



Micro Commercial Components

Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

3SMAJ5913B THRU 3SMAJ5943B

**3.0 Watt
 Surface Mount
 Silicon
 Zener Diodes**

Features

- Surface Mount Application
- 3.3 thru 56 Volt Voltage Range
- Low Inductance, Low Profile Mounting
- Glass Passivated Junction
- High specified maximum current (IZM) when adequately heat sinking

Mechanical Data

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- 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.

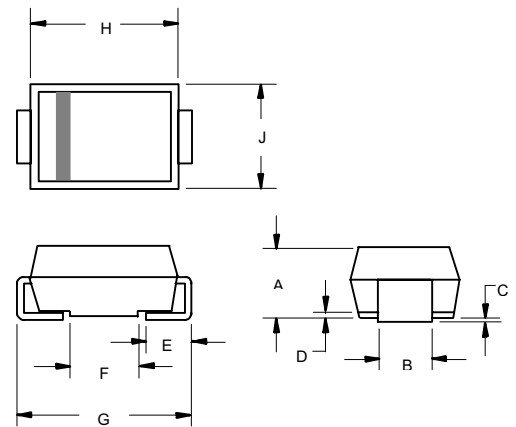
Maximum Ratings @ 25°C Unless Otherwise Specified

Maximum Forward Voltage	V _F	1.5V	(Note: 1)
Steady State Power Dissipation	P _d	3.0W	(Note: 2)
Operation and Storage Temperature	T _J , T _{STG}	-55°C to +150°C	
Thermal Resistance Junction to Lead	R _{thJL}	25°C/W	

NOTES:

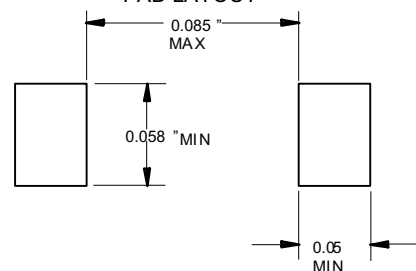
1. Forward Current @ 200mA.
2. Mounted on 5.0mm² (.013mm thick) land areas.
Lead temperature at T_L=75°C

DO-214AC (SMA) (LEAD FRAME)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
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



3SMAJ5913B thru 3SMAJ5943B

ELECTRICAL CHARACTERISTICS (T_L=30C unless otherwise noted) (V_F=1.5Volts Max @ I_F=200mA dc 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} mA dc	DEVICE MARKING
	VOLTS	mA	OHMS	mA	OHMS	μA	VOLTS	mA	
3SMAJ5913B	3.3	113.6	10.0	1.0	500	100	1.0	908	H 13B
3SMAJ5914B	3.6	104.2	9.0	1.0	500	75	1.0	832	H 14B
3SMAJ5915B	3.9	96.1	7.5	1.0	500	25	1.0	768	H 15B
3SMAJ5916B	4.3	87.2	6.0	1.0	500	5.0	1.0	696	H 16B
3SMAJ5917B	4.7	79.8	5.0	1.0	500	5.0	1.5	638	H 17B
3SMAJ5918B	5.1	73.5	4.0	1.0	350	5.0	2.0	588	H 18B
3SMAJ5919B	5.6	66.9	2.0	1.0	250	5.0	3.0	534	H 19B
3SMAJ5920B	6.2	60.5	2.0	1.0	200	5.0	4.0	482	H 20B
3SMAJ5921B	6.8	55.1	2.5	1.0	200	5.0	5.2	440	H 21B
3SMAJ5922B	7.5	50.0	3.0	0.5	400	5.0	6.0	400	H 22B
3SMAJ5923B	8.2	45.7	3.5	0.5	400	5.0	6.5	364	H 23B
3SMAJ5924B	9.1	41.2	4.0	0.5	500	5.0	7.0	328	H 24B
3SMAJ5925B	10	37.5	4.5	0.25	500	5.0	8.0	300	H 25B
3SMAJ5926B	11	34.1	5.5	0.25	550	1.0	8.4	272	H 26B
3SMAJ5927B	12	31.2	6.5	0.25	550	1.0	9.1	250	H 27B
3SMAJ5928B	13	28.8	7.0	0.25	550	1.0	9.9	230	H 28B
3SMAJ5929B	15	25.0	9.0	0.25	600	1.0	11.4	200	H 29B
3SMAJ5930B	16	23.4	10.0	0.25	600	1.0	12.2	186	H 30B
3SMAJ5931B	18	20.8	12.0	0.25	650	1.0	13.7	166	H 31B
3SMAJ5932B	20	18.7	14.0	0.25	650	1.0	15.2	150	H 31B
3SMAJ5933B	22	17.0	17.5	0.25	650	1.0	16.7	136	H 33B
3SMAJ5934B	24	15.6	19.0	0.25	700	1.0	18.2	124	H 34B
3SMAJ5935B	27	13.9	23.0	0.25	700	1.0	20.6	110	H 35B
3SMAJ5936B	30	12.5	28.0	0.25	750	1.0	22.8	100	H 36B
3SMAJ5937B	33	11.4	33.0	0.25	800	1.0	25.1	90	H 37B
3SMAJ5938B	36	10.4	38.0	0.25	850	1.0	27.4	82	H 38B
3SMAJ5939B	39	9.6	45.0	0.25	900	1.0	29.7	76	H 39B
3SMAJ5940B	43	8.7	53.0	0.25	950	1.0	32.7	68	H 40B
3SMAJ5941B	47	8.0	67.0	0.25	1000	1.0	35.8	62	H 41B
3SMAJ5942B	51	7.3	70.0	0.25	1100	1.0	38.8	58	H 42B
3SMAJ5943B	56	6.7	86.0	0.25	1300	1.0	42.6	52	H 43B

