

HZT33

Monolithic IC Zener Diode for Temperature Compensation

HITACHI

Rev. 1
Apr. 1995

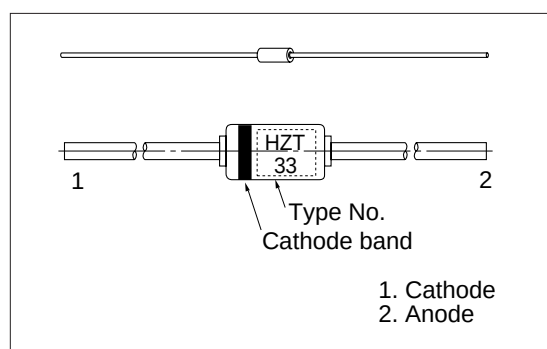
Features

- Lower temperature coefficient of the reference voltage.
($\gamma_Z = \pm 1 \text{ mV}/^\circ\text{C}_{\text{max}}$)
- Lower dynamic resistance.

Ordering Information

Type No.	Mark	Package Code
HZT33	Type No.	DO-35

Outline



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Value	Unit
Power dissipation	P_d	200	mW
Operation temperature	T_{opr}	-20 to + 75	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +175	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	V_Z	31.0	—	35.0	V	$I_Z = 5 \text{ mA}$
Dynamic resistance	r_d	—	—	25.0	Ω	$I_Z = 5 \text{ mA}$
Temperature coefficient	γ_Z	—	—	± 1.0	mV/ $^\circ\text{C}$	$I_Z = 5 \text{ mA}$ $T_a = -20 \text{ to } 25 \text{ to } 75^\circ\text{C}$

HZT33

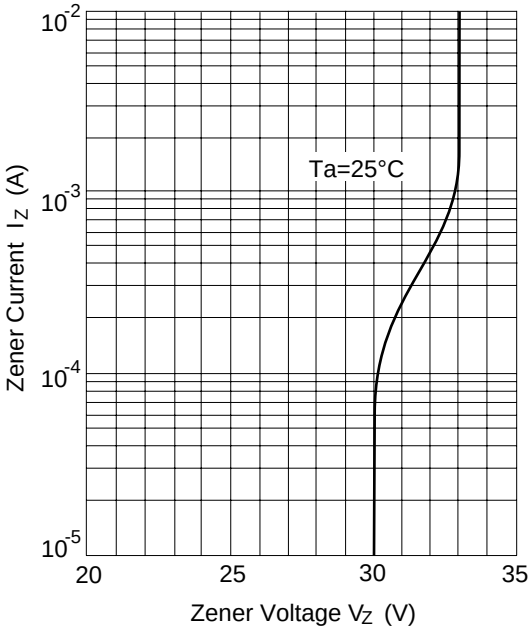


Fig.1 Zener current Vs. Zener voltage

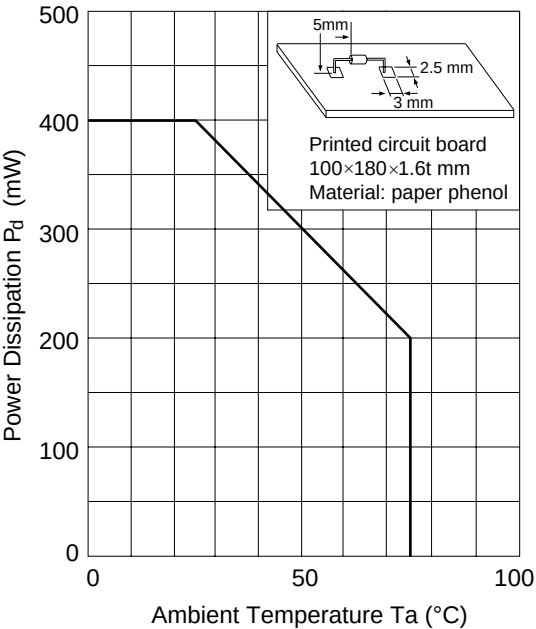
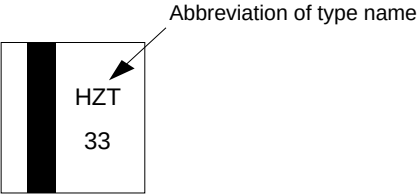
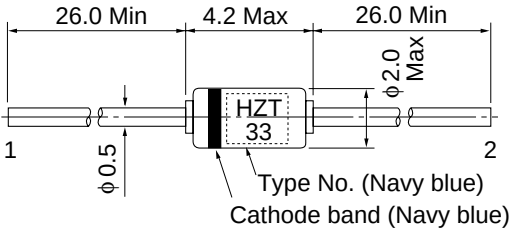


Fig.2 Power Dissipation Vs. Ambient Temperature

Package Dimensions

Unit: mm



Expanded drawing of marking

- 1 Cathode
- 2 Anode

HITACHI Code	DO-35
JEDEC Code	DO-35
EIAJ Code	SC-48
Weight (g)	0.13