Micro Commercial Components

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3SMBJ5925BHE3 THRU 3SMBJ5956BHE3

3.0 Watt Surface Mount Silicon Zener Diodes

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- 10 thru 200 Volt Voltage Range
- Low Inductance, Low Profile Mounting
- Glasss Passivated Junction
- Available On Tape and Reel
- Halogen free
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- AEC-Q101 Qualified

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.

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}	-55°C to +150 °C	
Thermal Resistance Junction to Ambient	R_{thJA}	42°C /W	

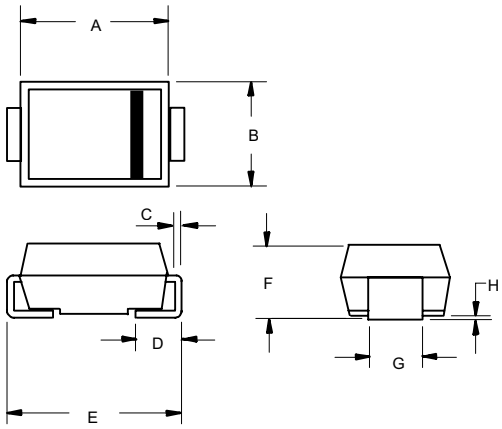
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

2. Forward Current @ 200mA.

3. Mounted on 5.0mm^2 (1oz thick) land areas.

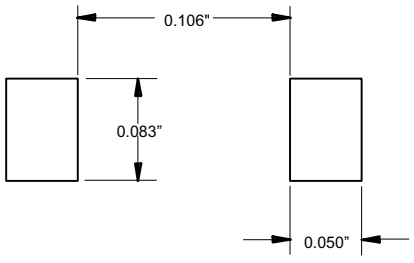
Lead temperature at T_L=75°C

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



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	
3SMBJ5925BHE3	10	37.5	4.5	0.25	500	5	8	H25B
3SMBJ5926BHE3	11	34.1	5.5	0.25	550	1	8.4	H26B
3SMBJ5927BHE3	12	31.2	6.5	0.25	550	1	9.1	H27B
3SMBJ5928BHE3	13	28.8	7	0.25	550	1	9.9	H28B
3SMBJ5929BHE3	15	25	9	0.25	600	1	11.4	H29B
3SMBJ5930BHE3	16	23.4	10	0.25	600	1	12.2	H30B
3SMBJ5931BHE3	18	20.8	12	0.25	650	1	13.7	H31B
3SMBJ5932BHE3	20	18.7	14	0.25	650	1	15.2	H32B
3SMBJ5933BHE3	22	17	17.5	0.25	650	1	16.7	H33B
3SMBJ5934BHE3	24	15.6	19	0.25	700	1	18.2	H34B
3SMBJ5935BHE3	27	13.9	23	0.25	700	1	20.6	H35B
3SMBJ5936BHE3	30	12.5	28	0.25	750	1	22.8	H36B
3SMBJ5937BHE3	33	11.4	33	0.25	800	1	25.1	H37B
3SMBJ5938BHE3	36	10.4	38	0.25	850	1	27.4	H38B
3SMBJ5939BHE3	39	9.6	45	0.25	900	1	29.7	H39B
3SMBJ5940BHE3	43	8.7	53	0.25	950	1	32.7	H40B
3SMBJ5941BHE3	47	8	67	0.25	1000	1	35.8	H41B
3SMBJ5942BHE3	51	7.3	70	0.25	1100	1	38.8	H42B
3SMBJ5943BHE3	56	6.7	86	0.25	1300	1	42.6	H43B
3SMBJ5944BHE3	62	6	100	0.25	1500	1	47.1	H44B
3SMBJ5945BHE3	68	5.5	120	0.25	1700	1	51.7	H45B
3SMBJ5946BHE3	75	5	140	0.25	2000	1	56	H46B
3SMBJ5947BHE3	82	4.6	160	0.25	2500	1	62.2	H47B
3SMBJ5948BHE3	91	4.1	200	0.25	3000	1	69.2	H48B
3SMBJ5949BHE3	100	3.7	250	0.25	3100	1	76	H49B
3SMBJ5950BHE3	110	3.4	300	0.25	4000	1	83.6	H50B
3SMBJ5951BHE3	120	3.1	380	0.25	4500	1	91.2	H51B
3SMBJ5952BHE3	130	2.9	450	0.25	5000	1	98.8	H52B
3SMBJ5953BHE3	150	2.5	600	0.25	6000	1	114	H53B
3SMBJ5954BHE3	160	2.3	700	0.25	6500	1	121.6	H54B
3SMBJ5955BHE3	180	2.1	900	0.25	7000	1	136.8	H55B
3SMBJ5956BHE3	200	1.9	1200	0.25	8000	1	152	H56B

