Micro Commercial Components

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3SMAJ5925BHE3 THRU 3SMAJ5956BHE3

3.0 Watt Surface Mount Silicon Zener Diodes

Features

- AEC-Q101 Qualified
- Low Inductance, Low Profile Mounting
- Glasss Passivated Junction
- High specified maximum current(IZM)when adequately heat sinking
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Halogen free
- Surface Mount Application

Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- 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 Lead	R_{thJL}	25℃/W	
Thermal Resistance Junction to Ambient	R_{thJA}	135℃/W	

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

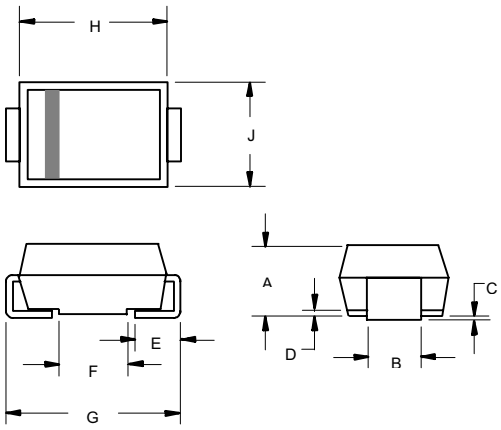
2. Forward Current @ 200mA.

3. Mounted on 5.0mm2 (1oz thick) land areas.

Lead temperature at T_L=75°C

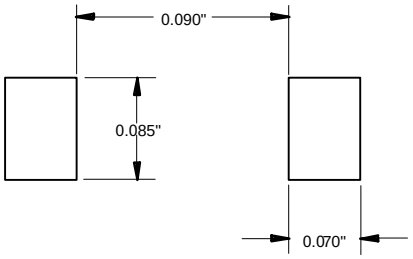
Lead temperature at T_A=15°C

DO-214AC
(SMA) (LEAD FRAME)



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.079	.096	2.00	2.44	
B	.050	.064	1.27	1.63	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.030	.060	.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_L=30C unless otherwise noted) (V_F=1.5Volts Max @ I_F=200mAdc for all types.)

MCC PART NUMBER	ZENER VOLTAGE V_Z (1)	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	Maximum DC Zener Current I_{ZM}	DEVICE MARKING
	VOLTS	mA	OHMS	mA	OHMS	µA	VOLTS	mA	
3SMAJ5925BHE3	10	37.5	4.5	0.25	500	5	8	300	H25B
3SMAJ5926BHE3	11	34.1	5.5	0.25	550	1	8.4	272	H26B
3SMAJ5927BHE3	12	31.2	6.5	0.25	550	1	9.1	250	H27B
3SMAJ5928BHE3	13	28.8	7	0.25	550	1	9.9	230	H28B
3SMAJ5929BHE3	15	25	9	0.25	600	1	11.4	200	H29B
3SMAJ5930BHE3	16	23.4	10	0.25	600	1	12.2	186	H30B
3SMAJ5931BHE3	18	20.8	12	0.25	650	1	13.7	166	H31B
3SMAJ5932BHE3	20	18.7	14	0.25	650	1	15.2	150	H32B
3SMAJ5933BHE3	22	17	17.5	0.25	650	1	16.7	136	H33B
3SMAJ5934BHE3	24	15.6	19	0.25	700	1	18.2	124	H34B
3SMAJ5935BHE3	27	13.9	23	0.25	700	1	20.6	110	H35B
3SMAJ5936BHE3	30	12.5	28	0.25	750	1	22.8	100	H36B
3SMAJ5937BHE3	33	11.4	33	0.25	800	1	25.1	90	H37B
3SMAJ5938BHE3	36	10.4	38	0.25	850	1	27.4	82	H38B
3SMAJ5939BHE3	39	9.6	45	0.25	900	1	29.7	76	H39B
3SMAJ5940BHE3	43	8.7	53	0.25	950	1	32.7	68	H40B
3SMAJ5941BHE3	47	8	67	0.25	1000	1	35.8	62	H41B
3SMAJ5942BHE3	51	7.3	70	0.25	1100	1	38.8	58	H42B
3SMAJ5943BHE3	56	6.7	86	0.25	1300	1	42.6	52	H43B
3SMAJ5944BHE3	62	6	100	0.25	1500	1	47.1	48	H44B
3SMAJ5945BHE3	68	5.5	120	0.25	1700	1	51.7	44	H45B
3SMAJ5946BHE3	75	5	140	0.25	2000	1	56	40	H46B
3SMAJ5947BHE3	82	4.6	160	0.25	2500	1	62.2	36	H47B
3SMAJ5948BHE3	91	4.1	200	0.25	3000	1	69.2	32	H48B
3SMAJ5949BHE3	100	3.7	250	0.25	3100	1	76	30	H49B
3SMAJ5950BHE3	110	3.4	300	0.25	4000	1	83.6	26	H50B
3SMAJ5951BHE3	120	3.1	380	0.25	4500	1	91.2	24	H51B
3SMAJ5952BHE3	130	2.9	450	0.25	5000	1	98.8	22	H52B
3SMAJ5953BHE3	150	2.5	600	0.25	6000	1	114	20	H53B
3SMAJ5954BHE3	160	2.3	700	0.25	6500	1	121.6	18	H54B
3SMAJ5955BHE3	180	2.1	900	0.25	7000	1	136.8	16	H55B
3SMAJ5956BHE3	200	1.9	1200	0.25	8000	1	152	14	H56B

Note 1: TOLERANCE AND VOLTAGE DESIGNATION - The type numbers listed indicate a tolerance of +/- 5%.

