ShinDengen

DE5L60U

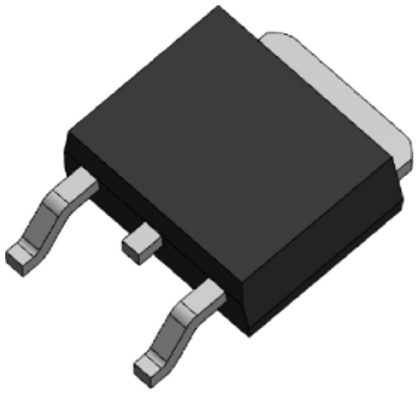
Fast Recovery Diodes
600V, 5A

Feature

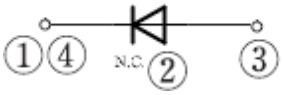
- SMD
- High Voltage
- Low Noise
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): E-pack
Package (JEITA Code): SC-63



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V_{RRM}		600	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, With heatsink, Tc=91°C ※	5	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C	60	A

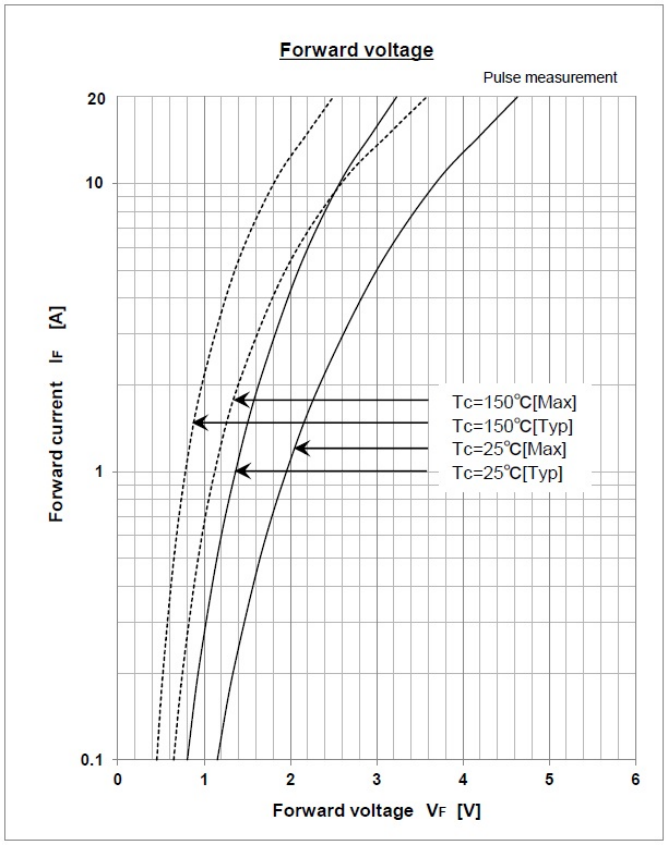
