

## Features

- Glass Passivated Junction
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)

# 1.5 Watt Zener Diode 5.1 to 200 Volts

## Maximum Ratings

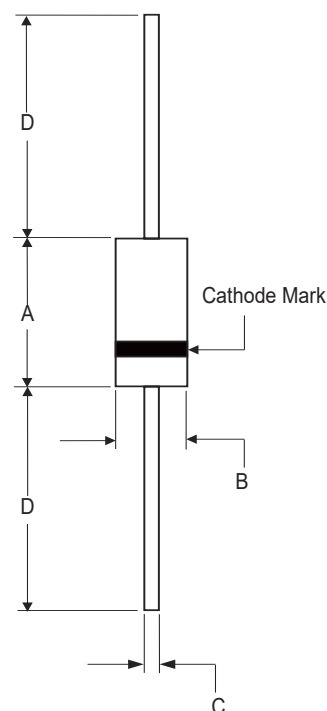
- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C

Parameter	Symbol	Rating	Conditions
Peak Forward Surge Current	$I_{FSM}$	10A	8.3ms single half sine/square wave
Power Dissipation	$P_D$	1.5W	$T_L=75^\circ\text{C}$ , Note 2
Maximum Forward Voltage	$V_F$	1.5V	$I_F=200\text{mA}$

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

2. 0.375" lead length from body.

## DO-41



### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.160	0.205	4.10	5.20	
B	0.080	0.107	2.00	2.70	Φ
C	0.028	0.035	0.70	0.90	Φ
D	1.000	-----	25.40	-----	

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

MCC Part Number	Zener Voltage	Test Current	Maximum Dynamic Impedance	Knee Current	Knee Impedance	Maximum Reverse Current	Reverse Voltage	MARKING CODE
	$V_Z$	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$I_{ZK}$	$Z_{ZK}$	$I_R$	$V_R$	
	V	mA	$\Omega$	mA	$\Omega$	$\mu A$	V	
1N5918BP	5.1	73.5	4	1	350	5	2	1N5918BP
1N5919BP	5.6	66.9	2	1	250	5	3	1N5919BP
1N5920BP	6.2	60.5	2	1	200	5	4	1N5920BP
1N5921BP	6.8	55.1	2.5	1	200	5	5.2	1N5921BP
1N5922BP	7.5	50	3	0.5	400	5	6	1N5922BP
1N5923BP	8.2	45.7	3.5	0.5	400	5	6.5	1N5923BP
1N5924BP	9.1	41.2	4	0.5	500	5	7	1N5924BP
1N5925BP	10	37.5	4.5	0.25	500	5	8	1N5925BP
1N5926BP	11	34.1	5.5	0.25	550	1	8.4	1N5926BP
1N5927BP	12	31.2	6.5	0.25	550	1	9.1	1N5927BP
1N5928BP	13	28.8	7	0.25	550	1	9.9	1N5928BP
1N5929BP	15	25	9	0.25	600	1	11.4	1N5929BP
1N5930BP	16	23.4	10	0.25	600	1	12.2	1N5930BP
1N5931BP	18	20.8	12	0.25	650	1	13.7	1N5931BP
1N5932BP	20	18.7	14	0.25	650	1	15.2	1N5932BP
1N5933BP	22	17	17.5	0.25	650	1	16.7	1N5933BP
1N5934BP	24	15.6	19	0.25	700	1	18.2	1N5934BP
1N5935BP	27	13.9	23	0.25	700	1	20.6	1N5935BP
1N5936BP	30	12.5	28	0.25	750	1	22.8	1N5936BP
1N5937BP	33	11.4	33	0.25	800	1	25.1	1N5937BP
1N5938BP	36	10.4	38	0.25	850	1	27.4	1N5938BP
1N5939BP	39	9.6	45	0.25	900	1	29.7	1N5939BP
1N5940BP	43	8.7	53	0.25	950	1	32.7	1N5940BP
1N5941BP	47	8	67	0.25	1000	1	35.8	1N5941BP
1N5942BP	51	7.3	70	0.25	1100	1	38.8	1N5942BP
1N5943BP	56	6.7	86	0.25	1300	1	42.6	1N5943BP
1N5944BP	62	6	100	0.25	1500	1	47.1	1N5944BP
1N5945BP	68	5.5	120	0.25	1700	1	51.7	1N5945BP
1N5946BP	75	5	140	0.25	2000	1	56	1N5946BP
1N5947BP	82	4.6	160	0.25	2500	1	62.2	1N5947BP
1N5948BP	91	4.1	200	0.25	3000	1	69.2	1N5948BP
1N5949BP	100	3.7	250	0.25	3100	1	76	1N5949BP
1N5950BP	110	3.4	300	0.25	4000	1	83.6	1N5950BP
1N5951BP	120	3.1	380	0.25	4500	1	91.2	1N5951BP
1N5952BP	130	2.9	450	0.25	5000	1	98.8	1N5952BP
1N5953BP	150	2.5	600	0.25	6000	1	114	1N5953BP
1N5954BP	160	2.3	700	0.25	6500	1	121.6	1N5954BP
1N5955BP	180	2.1	900	0.25	7000	1	136.8	1N5955BP
1N5956BP	200	1.9	1200	0.25	8000	1	152	1N5956BP

