

HZM27WA

Silicon Epitaxial Planar Zener Diode for Surge Absorb

HITACHI

Rev. 0
May.1995

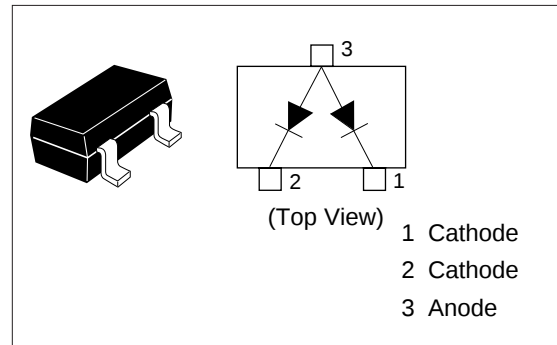
Features

- HZM27WA has two devices, and can absorb external + and –surge.
- MPAK Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HZM27WA	27A	MPAK

Outline



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	p_d^*	200	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

* Two device total, See Fig. 2.

Electrical Characteristics (Ta = 25°C)

tem	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	V_Z	25.10	—	28.90	V	$I_Z = 2 \text{ mA}$, 40ms pulse
Reverse current	I_R	—	—	2	μA	$V_R = 21\text{V}$
Capacitance	C^*	—	(27)	—	pF	$V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$
Dynamic resistance	r_d	—	—	70	Ω	$I_Z = 2 \text{ mA}$
ESD-Capability	—	30	—	—	KV	**C=150pF, R=330 Ω Both forward and reverse direction 10 pulse

* Reference only.