※ ：See the original Specifications

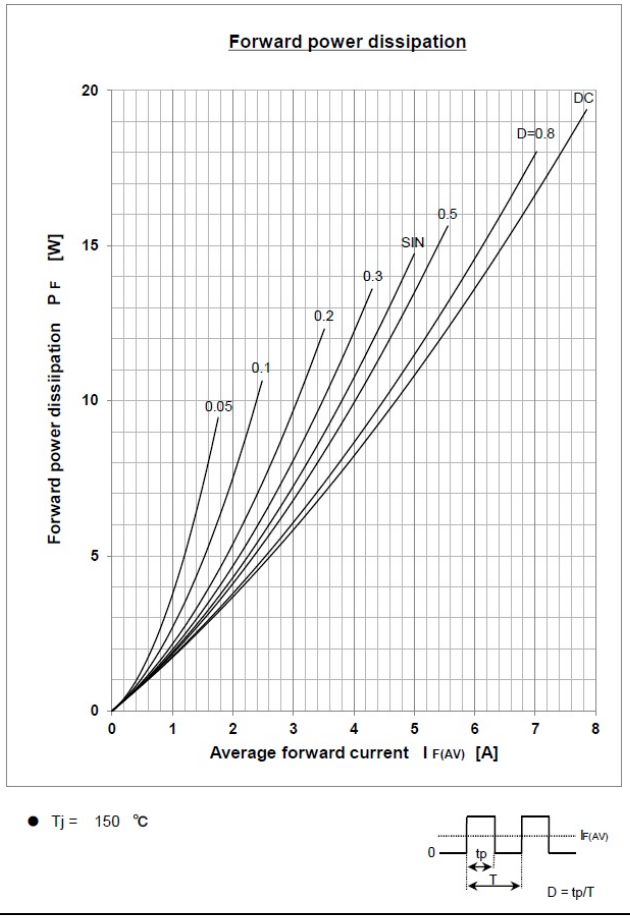
Electrical Characteristics (unless otherwise specified : Tc=25°C)

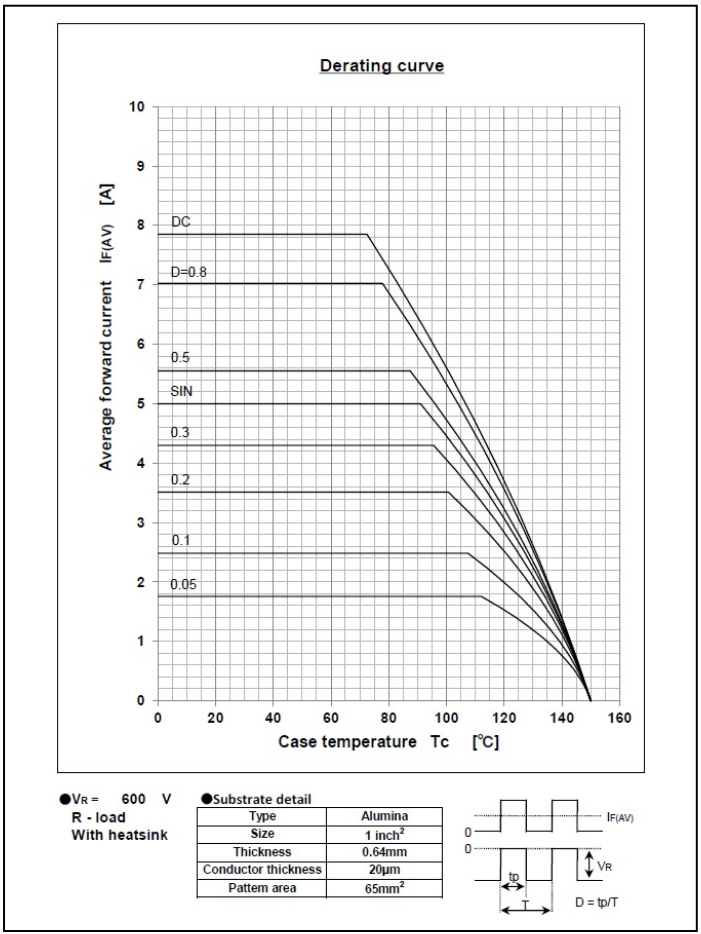
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=5A, Pulse measurement			3	V
Reverse current	I_R	VR=600V, Pulse measurement			25	μA
Reverse recovery time	trr	IF=0.5A, IR=1A, 0.1IR			25	ns
Total capacitance	Ct	f=1MHz, VR=10V		30		pF
Thermal resistance	Rth(j-c)	Junction to case, With heatsink ※			4	°C/W

