

# DE5L60A

## Fast Recovery Diodes

600V, 5A

### Feature

- SMD
- High Voltage
- Low Noise
- Pb free terminal
- RoHS:Yes

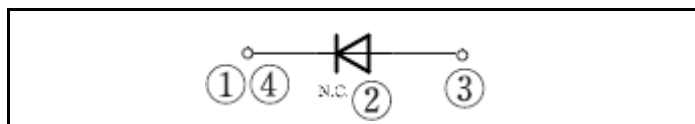
### OUTLINE

Package (House Name): E-pack

Package (JEITA Code): SC-63



### Equivalent circuit



### Absolute Maximum Ratings (unless otherwise specified : T<sub>c</sub>=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T <sub>stg</sub>		-55 to 150	°C
Junction temperature	T <sub>j</sub>		150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		600	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, T <sub>c</sub> =119°C	5	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle, Peak value, T <sub>j</sub> =25°C	60	A
Surge forward current	I <sub>FSM1</sub>	t <sub>p</sub> =1ms, Sine wave, Non-repetitive, Peak value, T <sub>j</sub> =25°C	110	A

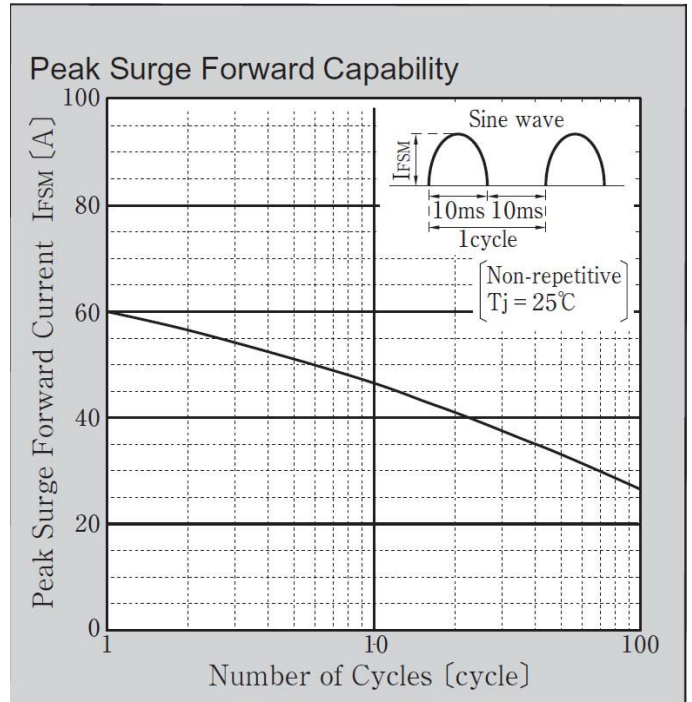
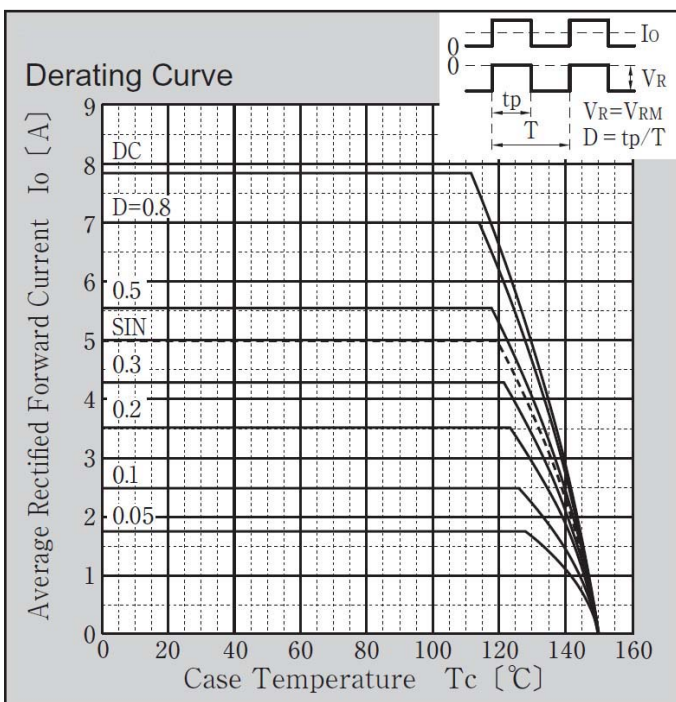
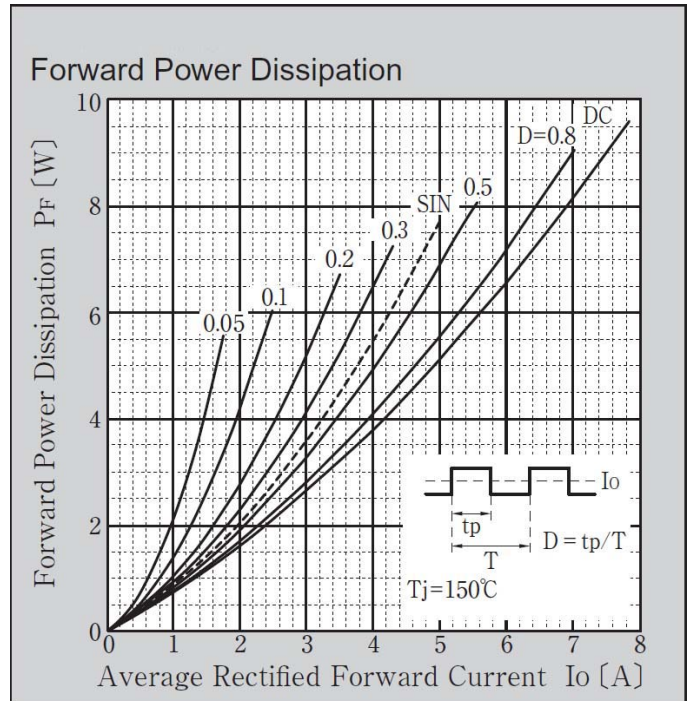
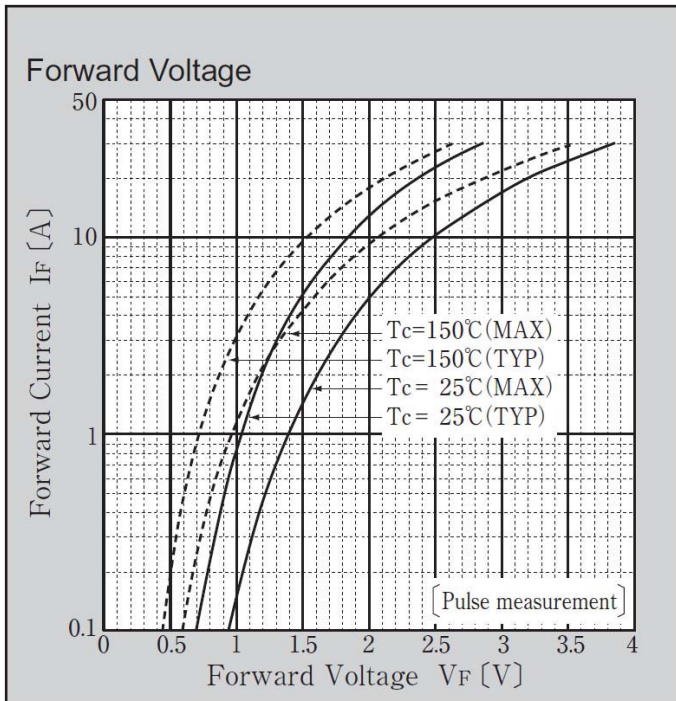
\* :See the original Specifications

**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

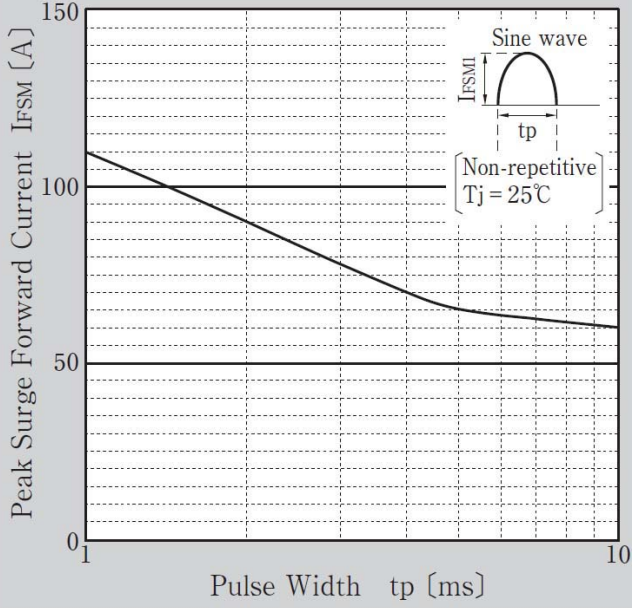
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =5.0A, Pulse measurement			2	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =600V, Pulse measurement			10	μA
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, 0.1I <sub>R</sub>			50	ns
Total capacitance	C <sub>t</sub>	f=1MHz, V <sub>R</sub> =10V		33		pF
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case			4	°C/W

