

# SMBJ5913B THRU SMBJ5917B

## 1.5 Watt Surface Mount Silicon Zener Diodes

### DO-214AA (SMB) (LEAD FRAME)

### Features

- Halogen free available upon request by adding suffix "-HF"
- Surface Mount Application
- 3.3 thru 200 Volt Voltage Range
- Low Inductance,Low Profile Mounting
- Glass Passivated Junction
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

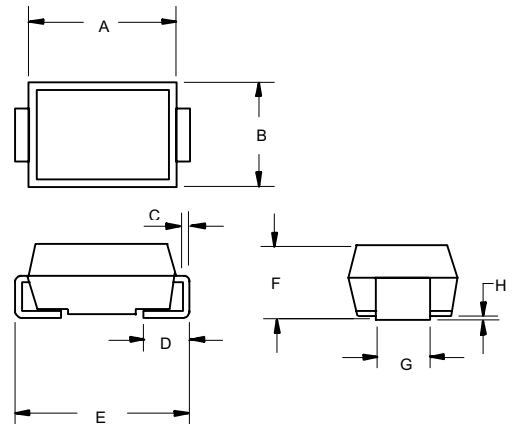
### Mechanical Data

- CASE: JEDEC DO-214AA molded Surface Mountable
- 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.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings @ 25°C Unless Otherwise Specified

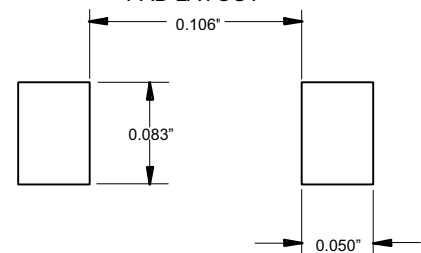
Output Current	I <sub>F</sub>	200mA	
Maximum Forward Voltage	V <sub>F</sub>	1.5V	(Note: 2)
Steady State Power Dissipation	P <sub>(AV)</sub>	1.5W	(Note: 3)
Operation And Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	-55°C to +150 °C	

- NOTES:
1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.
  2. Forward Current @ 200mA.
  3. Mounted on 5.0mm<sup>2</sup> (1oz thick) land areas.  
 Lead temperature at T<sub>L</sub>=75°C



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
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



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

MCC PART NUMBER	ZENER VOLTAGE $V_z$ (*)	TEST CURRENT $I_{ZT}$	MAXIMUM DYNAMIC IMPEDANCE $Z_{ZT} @ I_{ZT}$	KNEE CURRENT $I_{ZK}$	KNEE IMPEDANCE $Z_{ZK}$	MAXIMUM REVERSE CURRENT $I_R$	REVERSE VOLTAGE $V_R$	DEVICE MARKING
	VOLTS	mA	OHMS	mA	OHMS	$\mu$ A	VOLTS	
SMBJ5913B	3.3	113.6	10.0	1.0	500	100	1.0	913B
SMBJ5914B	3.6	104.2	9.0	1.0	500	75	1.0	914B
SMBJ5915B	3.9	96.1	7.5	1.0	500	25	1.0	915B
SMBJ5916B	4.3	87.2	6.0	1.0	500	5.0	1.0	916B
SMBJ5917B	4.7	79.8	5.0	1.0	500	5.0	1.5	917B

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

RATING AND CHARACTERISTICS CURVES

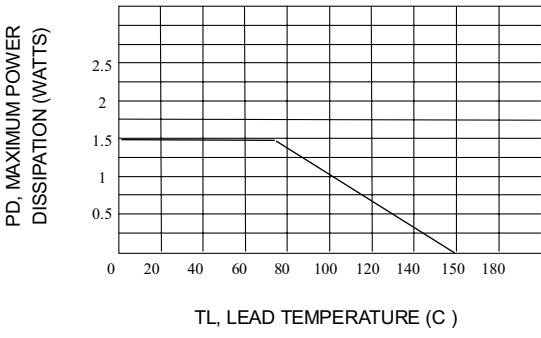
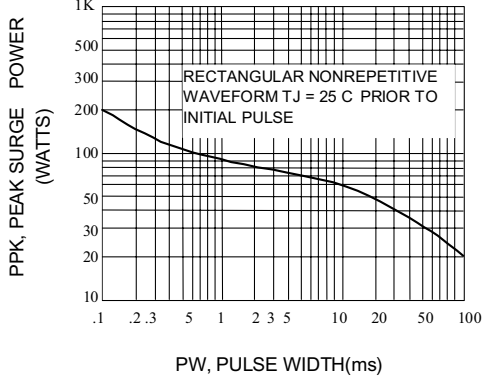
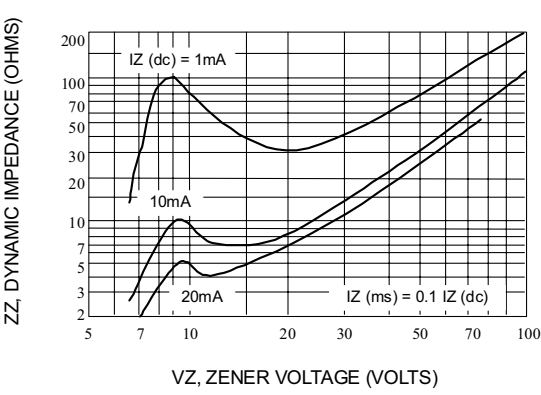


Fig. 5-STEADY STATE POWER DERATING



**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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