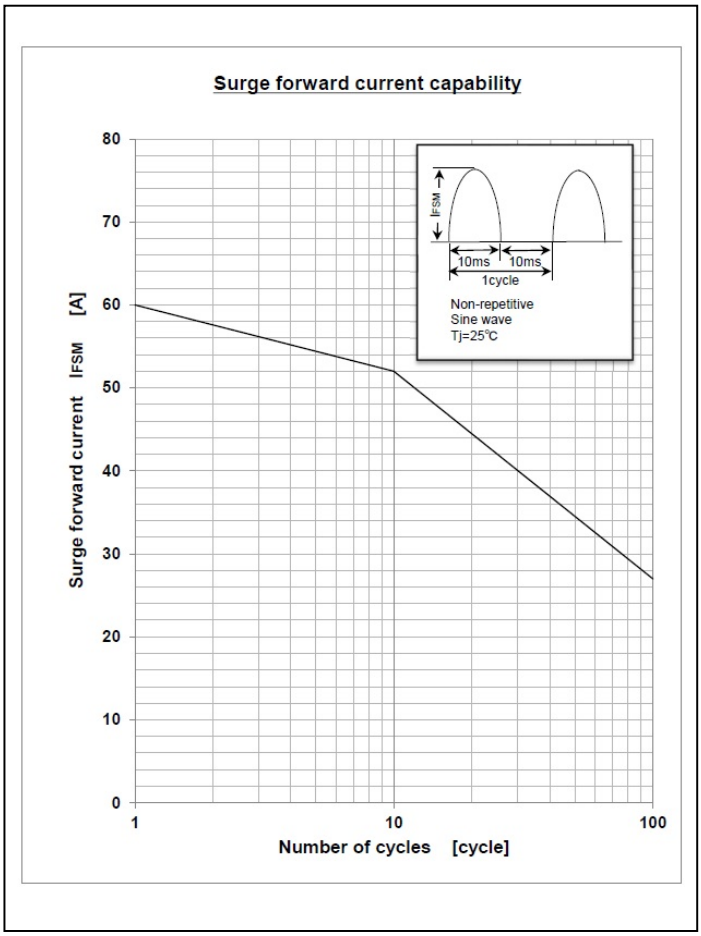
※ ：See the original Specifications

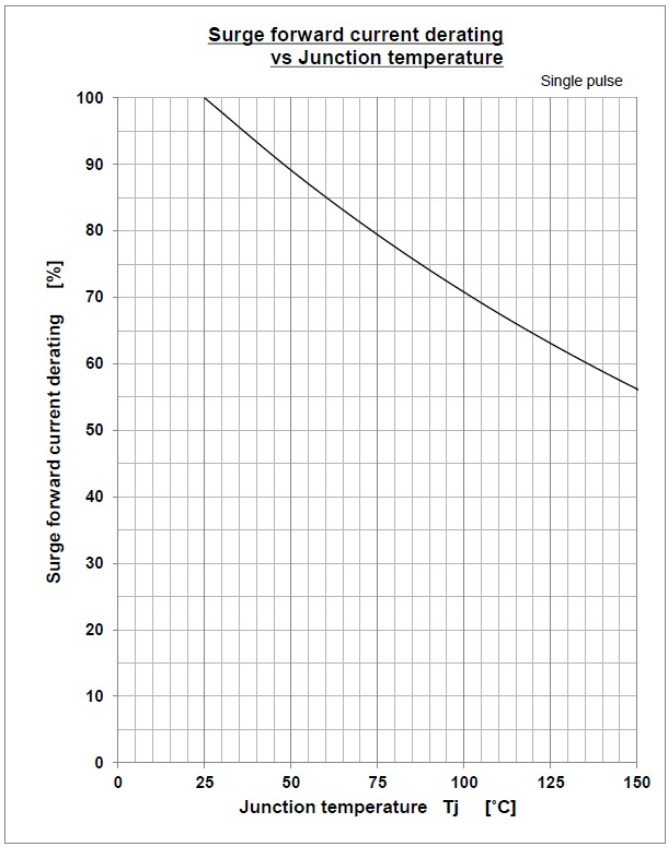
CHARACTERISTIC DIAGRAMS

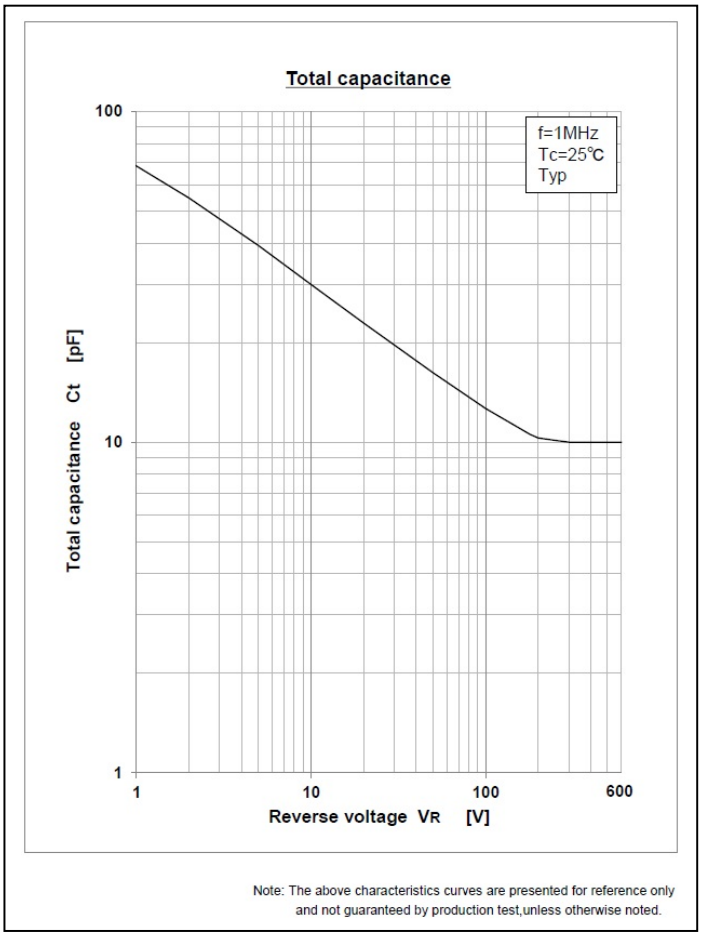




