

# HZM27WA

## Silicon Epitaxial Planar Zener Diode for Surge Absorb

# HITACHI

 Rev. 0  
 May.1995

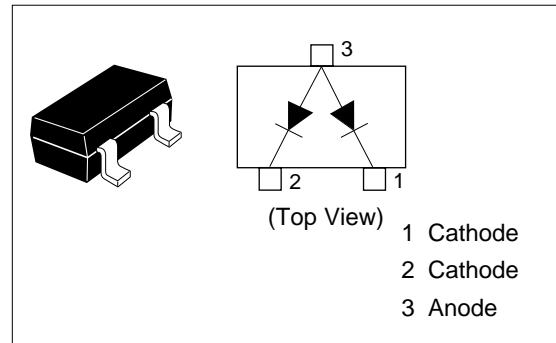
### Features

- 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.

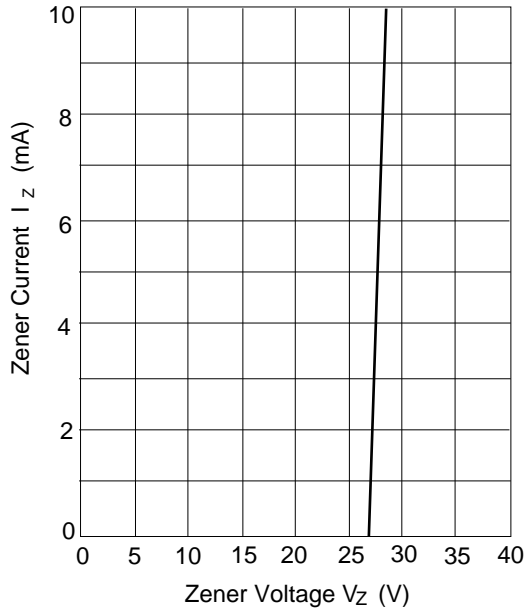
### Electrical Characteristics (Ta = 25°C)

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	$\mu\text{A}$	$V_R = 21\text{V}$
Capacitance	$C^*$	—	(27)	—	pF	$V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$
Dynamic resistance	$r_d$	—	—	70	$\Omega$	$I_Z = 2 \text{ mA}$
ESD-Capability	—	30	—	—	KV	**C=150pF, R=330 $\Omega$ Both forward and reverse direction 10 pulse

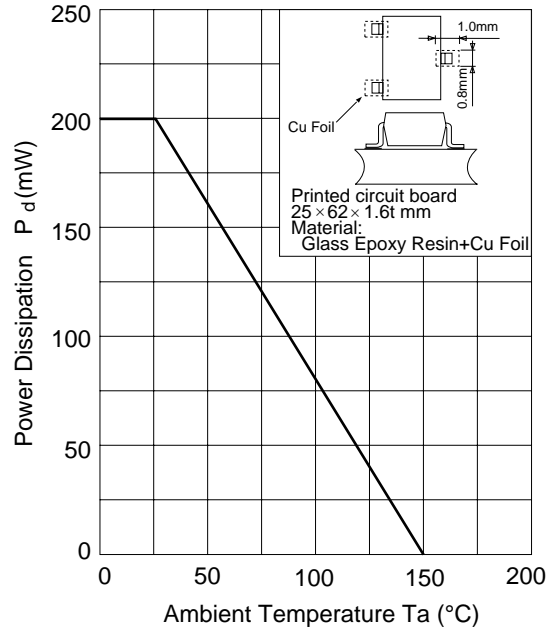
\* Reference only.

