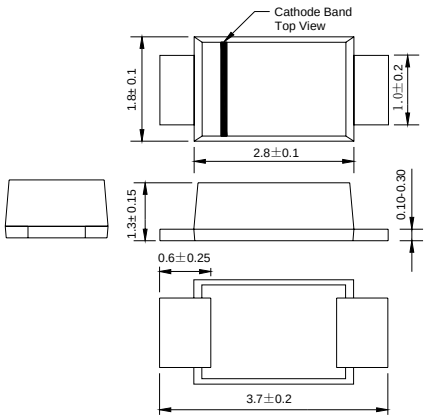
1DZ110

1W Surface Mount Zener Diode

Features

- For surface mounted applications in order to optimize board space
- Low profile space
- Low Zener impedance
- High reliability
- For use in stabilizing and clipping circuits with high power rating.
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

SOD-123FL



Dimensions in millimeters

Mechanical Date

- **Case:** Flat Lead SOD-123 Small Outline Plastic Package
- **Polarity:** Types the band by laser denotes the cathode
- **Terminals:**Solder plated, solderable per MIL-STD-750 Method 2026
  Weight:0.0007 ounce, 0.02 grams

Applications

- For general purpose regulation and protection applications

Major Ratings and Characteristics

P_{tot}	**1.0 W**
V_Z	**110 V**
I_{ZM}	**8 mA**
I_R	**5 μA**
T_j max.	**150 °C**

Maximum Ratings & Thermal Characteristics

(T_A = 25 °C unless otherwise noted)

	Symbol	VALUE	UNIT
power dissipation	P_{tot}	1	W
Thermal resistance from junction to ambient(1)	$R_{\theta JA}$	230	℃/ W
Operating junction temperature range	T_J	–65 to +150	°C
Storage temperature range	T_{STG}	–65 to +150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

Note1: Mounted on FR-4 P.C.B. With 0.9x1.5 mm copper pad areas (≈35 μm thick)

Electrical Characteristics

T_A =25℃ unless otherwise noted.

TYPE	Zener Voltage				Zener Impedance			Leakage Current		I_{ZM}
	V_Z(Volts)			@I_{ZT}	Z_{ZT}@I_{ZT}	Z_{ZK}@I_{ZK}		I_R@V_R		
	Min	Nom	Max	mA	Ω	Ω	mA	uA	Volts	mA
1DZ110	104	110	116	5	300	3000	0.25	5	83.6	8

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

Fig. 1 - Maximum Continuous Power Dissipation

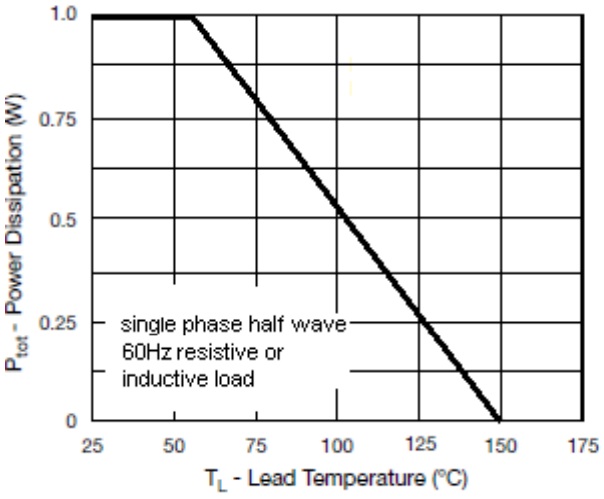


Fig. 2 - Typical Reverse Characteristics