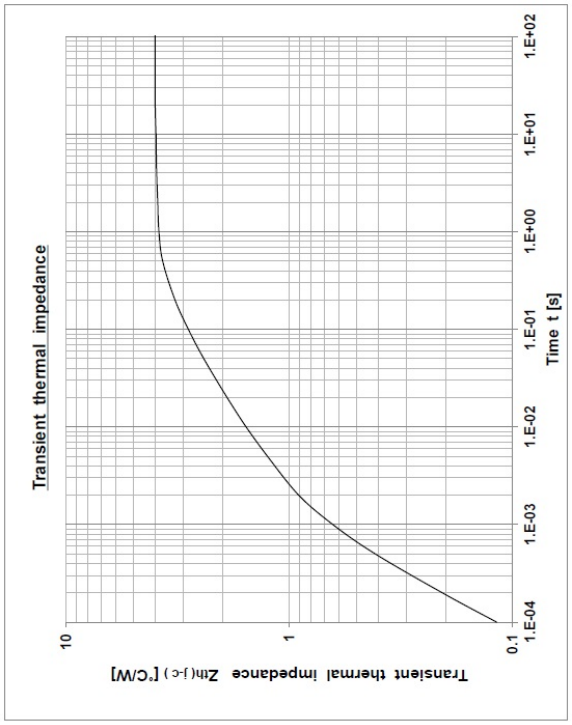




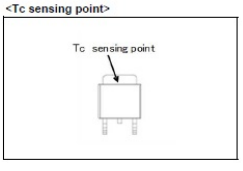




Note: The above characteristics curves are presented for reference only and not guaranteed by production test,unless otherwise noted.