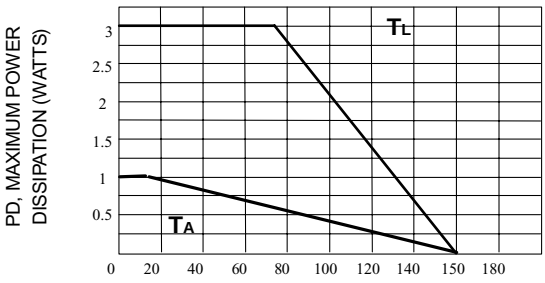


Fig. 1-STEADY STATE POWER DERATING

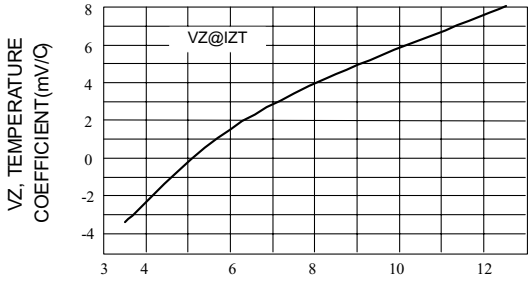


Fig. 2-ZENER VOLTAGE- 3 TO 12 VOLTS

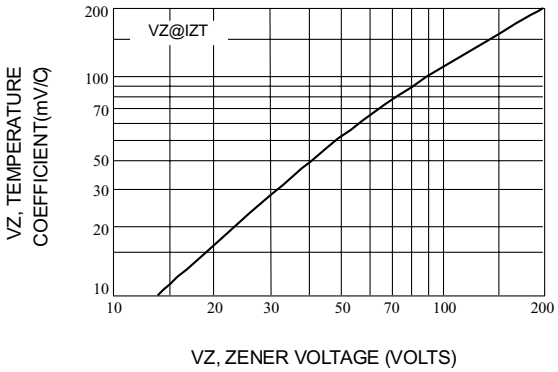


Fig. 3-ZENER VOLTAGE-10 TO 200 VOLTS

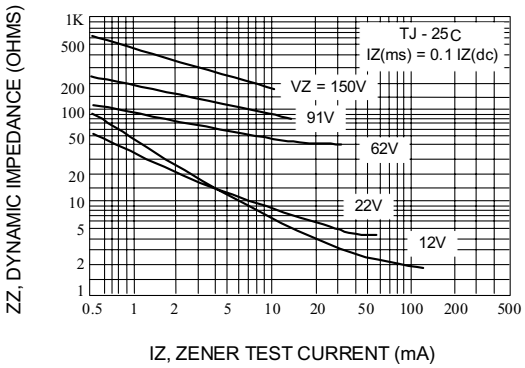
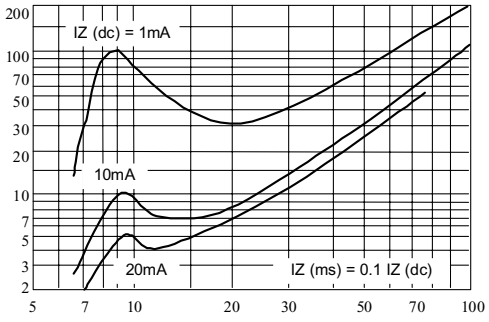
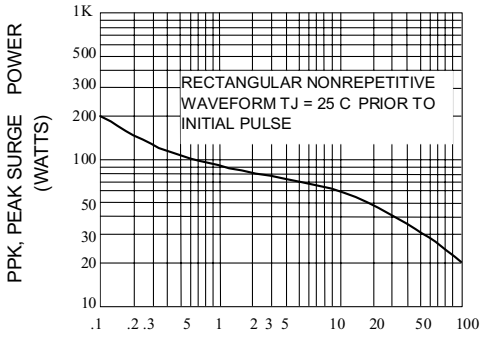


Fig. 4-EFFECT OF ZENER CURRENT





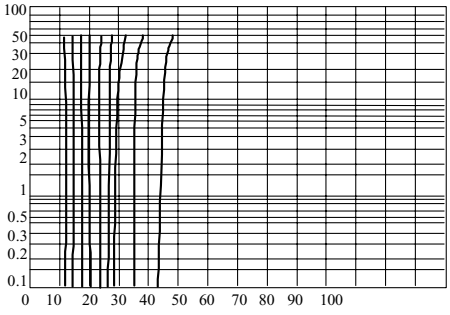


Fig. 7-VZ = 12 THRU 40 VOLTS

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 7.5Kpcs/Reel

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