

HZM7.5FA

Silicon Epitaxial Planar Zener Diode for Surge Absorb

HITACHI

ADE-208-616A (Z)

Rev.1
Nov. 2001

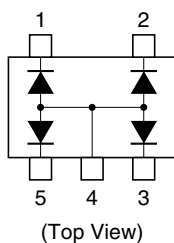
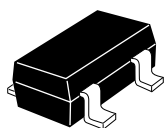
Features

- HZM7.5FA has four devices, and can absorb external + and -surge.
- MPAK-5 Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HZM7.5FA	75A	MPAK-5

Pin Arrangement



1. Cathode
2. Cathode
3. Cathode
4. Anode
5. Cathode

Absolute Maximum Ratings

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

Item	Symbol	Value	Unit
Power dissipation	P_d *	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note: Four device total, See Fig.2.

Electrical Characteristics *¹

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	V_z	7.06	—	7.84	V	$I_z = 5\text{ mA}$, 40 ms pulse
Reverse current	I_R	—	—	2	μA	$V_R = 4\text{ V}$
Capacitance	C	—	—	125	pF	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$
Dynamic resistance	r_d	—	—	30	Ω	$I_z = 5\text{ mA}$
ESD-Capability * ²	—	30	—	—	kV	C = 150 pF, R = 330 Ω , Both forward and reverse direction 10 pulse

Notes: 1. Per one device.