<Tc sensing point>



●Substrate detail

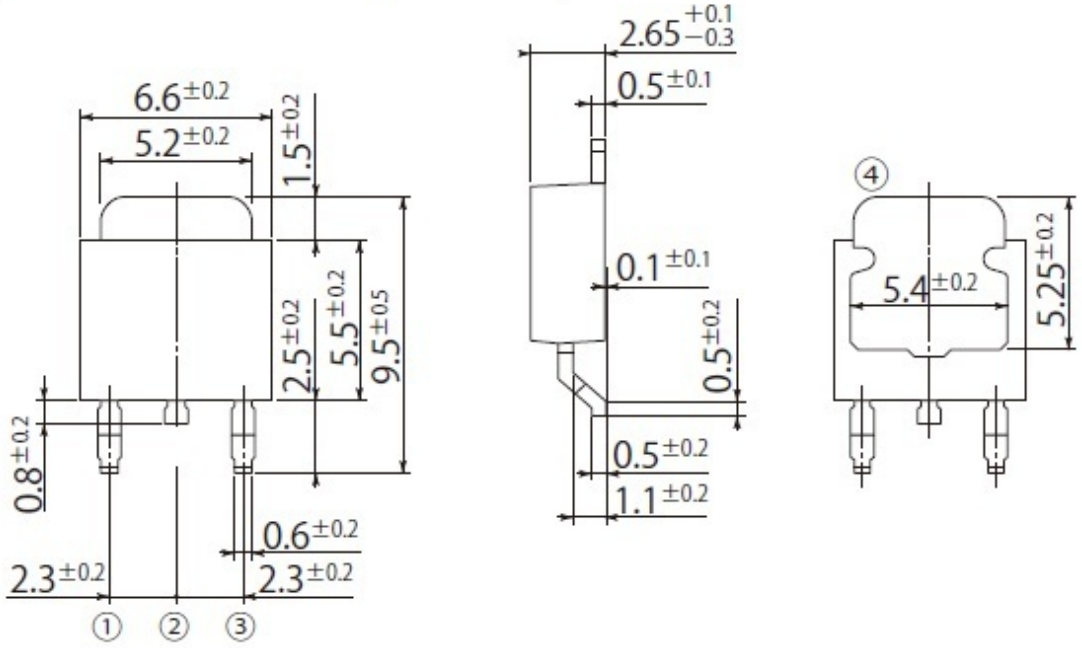
Type	Alumina
Size	1 inch²
Thickness	0.64mm
Conductor thickness	20μm
Pattern area	65mm²

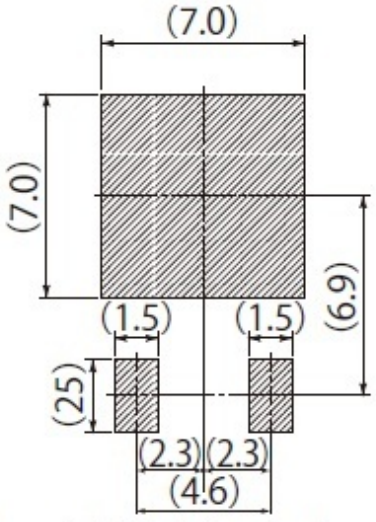
Outline Dimensions

unit:mm

G1

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

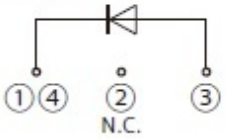




Referential Soldering Pad

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

Fig. G1-5



- The content specified herein is subject to change for improvement without notice.
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U182-1(2026.09)

Notes

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   【Special applications】
   Transportation equipment (vehicles, ships, etc.), trunk-line communication equipment, traffic signal control systems, anti-disaster/crime systems, safety equipment, medical equipment, etc.
   【Specific applications】
   Nuclear reactor control systems, aircraft, aerospace equipment, submarine repeaters, life support equipment and systems, etc.
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