Micro Commercial Components

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3SMBJ5913B THRU 3SMBJ5917B

3.0 Watt Surface Mount Silicon Zener Diodes

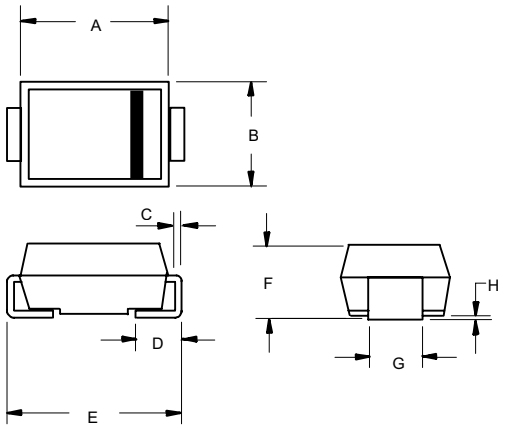
Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- 3.3 thru 4.7 Volt Voltage Range
- Low Inductance, Low Profile Mounting
- Glasss Passivated Junction
- Available On Tape and Reel
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Mechanical Data

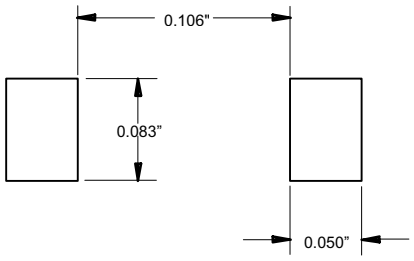
- Terminals solderable per MIL-STD-750, Method 2026
- Polarity is indicated by cathode band.
- Packaging: Standard 12mm Tape (see EIA 481)
- Maximum temperature for soldering: 260°C for 10 seconds.

DO-214AA
(SMB) (LEAD FRAME)



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.160	.185	4.06	4.70	
B	.130	.155	3.30	3.94	
C	.006	.012	0.15	0.31	
D	.030	.060	0.76	1.52	
E	.200	.220	5.08	5.59	
F	.079	.096	2.00	2.44	
G	.075	.087	1.91	2.21	
H	.002	.008	0.05	0.203	

SUGGESTED SOLDER PAD LAYOUT



Maximum Ratings @ 25°C Unless Otherwise Specified

Maximum Forward Voltage	V_F	1.5V	(Note: 2)
Steady State Power Dissipation	P_d	3.0W	(Note: 3)
Operation and Storage Temperature	T_J, T_{STG}	-65°C to +150 °C	
Thermal Resistance Junction to Ambient	R_{thJA}	42°C /W	

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

2. Forward Current @ 200mA.

3. Mounted on 5.0mm^2 (1oz thick) land areas.
Lead temperature at T_L=75°C

ELECTRICAL CHARACTERISTICS(TL=30 centigrade unless otherwise noted) (VF=1.5Volts Max @IF=200mAdc for all types.

MCC PART NUMBER	ZENER VOLTAGE VZ (*)	TEST CURRENT IZT	MAXIMUM DYNAMIC IMPEDANCE ZZT @IZT	KNEE CURRENT IZK	KNEE IMPEDANCE ZZK	MAXIMUM REVERSE CURRENT IR	REVERSE VOLTAGE VR	DEVICE MARKING
	VOLTS	mA	OHMS	mA	OHMS	µA	VOLTS	
3SMBJ5913B	3.3	113.6	10	1	500	100	1	H13B
3SMBJ5914B	3.6	104.2	9	1	500	75	1	H14B
3SMBJ5915B	3.9	96.1	7.5	1	500	25	1	H15B
3SMBJ5916B	4.3	87.2	6	1	500	5	1	H16B
3SMBJ5917B	4.7	79.8	5	1	500	5	1.5	H17B

* TOLERANCE AND VOLTAGE DESIGNATION Tolerance designation - The type numbers listed indicate a tolerance of +/-5%

RATING AND CHARACTERISTICS CURVES

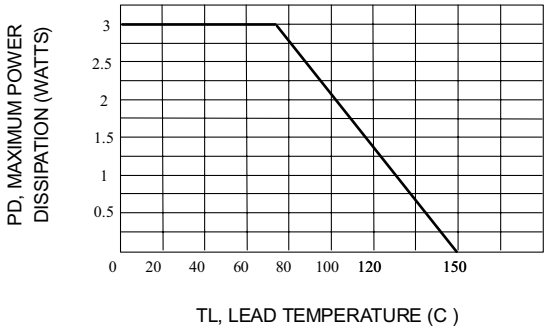


Fig. 1-STEADY STATE POWER DERATING

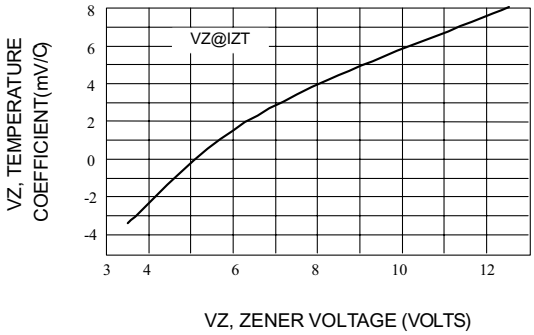


Fig. 2-ZENER VOLTAGE-3.3 TO 4.7 VOLTS

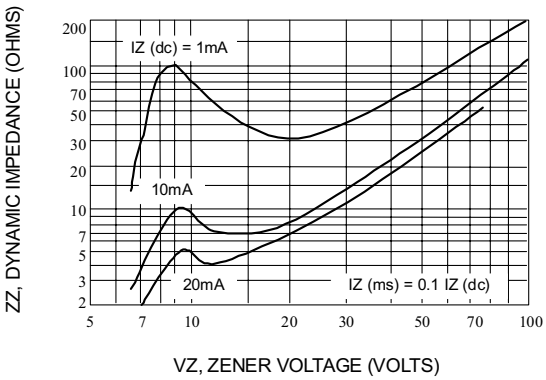


Fig. 3-EFFECT OF ZENER VOLTAGE

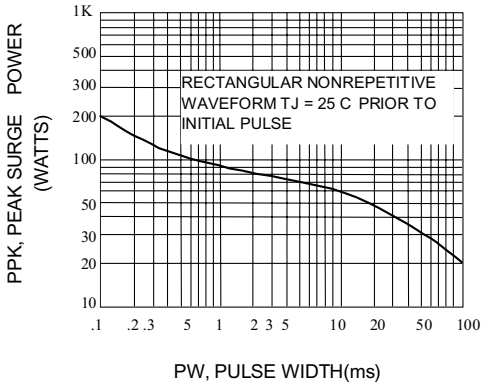


Fig. 4-PULSE RATING CURVE

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Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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