2. Failure criterion ; $I_R > 2\text{ }\mu\text{A}$ at $V_R = 4\text{ V}$.

Main Characteristic

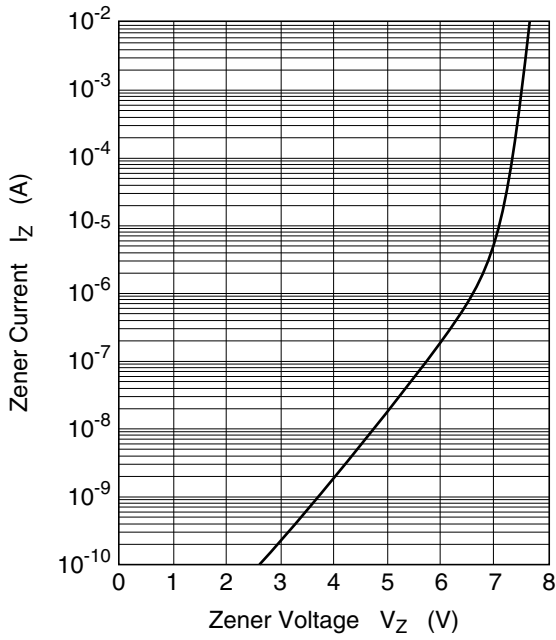


Fig.1 Zener current vs. Zener voltage

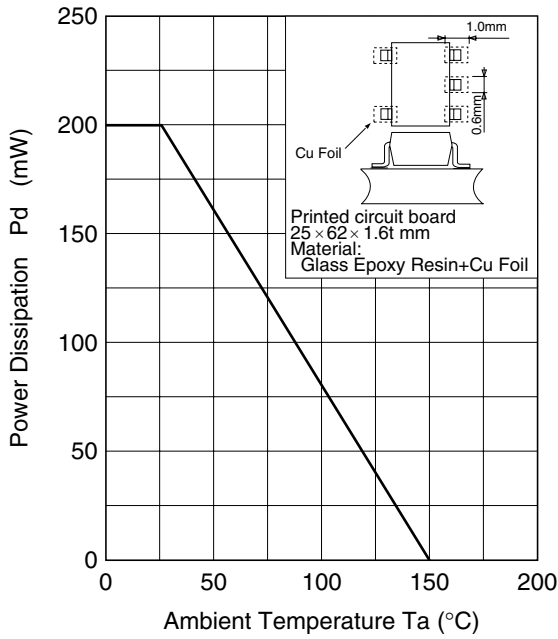


Fig.2 Power Dissipation vs. Ambient Temperature

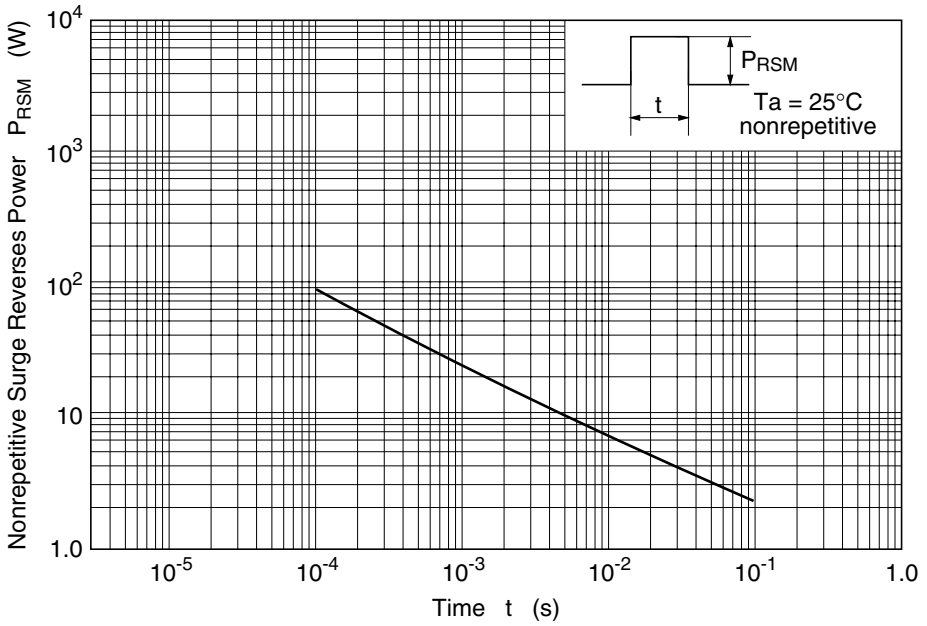


Fig.3 Surge Reverse Power Ratings

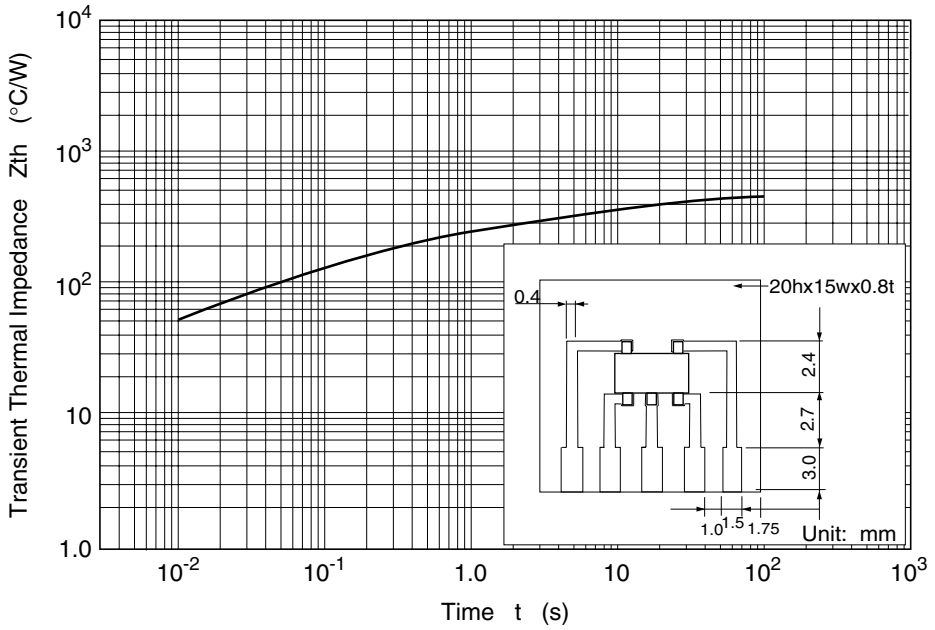
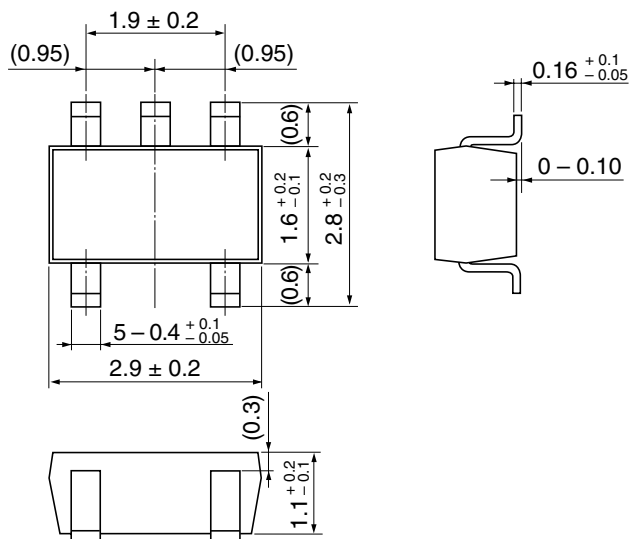


Fig.4 Transient Thermal Impedance

Package Dimensions

As of July, 2001

Unit: mm



Hitachi Code	MPAK-5
JEDEC	—
JEITA	—
Mass (reference value)	0.013 g

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