

# 1DZ120

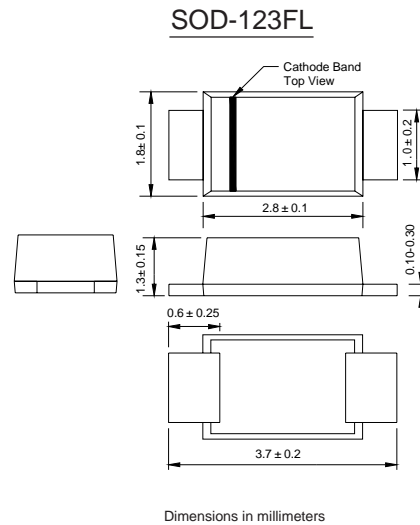
## 1W Surface Mount Zener Diode

### 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

### Mechanical Data

- **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

### Maximum Ratings & Thermal Characteristics

( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted)

	Symbol	VALUE	UNIT
power dissipation	$P_{tot}$	1	W
Thermal resistance from junction to ambient <sup>(1)</sup>	$R_{\theta JA}$	230	$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	-65 to +150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-65 to +150	$^\circ\text{C}$

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 ( $\approx 35\text{ }\mu\text{m}$  thick)

### Electrical Characteristics

$T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted.

TYPE	Zener Voltage			Zener Impedance			Leakage Current		$I_{ZM}$	
	$V_Z(\text{Volts})$			$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$		$I_R@V_R$			
	Min	Nom	Max	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	Volts	mA
1DZ120	114	120	126	2.0	550	4500	0.25	5	91.2	7.8

**Characteristic Curves** ( $T_A=25\text{ }^\circ\text{C}$  unless otherwise noted)

Fig. 1 - Maximum Continuous Power Dissipation

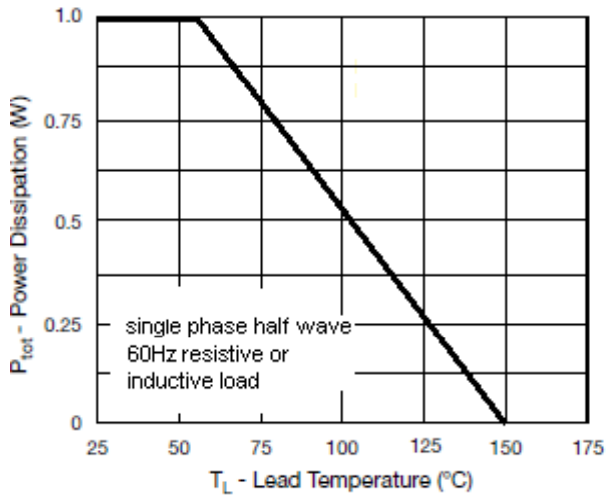


Fig. 2 - Typical Reverse Characteristics