\* :See the original Specifications

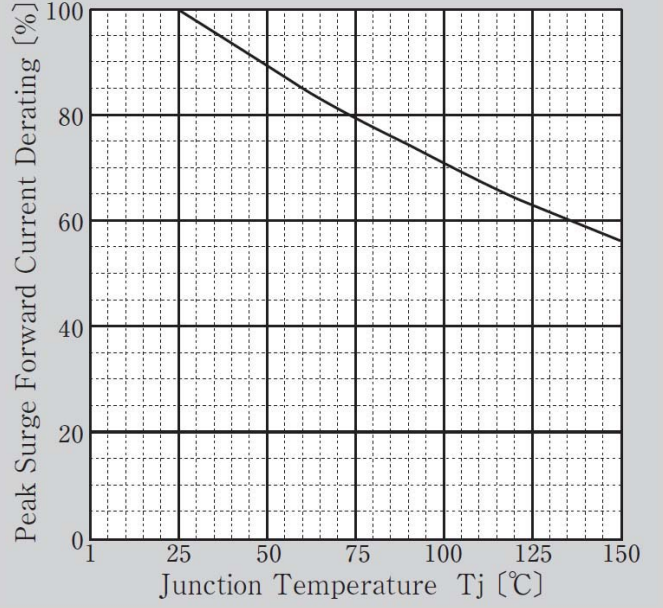
# CHARACTERISTIC DIAGRAMS



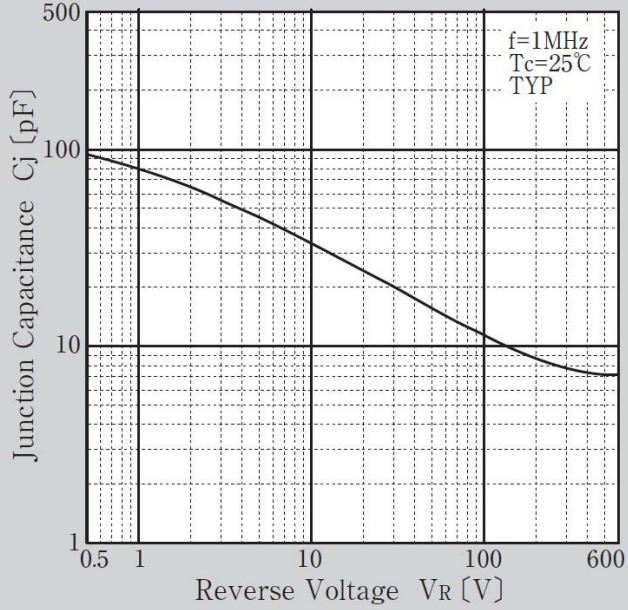
Peak Surge Forward Capability



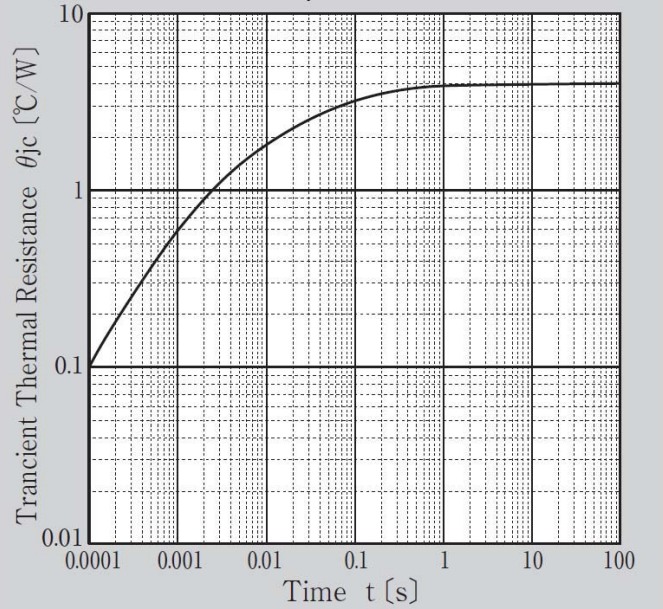
Peak Surge Forward Current Derating vs Junction Temperature



