

3SMBJ5913B-TPX01 THRU 3SMBJ5943B-TPX01

3.0 Watt Surface Mount Silicon Zener Diodes

Features

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates RoHS Compliant. See ordering information)
- 3.3thru 56 Volt Voltage Range
- Low Inductance,Low Profile Mounting
- Glass Passivated Junction
- Available on Tape and Reel

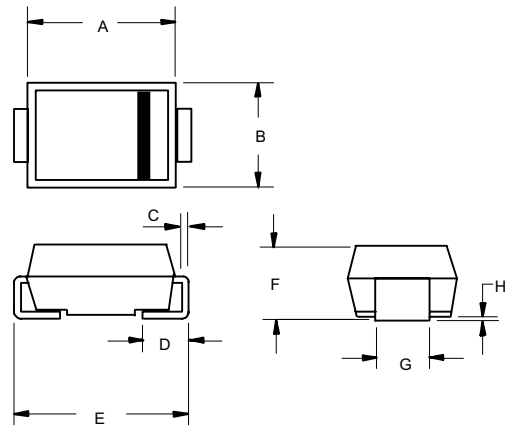
Mechanical Data

- 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

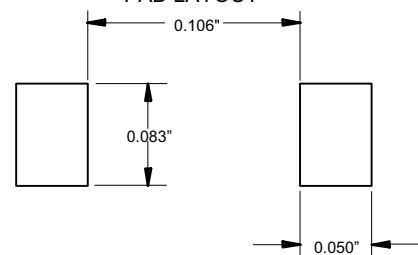
Maximum Forward Voltage	V _F	1.5V	(Note: 2)
Steady State Power Dissipation	P _d	3.0W	(Note: 3)
Operation and Storage Temperature	T _J , T _{STG}	-55°C to +150°C	

DO-214AA (SMB) (LEAD FRAME)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
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



- 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

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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	μA	VOLTS	
3SMBJ5913B-TPX01	3.3	113.6	10.0	1.0	500	100	1.0	H13B
3SMBJ5914B-TPX01	3.6	104.2	9.0	1.0	500	75.0	1.0	H14B
3SMBJ5915B-TPX01	3.9	96.1	7.5	1.0	500	25.0	1.0	H15B
3SMBJ5916B-TPX01	4.3	87.2	6.0	1.0	500	5.0	1.0	H16B
3SMBJ5917B-TPX01	4.7	79.8	5.0	1.0	500	5.0	1.5	H17B
3SMBJ5918B-TPX01	5.1	73.5	4.0	1.0	350	5.0	2.0	H18B
3SMBJ5919B-TPX01	5.6	66.9	2.0	1.0	250	5.0	3.0	H19B
3SMBJ5920B-TPX01	6.2	60.5	2.0	1.0	200	5.0	4.0	H20B
3SMBJ5921B-TPX01	6.8	55.1	2.5	1.0	200	5.0	5.2	H21B
3SMBJ5922B-TPX01	7.5	50.0	3.0	0.5	400	5.0	6.0	H22B
3SMBJ5923B-TPX01	8.2	45.7	3.5	0.5	400	5.0	6.5	H23B
3SMBJ5924B-TPX01	9.1	41.2	4.0	0.5	500	5.0	7.0	H24B
3SMBJ5925B-TPX01	10	37.5	4.5	0.25	500	5.0	8.0	H25B
3SMBJ5926B-TPX01	11	34.1	5.5	0.25	550	1.0	8.4	H26B
3SMBJ5927B-TPX01	12	31.2	6.5	0.25	550	1.0	9.1	H27B
3SMBJ5928B-TPX01	13	28.8	7.0	0.25	550	1.0	9.9	H28B
3SMBJ5929B-TPX01	15	25.0	9.0	0.25	600	1.0	11.4	H29B
3SMBJ5930B-TPX01	16	23.4	10.0	0.25	600	1.0	12.2	H30B
3SMBJ5931B-TPX01	18	20.8	12.0	0.25	650	1.0	13.7	H31B
3SMBJ5932B-TPX01	20	18.7	14.0	0.25	650	1.0	15.2	H32B
3SMBJ5933B-TPX01	22	17.0	17.5	0.25	650	1.0	16.7	H33B
3SMBJ5934B-TPX01	24	15.6	19.0	0.25	700	1.0	18.2	H34B
3SMBJ5935B-TPX01	27	13.9	23.0	0.25	700	1.0	20.6	H35B
3SMBJ5936B-TPX01	30	12.5	28.0	0.25	750	1.0	22.8	H36B
3SMBJ5937B-TPX01	33	11.4	33.0	0.25	800	1.0	25.1	H37B
3SMBJ5938B-TPX01	36	10.4	38.0	0.25	850	1.0	27.4	H38B
3SMBJ5939B-TPX01	39	9.6	45.0	0.25	900	1.0	29.7	H39B
3SMBJ5940B-TPX01	43	8.7	53.0	0.25	950	1.0	32.7	H40B
3SMBJ5941B-TPX01	47	8.0	67.0	0.25	1000	1.0	35.8	H41B
3SMBJ5942B-TPX01	51	7.3	70.0	0.25	1100	1.0	38.8	H42B
3SMBJ5943B-TPX01	56	6.7	86.0	0.25	1300	1.0	42.6	H43B

