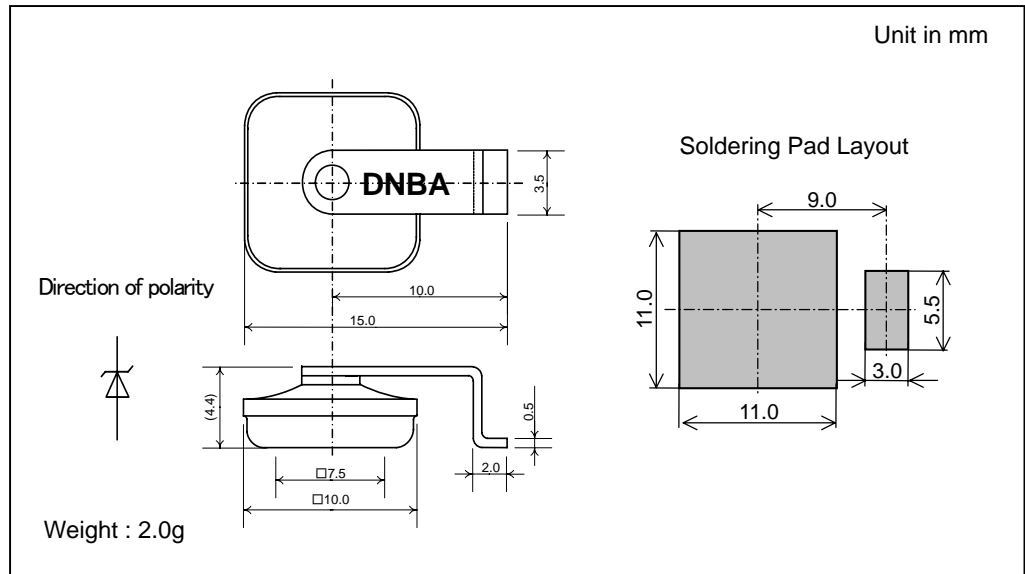


# ZSH5MT53C

## 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 $t=1ms$ $T_j=25^\circ C$ start)
Non-Repetitive Peak Reverse Surge Current	$I_{RSM}$	A	45(Exponential waveform. See Fig.1, $T_j=25^\circ C$ start)
DC Reverse Voltage	$V_{DC}$	V	43
Operating Junction Temperature	$T_j$	$^\circ C$	-40 ~ +150
Storage Temperature	$T_{stg}$	$^\circ C$	-40 ~ +150

## CHARACTERISTICS( $T_L=25^\circ C$ )

Items	Symbols	Units	Min.	Typ.	Max.	Test Conditions
Zener Voltage	$V_Z$	V	47.7	53.0	58.3	$I_Z=10mA$
Dynamic Impedance	$Z_Z$	$\Omega$	-	-	50	$I_Z=10mA$
Zener Voltage Temperature Coefficient	$\gamma_Z$	$\%/^\circ C$	-	0.091	-	$I_Z=10mA$
Peak Forward Voltage	$V_{FM}$	V	-	-	1.2	$I_{FM}=6A$
Peak Reverse Current	$I_{RRM}$	$\mu A$	-	-	10	$V_R=43V$

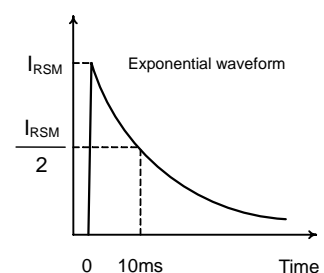
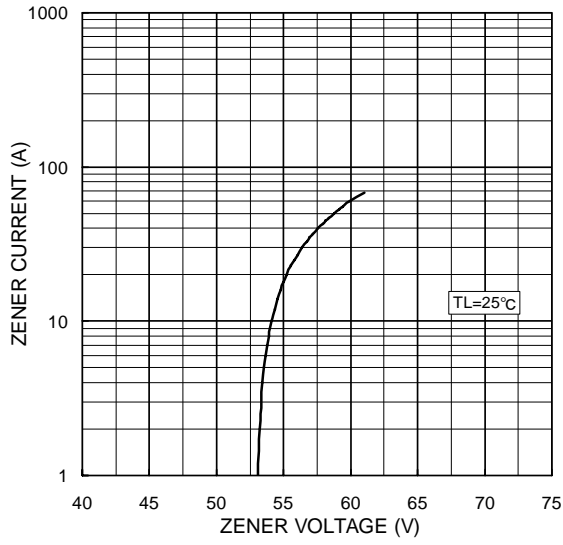


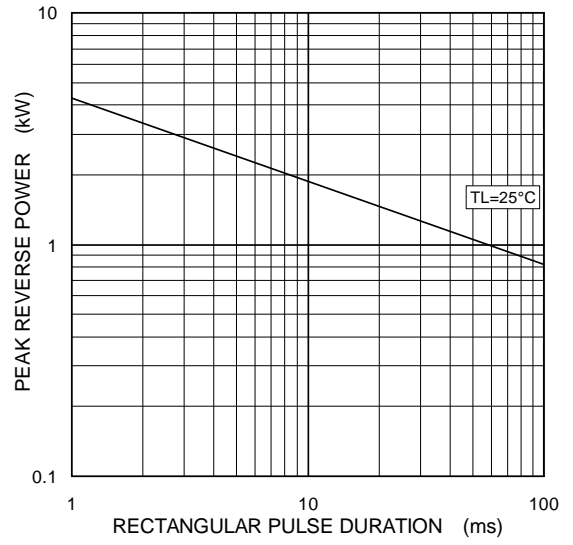
Figure 1.  $I_{RSM}$  waveform

# ZSH5MT53C

Typical zener characteristics



Typical reverse power characteristics  
(Rectangular pulse non-repetitive)



# HITACHI POWER SEMICONDUCTORS

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