



Micro Commercial Components
21201 Itasca Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

1EZ110D5 THRU 1EZ200D5

Features

- Zener Voltage 100V to 200V
- Silicon Planar Power Zener Diodes
- Low profile package
- Glass passivated junction

1.0 W Silicon Zener Diodes 100 to 200 Volts

Mechanical Data

- Case: Molded plastic, DO-41
- Polarity: Color band denotes cathode end
- Weight: 0.012 ounce, 0.3 gram

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	$^{\circ}\text{C}$

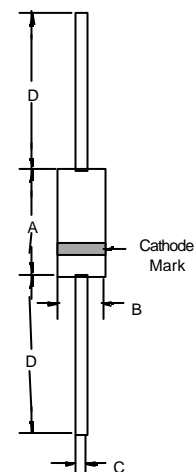
Electrical Characteristics @ 25°C Unless Otherwise Specified

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

NOTE:

- (1) Mounted on 5.0mm^2 (.013mm thick) land areas.
- (2) Measured on 8.0ms, single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum.

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 1EZ200D5

MCC PART NUMBER	ZENER VOLTAGE @TEST CURRENT ^(1,2)		MAXIMUM ZENER IMPEDANCE ⁽³⁾			LEAKAGE CURRENT		TYPICAL TEMP. COEFFICIENT
	V_Z	I_{ZT}	Z_{ZT}	Z_{ZK}	I_{ZK}	I_R	V_R	
	V	mA	Ohms	Ohms	mA	µ A	V	
1EZ110D5	110	2.3	450	4000	0.25	5.0	83.6	+0.095
1EZ120D5	120	2.0	550	4500	0.25	5.0	91.2	+0.095
1EZ130D5	130	1.9	700	5000	0.25	5.0	98.8	+0.095
1EZ140D5	140	1.8	900	5500	0.25	5.0	106.4	+0.095
1EZ150D5	150	1.7	1000	6000	0.25	5.0	114.0	+0.095
1EZ160D5	160	1.6	1100	6500	0.25	5.0	121.6	+0.095
1EZ170D5	170	1.5	1150	6800	0.25	5.0	129.2	+0.095
1EZ180D5	180	1.4	1200	7000	0.25	5.0	136.8	+0.095
1EZ190D5	190	1.3	1350	7500	0.25	5.0	144.4	+0.095
1EZ200D5	200	1.2	1500	8000	0.25	5.0	152.0	+0.100

- Note:
- Specials Available Include:
 - A: Nominal zener voltages between the voltages shown and tighter voltage Tolerances.
 - B: Matched sets.
 - Zener Voltage (V_Z) Measurement. Guarantess the zener voltage when measured at 90 seconds while maintaining the lead temperature (T_L) at $30^{\circ}\text{C} + \text{or} - 1^{\circ}\text{C}$, from the diode body.
 - 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} .

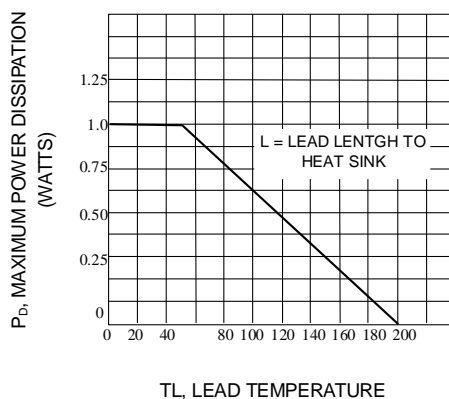


Fig. 1-POWER TEMPERATURE DERATING CURVE

1EZ110D5 thru 1EZ200D5

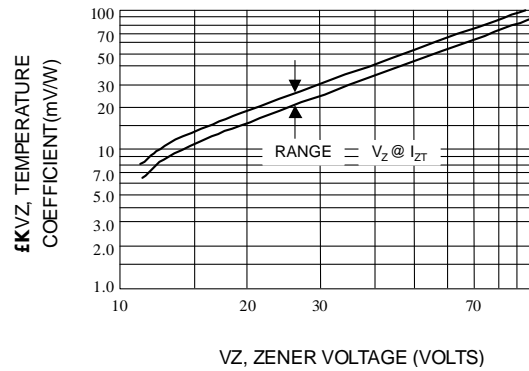


Fig. 2-TEMPERATURE COEFFICIENTS

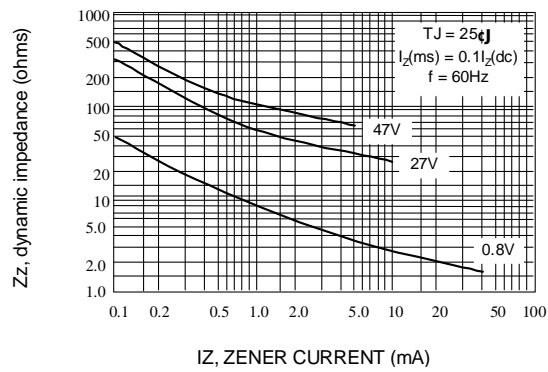


Fig. 3-EFFECT OF ZENER CURRENT ON ZENER IMPEDANCE