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

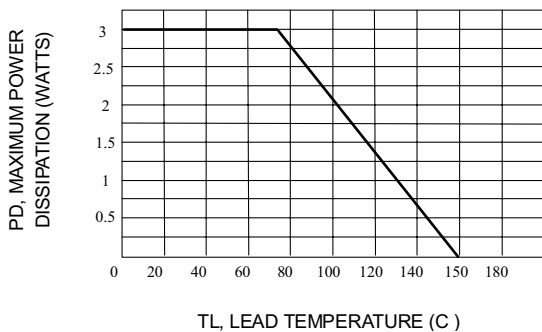
RATING AND CHARACTERISTICS CURVES


Fig. 1-STEADY STATE POWER DERATING

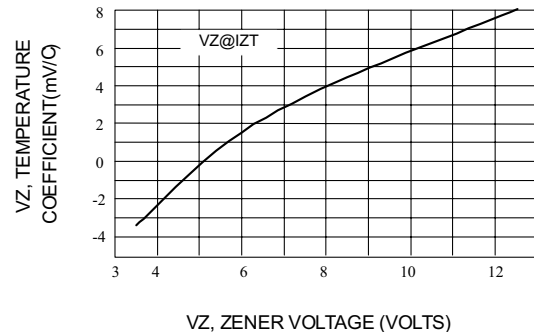


Fig. 2-ZENER VOLTAGE-TO 12 VOLTS

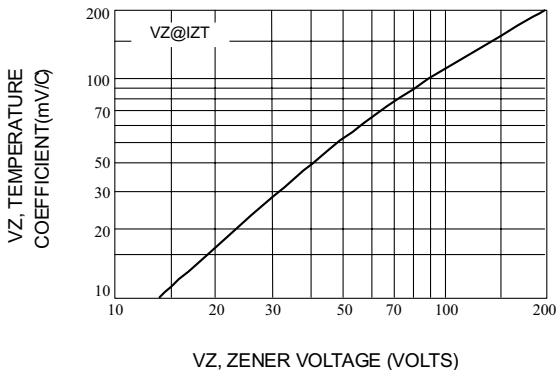


Fig. 3-ZENER VOLTAGE-10 TO 200 VOLTS

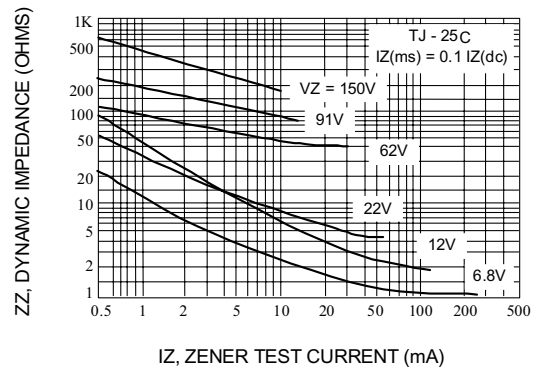


Fig. 4-EFFECT OF ZENER CURRENT

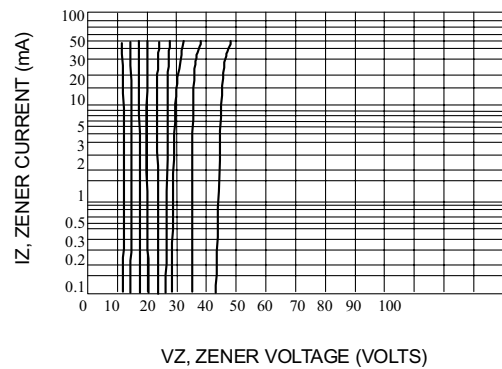
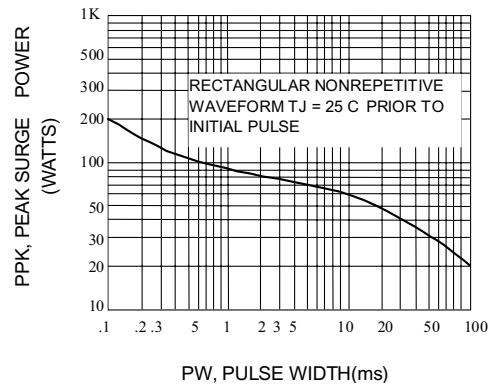
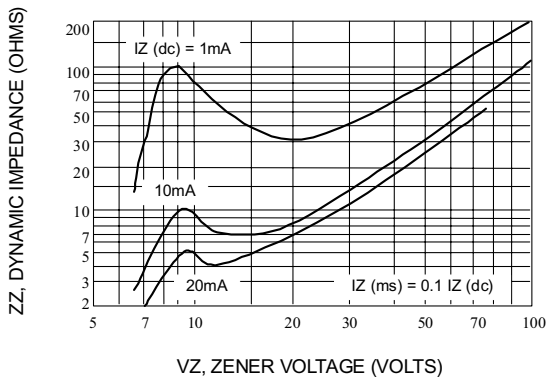


Fig. 7-VZ = 12 THRU 40 VOLTS



ZIBO MICRO COMMERCIAL
COMPONENTS CORP.

Ordering Information :

Device	Packing
3SMBJ5913B-TPX01 ~ 3SMBJ5943B-TPX01	Tape&Reel; 3Kpcs/Reel

*****LIFE SUPPORT*****

ZBMCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of ZiBo Micro Commercial Components Corp.

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