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

RATING AND CHARACTERISTICS CURVES

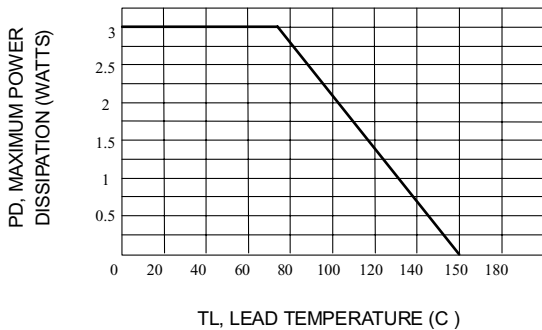


Fig. 1-STEADY STATE POWER DERATING

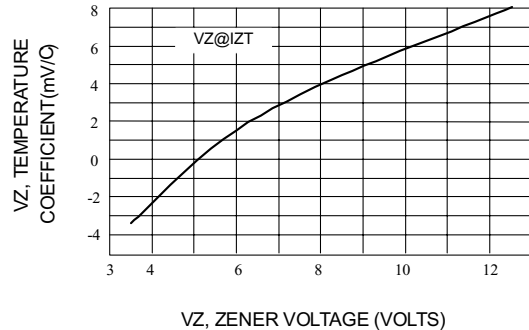


Fig. 2-ZENER VOLTAGE- 3 TO 12 VOLTS

RATING AND CHARACTERISTICS CURVES
3SMAJ5913B thru 3SMAJ5943B

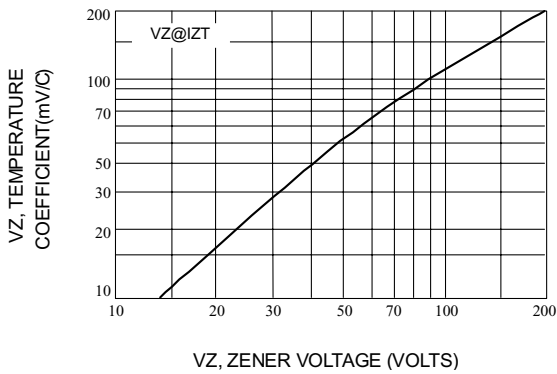


Fig. 3-ZENER VOLTAGE-10 TO 200 VOLTS

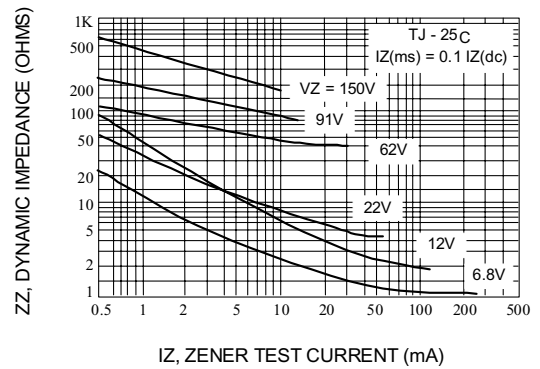


Fig. 4-EFFECT OF ZENER CURRENT

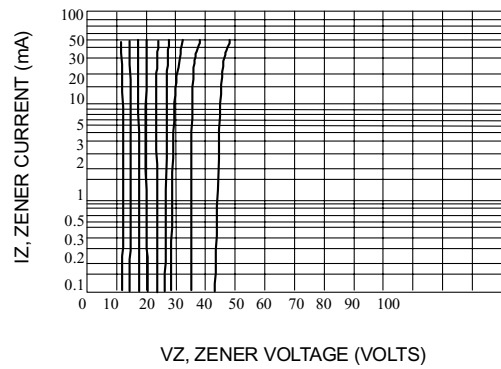
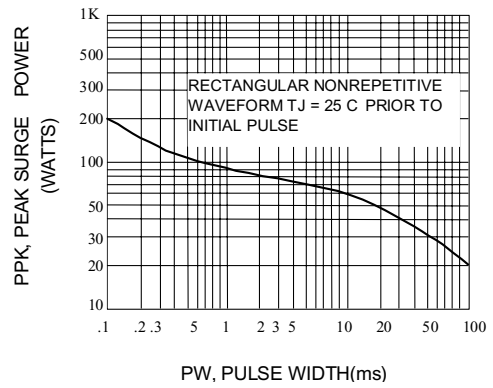
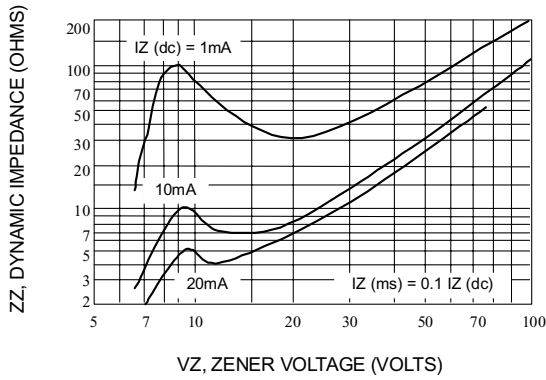


Fig. 7-VZ = 12 THRU 40 VOLTS



Micro Commercial Components

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes.

Micro Commercial Components Corp. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

*****APPLICATIONS DISCLAIMER*****

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.