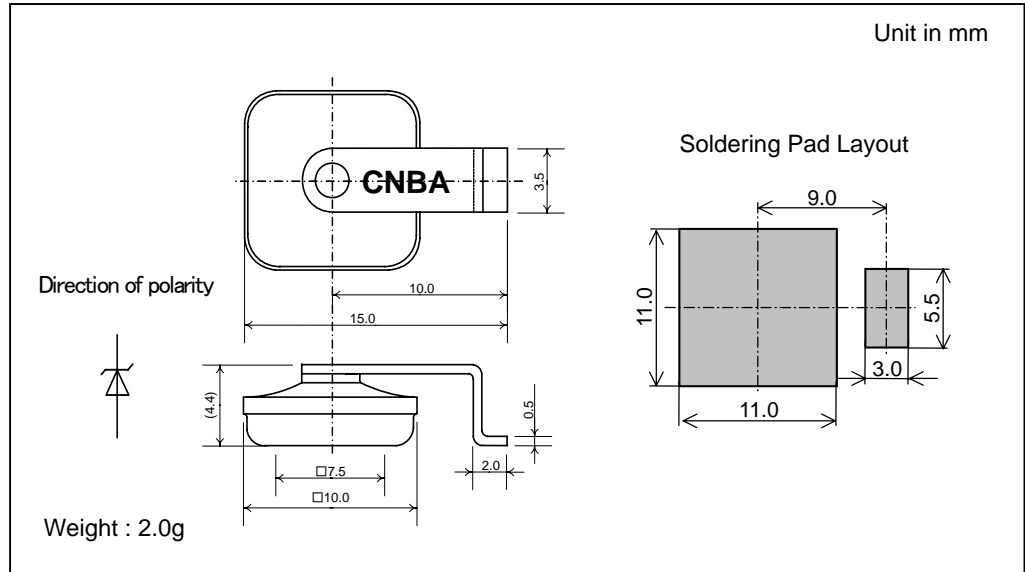


ZSH5MT48C

FEATURES

- High transient reverse power capability suitable for Load Dump Surge protecting for automobile electronic components etc.
- JEDEC DO-218 soldering pad Layout compatible.

OUTLINE DRAWING

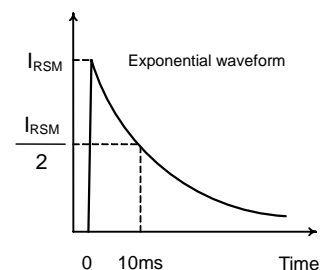


ABSOLUTE MAXIMUM RATINGS

Items	Symbols	Units	Ratings
Non-Repetitive Peak Reverse One-Cycle Dissipation	P_{RSM}	W	4,300(Rectangular pulse $t=1\text{ms}$ $T_j=25^\circ\text{C}$ start)
Non-Repetitive Peak Reverse Surge Current	I_{RSM}	A	50(Exponential waveform. See Fig.1, $T_j=25^\circ\text{C}$ start)
DC Reverse Voltage	V_{DC}	V	39
Operating Junction Temperature	T_j	$^\circ\text{C}$	-40 ~ +150
Storage Temperature	T_{stg}	$^\circ\text{C}$	-40 ~ +150

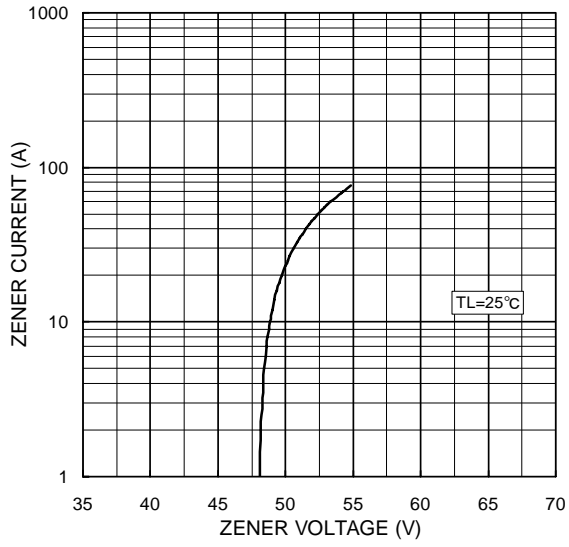
CHARACTERISTICS($T_L=25^\circ\text{C}$)

Items	Symbols	Units	Min.	Typ.	Max.	Test Conditions
Zener Voltage	V_Z	V	43.2	48.0	52.8	$I_Z=10\text{mA}$
Dynamic Impedance	Z_Z	Ω	-	-	50	$I_Z=10\text{mA}$
Zener Voltage Temperature Coefficient	γ_Z	$\%/^\circ\text{C}$	-	0.089	-	$I_Z=10\text{mA}$
Peak Forward Voltage	V_{FM}	V	-	-	1.2	$I_{FM}=6\text{A}$
Peak Reverse Current	I_{RRM}	μA	-	-	10	$V_R=39\text{V}$

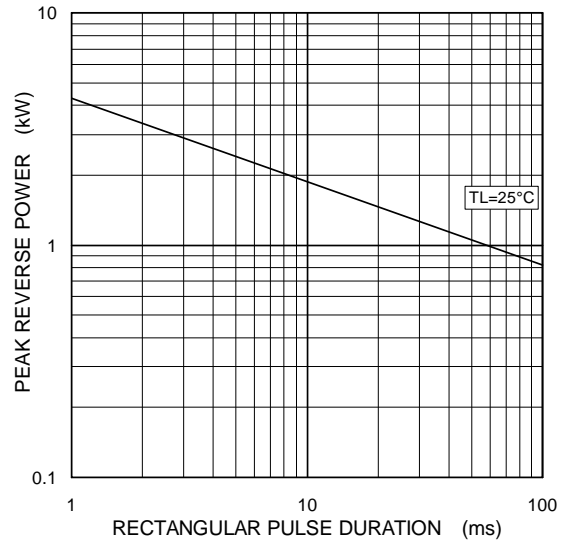
Figure 1. I_{RSM} waveform

ZSH5MT48C

Typical zener characteristics



Typical reverse power characteristics
(Rectangular pulse non-repetitive)



HITACHI POWER SEMICONDUCTORS

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