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

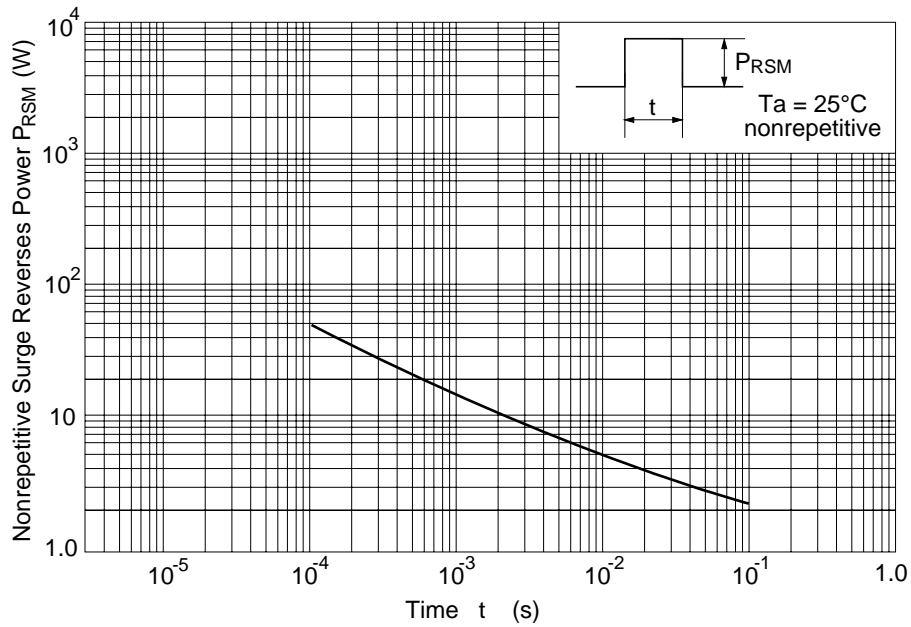
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**Fig.1 Zener current Vs. Zener voltage**



**Fig.2 Power Dissipation Vs. Ambient Temperature**



**Fig.3 Surge Reverse Power Ratings**

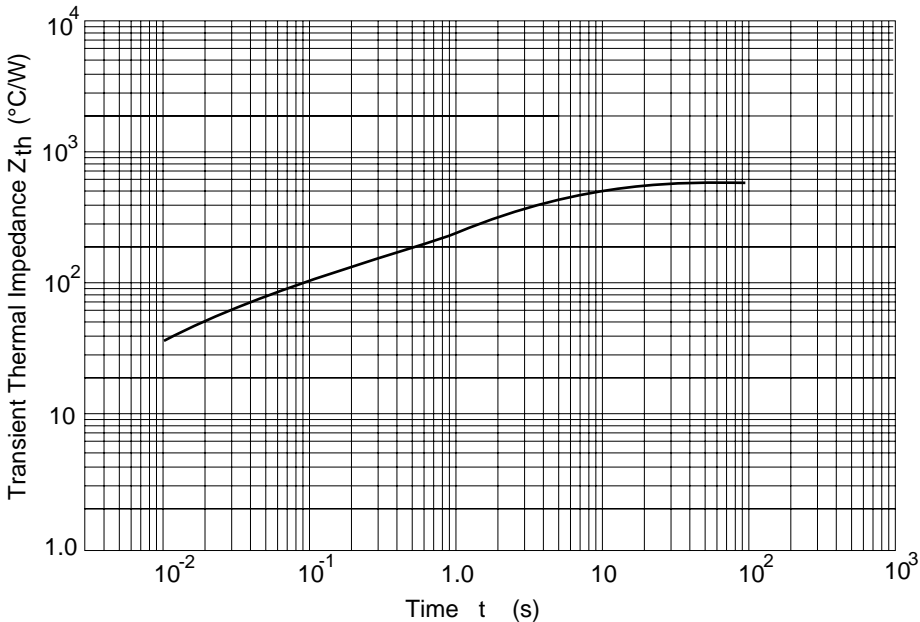
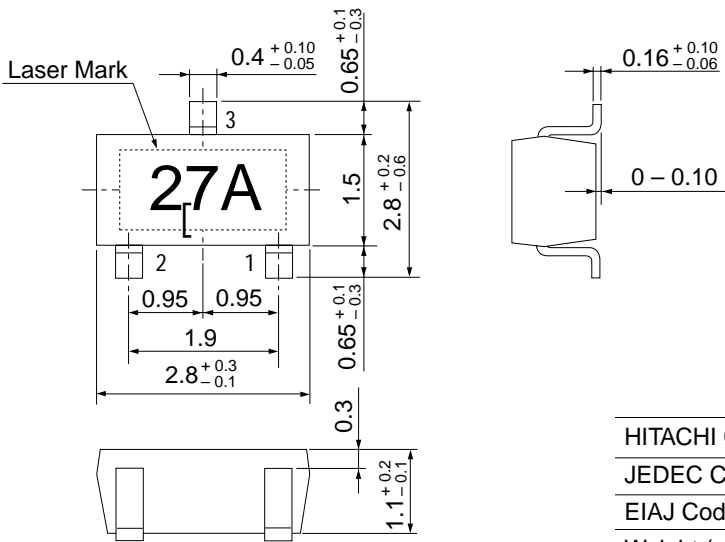


Fig.4 Transient Thermal Impedance

Package Dimensions

Unit: mm



- 1 Cathode
- 2 Cathode
- 3 Anode

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