



Micro Commercial Components



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3SMAJ5918B
THRU
3SMAJ5956B

3.0 Watt
Surface Mount
Silicon
Zener Diodes

Features

- 5.1thru 200 Volt Voltage Range
Low Inductance, Low Profile Mounting
Glass 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 available upon request by adding suffix "-HF"
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

Table with 4 columns: Parameter, Symbol, Value, and Note. Rows include Maximum Forward Voltage (VF=1.5V), Steady State Power Dissipation (Pd=3.0W), Operation and Storage Temperature (Tj, Tstg=-55°C to +150°C), Thermal Resistance Junction to Lead (RthJL=25°C/W), and Thermal Resistance Junction to Ambient (RthJA=135°C/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 TL=75°C
Lead temperature at TA=15°C

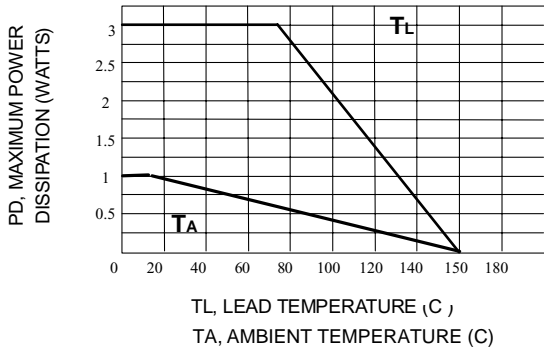
DO-214AC (SMA) (LEAD FRAME)
Technical drawing showing top, side, and perspective views with dimensions H, J, A, B, C, D, E, F, G. Includes a DIMENSIONS table and a SUGGESTED SOLDER PAD LAYOUT diagram.

ELECTRICAL CHARACTERISTICS ( $T_L=30C$  unless otherwise noted) ( $V_F=1.5$ Volts Max @  $I_F=200$ mA for all types.)

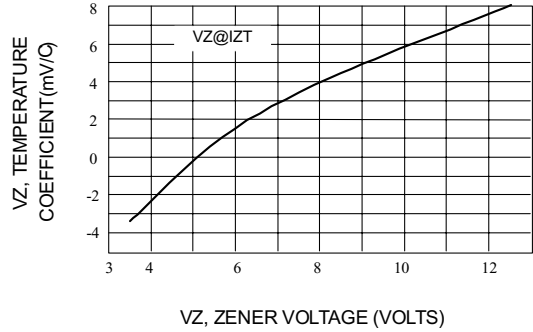
MCC PART NUMBER	ZENER VOLTAGE $V_z$ (1)	TEST CURRENT $I_{ZT}$	MAXIMUM DYNAMIC IMPEDANCE $Z_{ZT}$ @ $I_{ZT}$	KNEE CURRENT $I_{zk}$	KNEE IMPEDANCE $Z_{zk}$	MAXIMUM REVERSE CURRENT $I_R$	REVERSE VOLTAGE $V_R$	Maximum DC Zener Current $I_{ZM}$	DEVICE MARKING
	VOLTS	mA	OHMS	mA	OHMS	$\mu$ A	VOLTS	mA	
3SMAJ5918B	5.1	73.5	4	1	350	5	2	588	H18B
3SMAJ5919B	5.6	66.9	2	1	250	5	3	534	H19B
3SMAJ5920B	6.2	60.5	2	1	200	5	4	482	H20B
3SMAJ5921B	6.8	55.1	2.5	1	200	5	5.2	440	H21B
3SMAJ5922B	7.5	50	3	0.5	400	5	6	400	H22B
3SMAJ5923B	8.2	45.7	3.5	0.5	400	5	6.5	364	H23B
3SMAJ5924B	9.1	41.2	4	0.5	500	5	7	328	H24B
3SMAJ5925B	10	37.5	4.5	0.25	500	5	8	300	H25B
3SMAJ5926B	11	34.1	5.5	0.25	550	1	8.4	272	H26B
3SMAJ5927B	12	31.2	6.5	0.25	550	1	9.1	250	H27B
3SMAJ5928B	13	28.8	7	0.25	550	1	9.9	230	H28B
3SMAJ5929B	15	25	9	0.25	600	1	11.4	200	H29B
3SMAJ5930B	16	23.4	10	0.25	600	1	12.2	186	H30B
3SMAJ5931B	18	20.8	12	0.25	650	1	13.7	166	H31B
3SMAJ5932B	20	18.7	14	0.25	650	1	15.2	150	H32B
3SMAJ5933B	22	17	17.5	0.25	650	1	16.7	136	H33B
3SMAJ5934B	24	15.6	19	0.25	700	1	18.2	124	H34B
3SMAJ5935B	27	13.9	23	0.25	700	1	20.6	110	H35B
3SMAJ5936B	30	12.5	28	0.25	750	1	22.8	100	H36B
3SMAJ5937B	33	11.4	33	0.25	800	1	25.1	90	H37B
3SMAJ5938B	36	10.4	38	0.25	850	1	27.4	82	H38B
3SMAJ5939B	39	9.6	45	0.25	900	1	29.7	76	H39B
3SMAJ5940B	43	8.7	53	0.25	950	1	32.7	68	H40B
3SMAJ5941B	47	8	67	0.25	1000	1	35.8	62	H41B
3SMAJ5942B	51	7.3	70	0.25	1100	1	38.8	58	H42B
3SMAJ5943B	56	6.7	86	0.25	1300	1	42.6	52	H43B
3SMAJ5944B	62	6	100	0.25	1500	1	47.1	48	H44B
3SMAJ5945B	68	5.5	120	0.25	1700	1	51.7	44	H45B
3SMAJ5946B	75	5	140	0.25	2000	1	56	40	H46B
3SMAJ5947B	82	4.6	160	0.25	2500	1	62.2	36	H47B
3SMAJ5948B	91	4.1	200	0.25	3000	1	69.2	32	H48B
3SMAJ5949B	100	3.7	250	0.25	3100	1	76	30	H49B
3SMAJ5950B	110	3.4	300	0.25	4000	1	83.6	26	H50B
3SMAJ5951B	120	3.1	380	0.25	4500	1	91.2	24	H51B
3SMAJ5952B	130	2.9	450	0.25	5000	1	98.8	22	H52B
3SMAJ5953B	150	2.5	600	0.25	6000	1	114	20	H53B
3SMAJ5954B	160	2.3	700	0.25	6500	1	121.6	18	H54B
3SMAJ5955B	180	2.1	900	0.25	7000	1	136.8	16	H55B
3SMAJ5956B	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%.

