



Micro Commercial Components



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1EZ110D5 THRU 1EZ330D5

1.0 W Silicon Zener Diodes 110 to 330 Volts

Features

- Halogen free available upon request by adding suffix "-HF"
- Zener Voltage 110V to 330V
- Silicon Planar Power Zener Diodes
- Low profile package
- Glass passivated junction
- Lead Free Finish/Rohs Compliant (Note3) ("P" Suffix designates Compliant. See ordering information)

Mechanical Data

- Marking : Cathode Band and type number.
- Weight: 0.012 ounce, 0.34 gram
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

	Symbol	Value	Units
Peak Pulse Power Dissipation on $T_A=50^\circ\text{C}^{(1)}$ Derate above 50°C	P_D	1.0 6.67	W mW/ $^\circ\text{C}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to 150	$^\circ\text{C}$

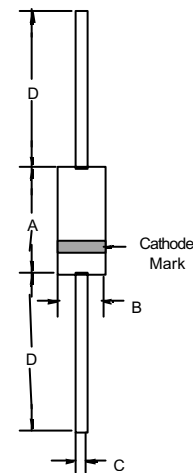
Electrical Characteristics @ 25°C Unless Otherwise Specified

	Symbol	Value	Unit
Peak Forward Surge Current ⁽²⁾	I_{FSM}	10	A
Maximum Forward Voltage @ $I_F=200\text{mA}$	V_F	1.2	V

NOTE:

- (1) Mounted on 5.0mm² (.013mm thick) land areas.
- (2) Measured on 8.0ms, single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum.
- (3) High Temperature Solder Exemption Applied, see EU Directive Annex 7.

DO-41



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.160	0.205	4.10	5.20	
B	0.080	0.107	2.00	2.70	Diameter
C	0.028	0.034	0.71	0.86	Diameter
D	1.000	-----	25.40	-----	

1EZ110D5 thru 1EZ330D5

MCC PART NUMBER	ZENER VOLTAGE @TEST CURRENT (1,2)		MAXIMUM ZENER IMPEDANCE (3)			LEAKAGE CURRENT	
	V _Z	I _{ZT}	Z _{ZT}	Z _{ZK}	I _{ZK}	I _R	V _R
	V	mA	Ohms	Ohms	mA	μA	V
1EZ110D5	110	2.3	450	4000	0.25	0.1	83.6
1EZ120D5	120	2.0	550	4500	0.25	0.1	91.2
1EZ130D5	130	1.9	700	5000	0.25	0.1	98.8
1EZ140D5	140	1.8	900	5500	0.25	0.1	106.4
1EZ150D5	150	1.7	1000	6000	0.25	0.1	114.0
1EZ160D5	160	1.6	1100	6500	0.25	0.1	121.6
1EZ170D5	170	1.5	1150	6800	0.25	0.1	129.2
1EZ180D5	180	1.4	1200	7000	0.25	0.1	136.8
1EZ190D5	190	1.3	1350	7500	0.25	0.1	144.4
1EZ200D5	200	1.2	1900	9990	0.25	0.1	152.0
1EZ220D5	220	1.0	1600	8000	0.25	0.1	167.2
1EZ240D5	240	0.9	1800	8500	0.25	0.1	182.4
1EZ250D5	250	0.9	2000	9000	0.25	0.1	190.0
1EZ270D5	270	0.8	2100	9000	0.25	0.1	205.0
1EZ300D5	300	0.8	2300	9500	0.25	0.1	228.0
1EZ330D5	330	0.7	2500	9500	0.25	0.1	250.2

- Note:
- (1) Specials Available Include:
 - A: Nominal zener voltages between the voltages shown and tighter voltage Tolerances.
 - B: Matched sets.
 - (2) Zener Voltage (V_Z) Measurement. Guarantess the zener voltage when measured at 90 seconds while maintaining the lead temperature (T_L) at 30°C + or - 1°C, from the diode body.
 - (3) Zener Impedance (Z_Z) Derivation. The zener impedance is derived from the 60 cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}.

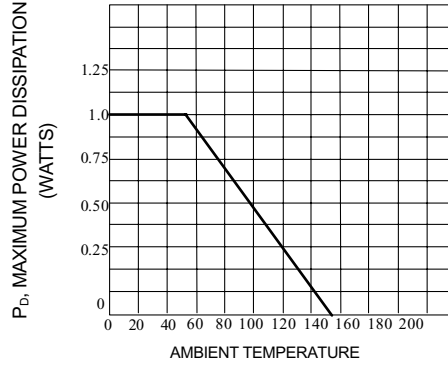


Fig. 1-POWER TEMPERATURE DERATING CURVE

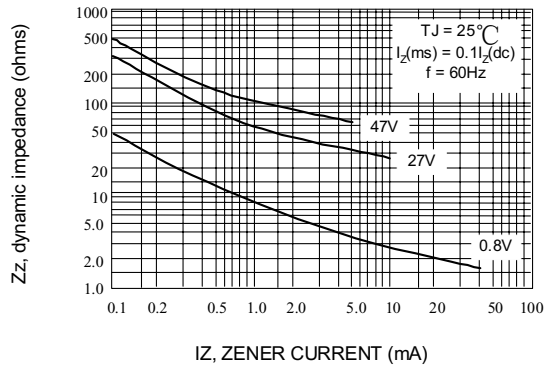


Fig. 2-EFFECT OF ZENER CURRENT ON ZENER IMPEDANCE



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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