Junction Capacitance



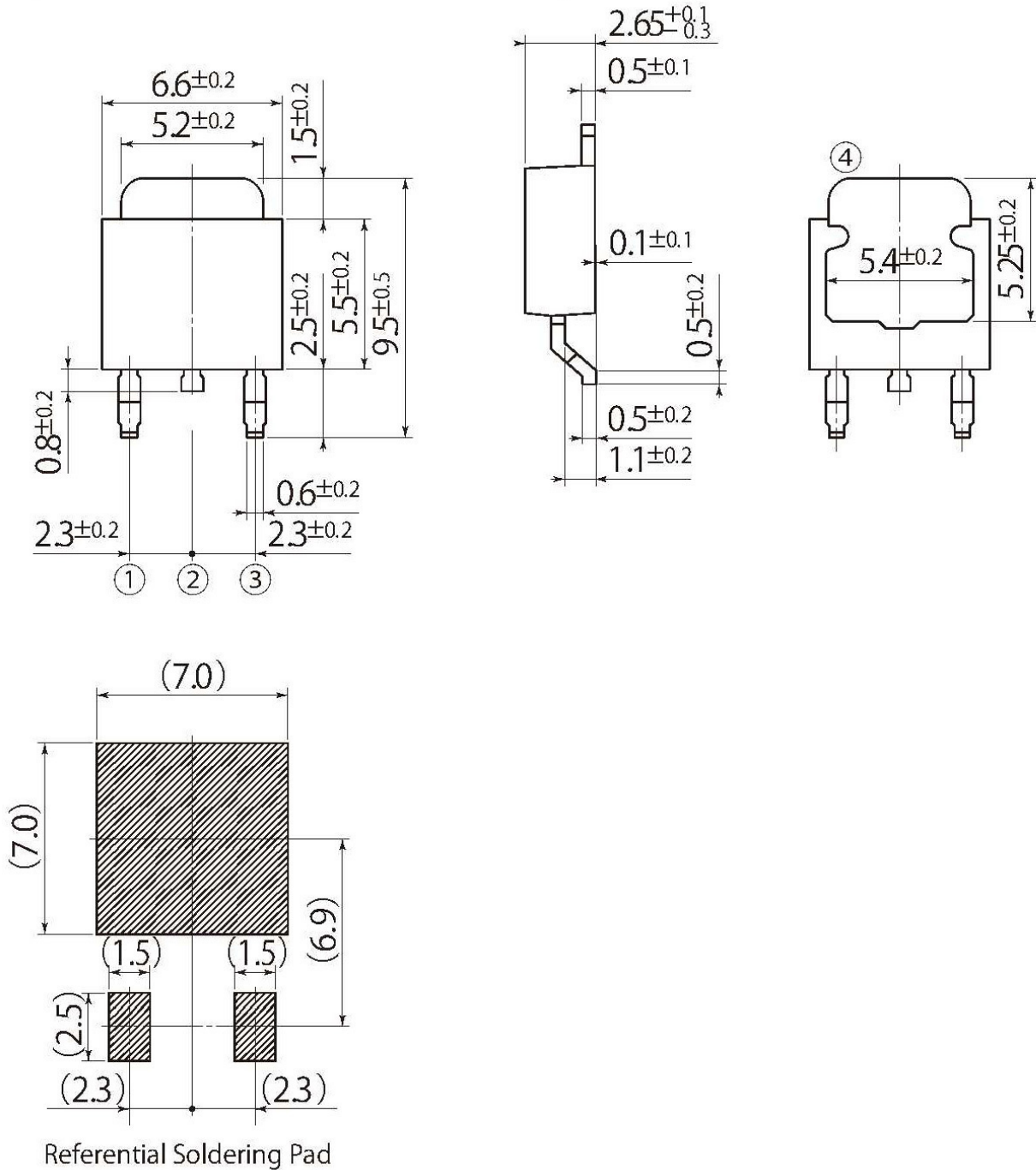
Transient Thermal Impedance





G1

JEDEC Code	-
JEITA Code	SC-63
House Name	E-pack



• Optimize soldering pad to the board design and soldering condition.

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