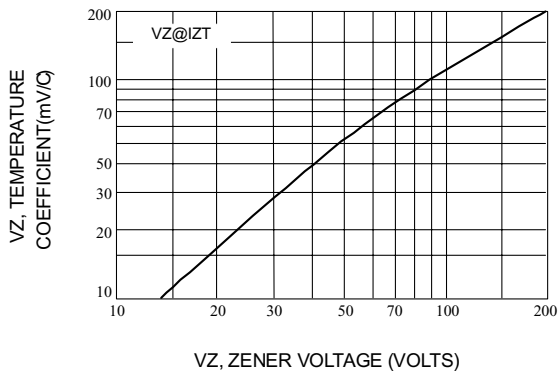
**RATING AND CHARACTERISTICS CURVES**



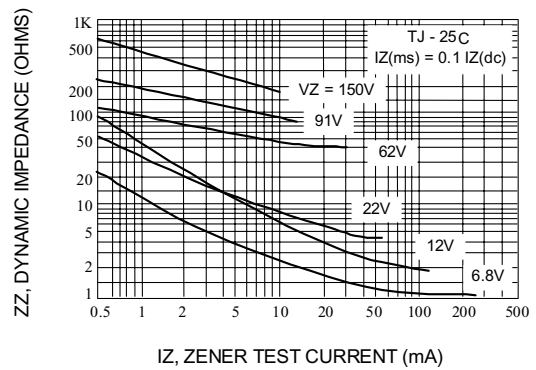
**Fig. 1-STEADY STATE POWER DERATING**



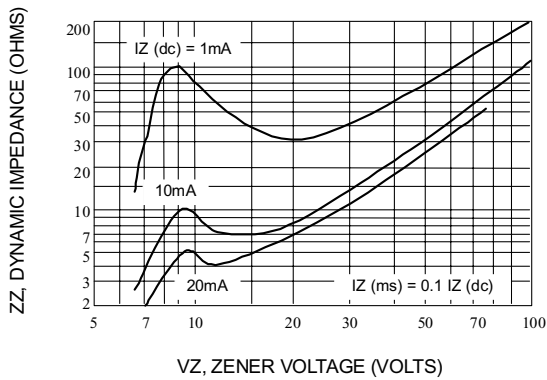
**Fig. 2-ZENER VOLTAGE- 5.1 TO 12 VOLTS**



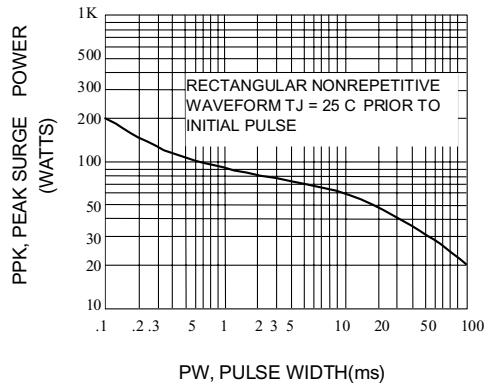
**Fig. 3-ZENER VOLTAGE-10 TO 200 VOLTS**



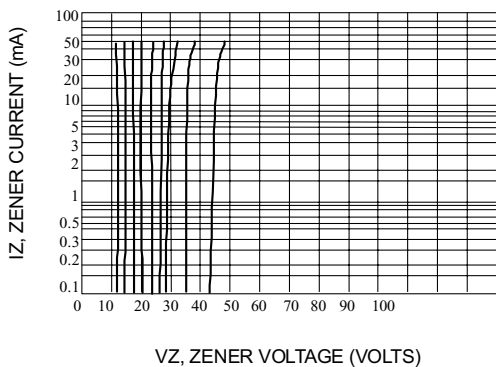
**Fig. 4-EFFECT OF ZENER CURRENT**



**Fig. 5-EFFECT OF ZENER VOLTAGE**



**Fig. 6- PULSE RATING CURVE**



**Fig. 7-VZ = 12 THRU 40 VOLTS**



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Ordering Information :

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

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

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