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

RATING AND CHARACTERISTICS CURVES

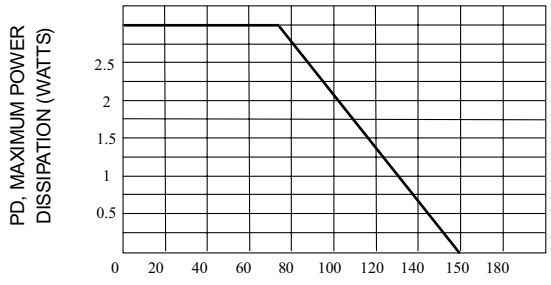


Fig. 1-STEADY STATE POWER DERATING

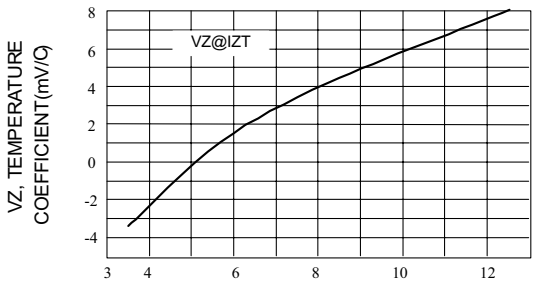


Fig. 2-ZENER VOLTAGE-TO 12 VOLTS

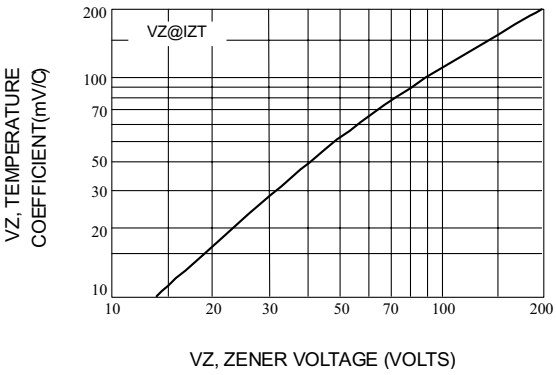


Fig. 3-ZENER VOLTAGE-10 TO 200 VOLTS

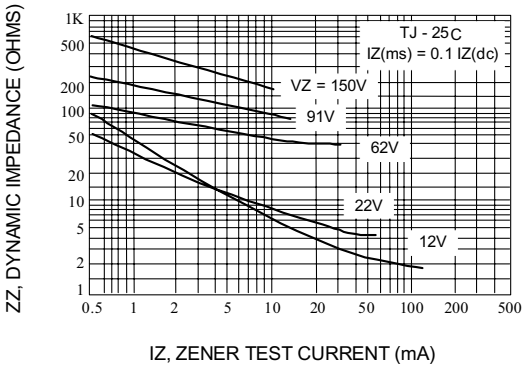
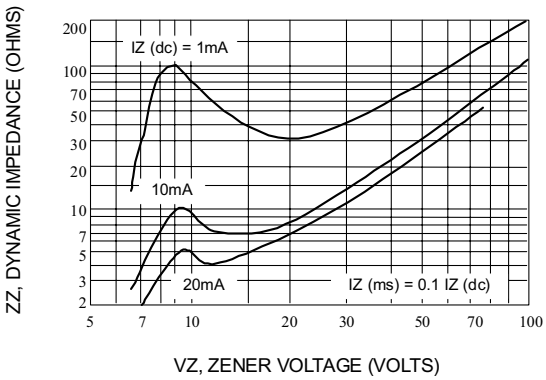
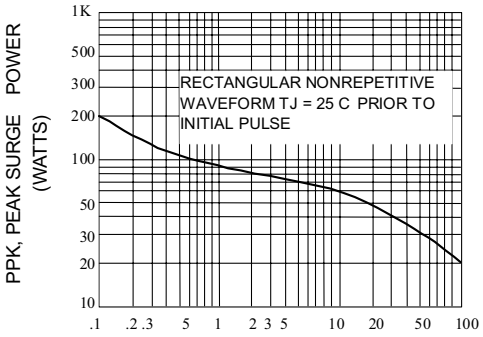


Fig. 4-EFFECT OF ZENER CURRENT





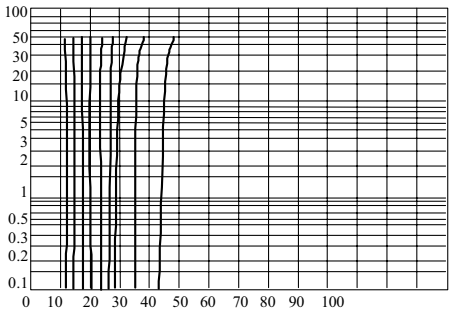


Fig. 7-VZ = 12 THRU 40 VOLTS

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Ordering Information

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

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