** Failure criterion ; $I_R \geq 2\mu\text{A}$ at $V_R = 21\text{V}$.

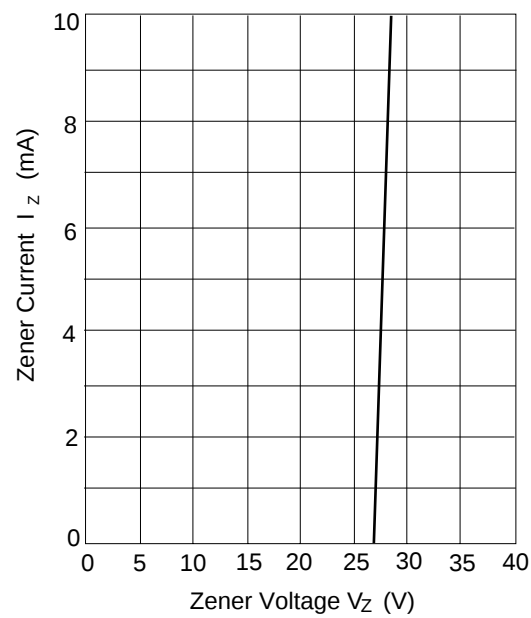


Fig.1 Zener current Vs. Zener voltage

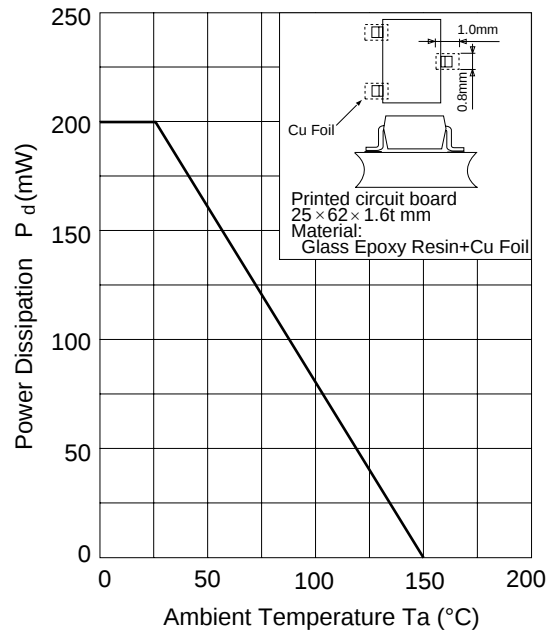


Fig.2 Power Dissipation Vs. Ambient Temperature

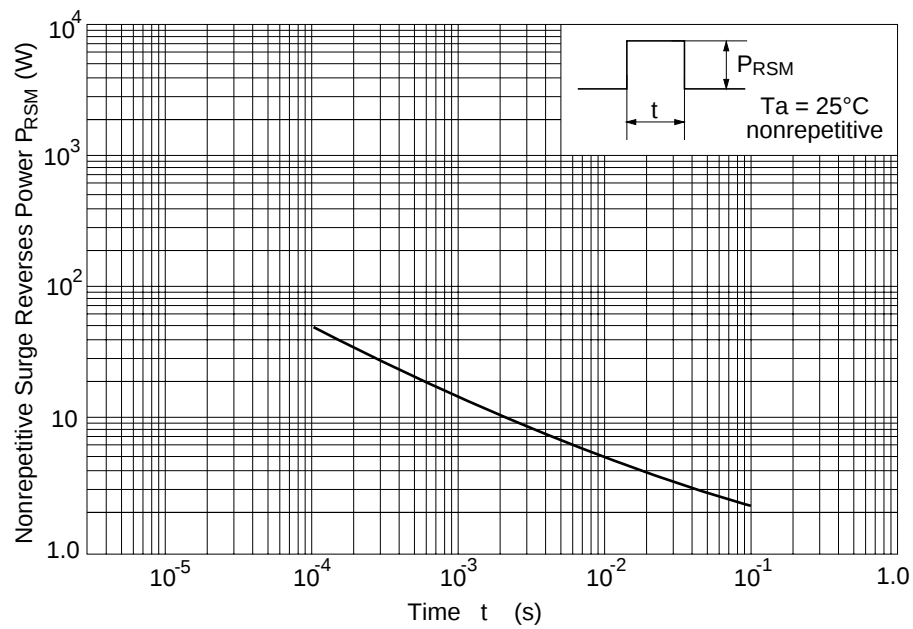


Fig.3 Surge Reverse Power Ratings

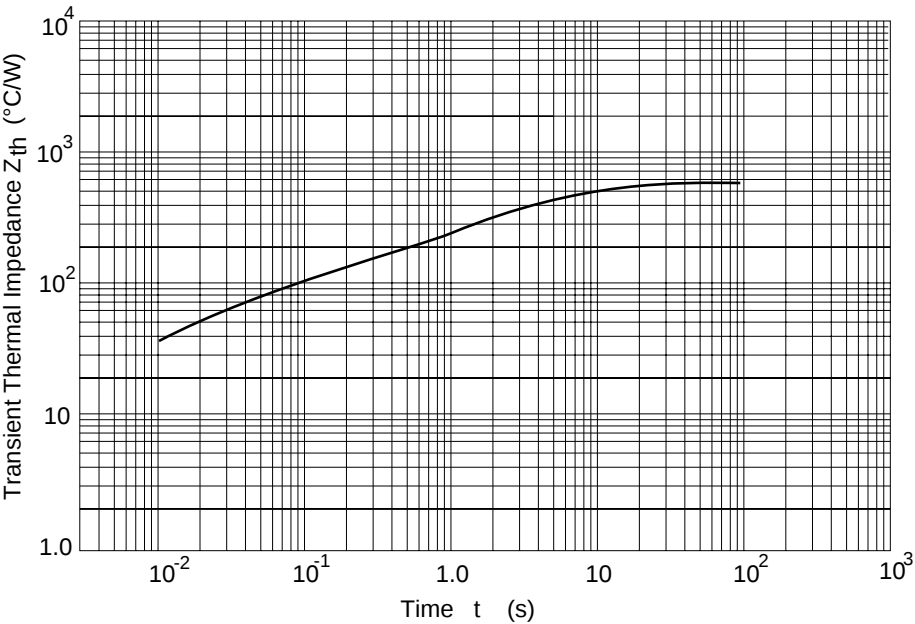
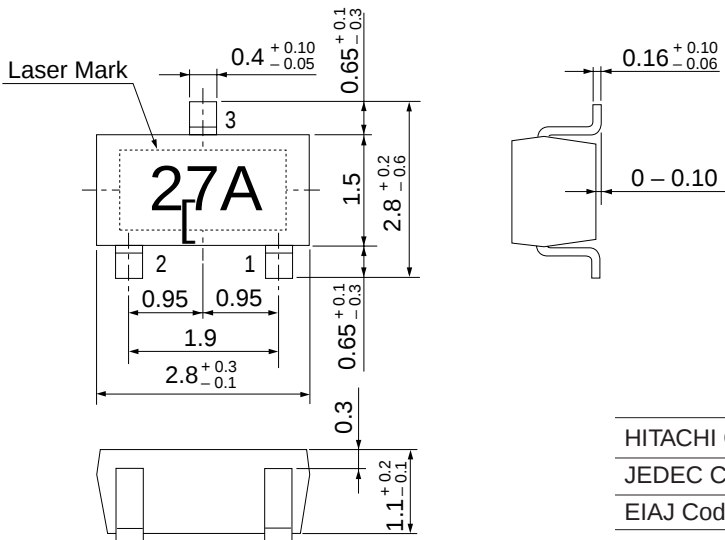


Fig.4 Transient Thermal Impedance

Package Dimensions

Unit: mm



HITACHI Code	MPAK(1)
JEDEC Code	—
EIAJ Code	SC-59A
Weight (g)	0.011