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

## Curve Characteristics

Fig. 1 - Power Derating Curve

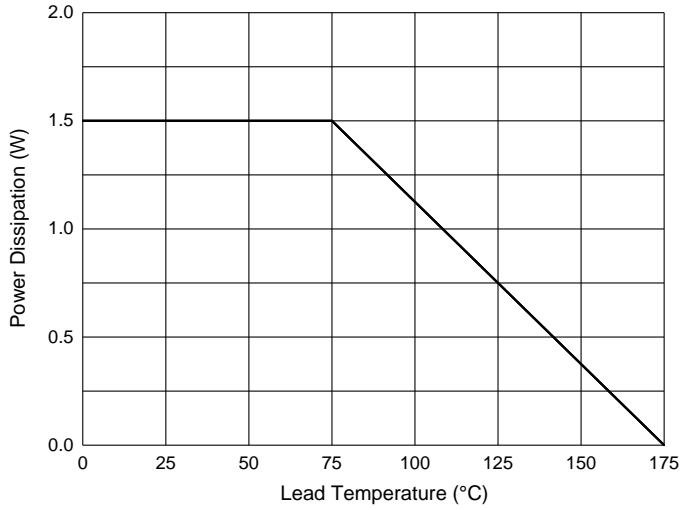


Fig. 2 - Typical Zener Breakdown Characteristics

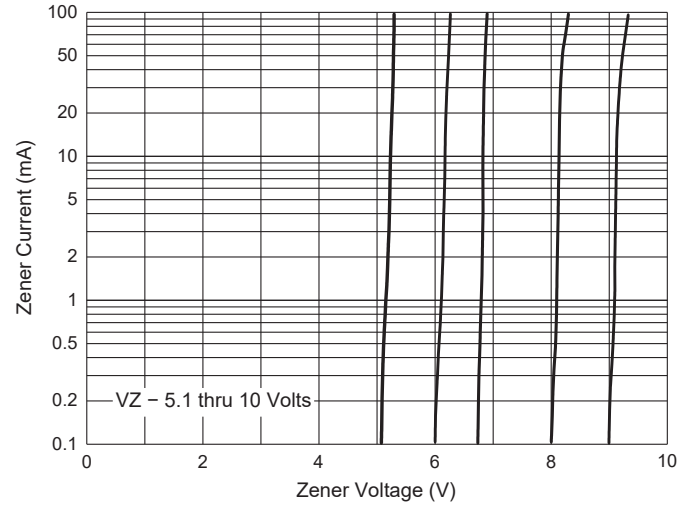
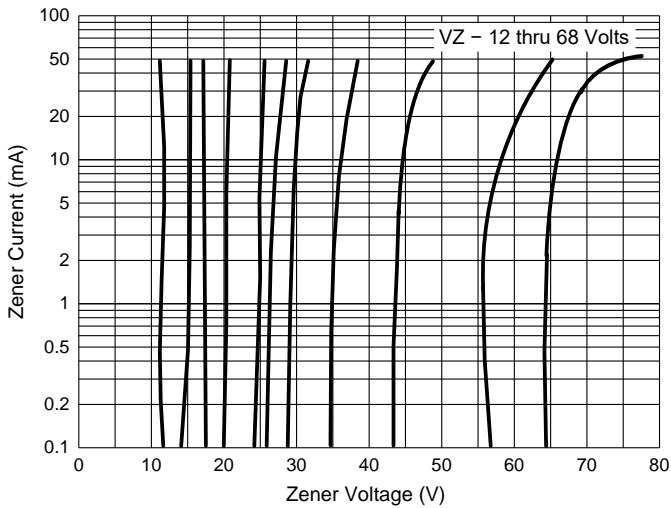


Fig. 3 - Typical Zener Breakdown Characteristics



## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel: 5Kpcs/Reel
(Part Number)-AP	Ammo Packing: 5Kpcs/Ammo Box
(Part Number)-BP	Bulk: 50Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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