} Volts (Note 2.)	Test Current I_{ZT} mA	Maximum Zener Impedance (Note 3)			Leakage Current		Maximum Zener Current I_{ZM} mA	Surge Current @ $T_A=25$ I_{ZSM} -A (Note 4.)	Device Marking
			Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R	V_R			
			Ohms	Ohms	mA	$\mu\text{A Max}$	Volts			
SMA1EZ110D5	110	2.3	450	4000	0.25	0.1	83.6	8.6	40	11Z
SMA1EZ120D5	120	2.0	550	4500	0.25	0.1	91.2	7.8	37	12Z
SMA1EZ130D5	130	1.9	700	5000	0.25	0.1	98.8	7.0	34	13Z
SMA1EZ150D5	150	1.7	1000	6000	0.25	0.1	114.0	6.4	30	15Z
SMA1EZ160D5	160	1.6	1100	6500	0.25	0.1	121.6	5.8	28	16Z
SMA1EZ180D5	180	1.4	1200	7000	0.25	0.1	136.8	5.2	25	18Z
SMA1EZ200D5	200	1.2	1900	9990	0.25	0.1	152.0	4.7	22	20Z
SMA1EZ220D5	220	1.0	1600	8000	0.25	0.1	167.2	4.0	20	22Z
SMA1EZ240D5	240	0.9	1800	8500	0.25	0.1	182.4	3.8	19	24Z
SMA1EZ250D5	250	0.9	2000	9000	0.25	0.1	190.0	3.6	18	25Z
SMA1EZ270D5	270	0.8	2100	9000	0.25	0.1	205.0	3.3	16	27Z
SMA1EZ300D5	300	0.8	2300	9500	0.25	0.1	228.0	3.0	15	30Z
SMA1EZ330D5	330	0.7	2500	9500	0.25	0.1	250.2	2.7	13	33Z

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

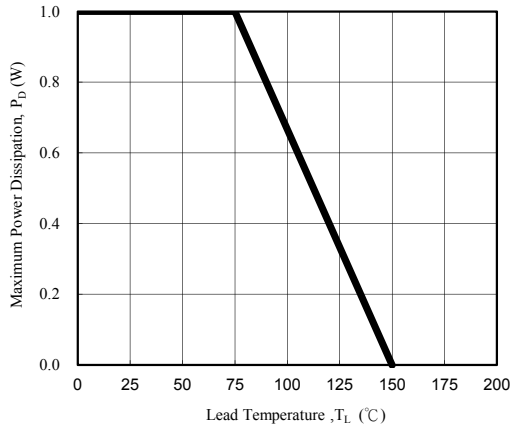


Fig. 1 - Power Temperature Derating Curve

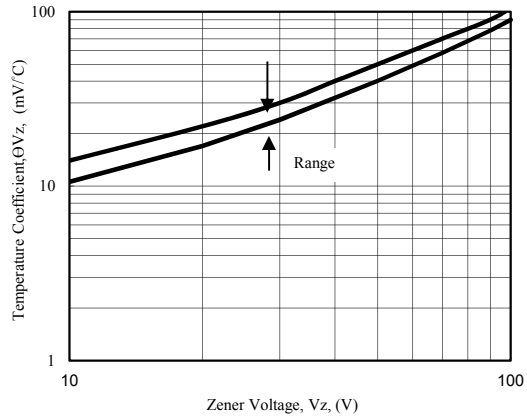


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

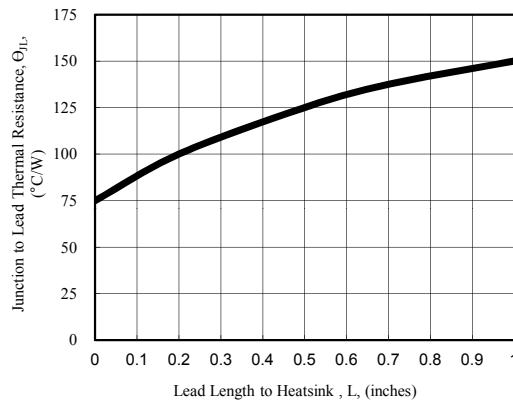


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

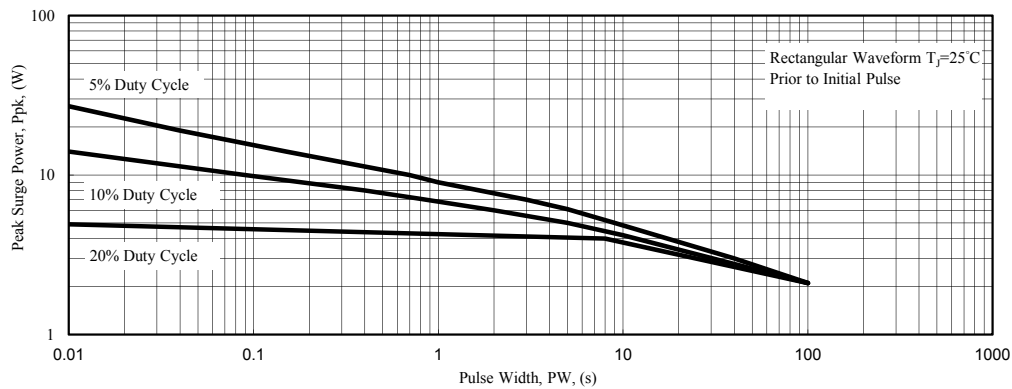


Fig. 4 - Maximum Surge Power



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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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