ShinDengen

DE5LC20U

Fast Recovery Diodes
200V, 5A

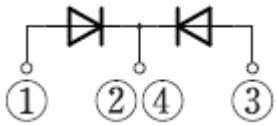
Feature

- SMD
- High Recovery Speed
- 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℃)

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	℃
Junction temperature	Tj		150	℃
Repetitive peak reverse voltage	V_{RRM}		200	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, Tc=81℃	5	A
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On alumina substrate, Rating for each diode IF(AV)/2, Ta=25℃	2.6	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25℃	50	A

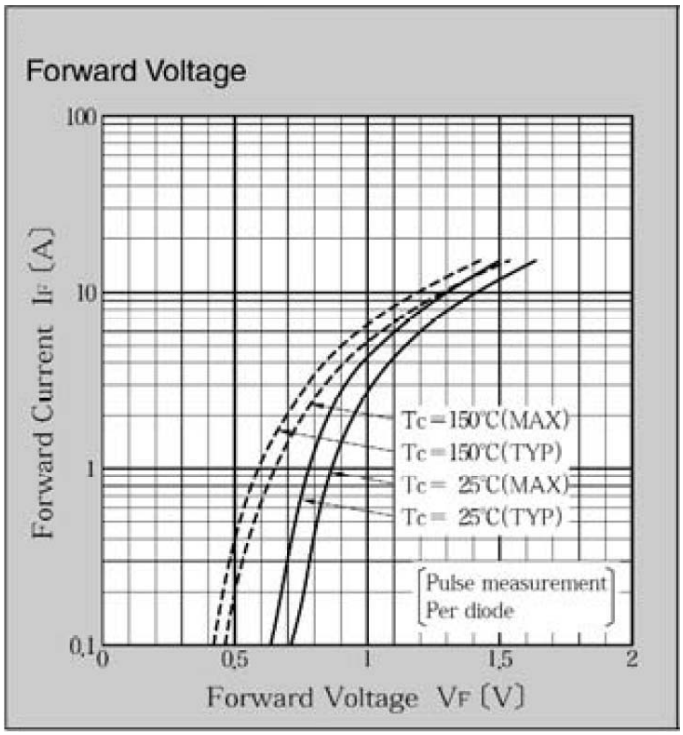
※ :See the original Specifications

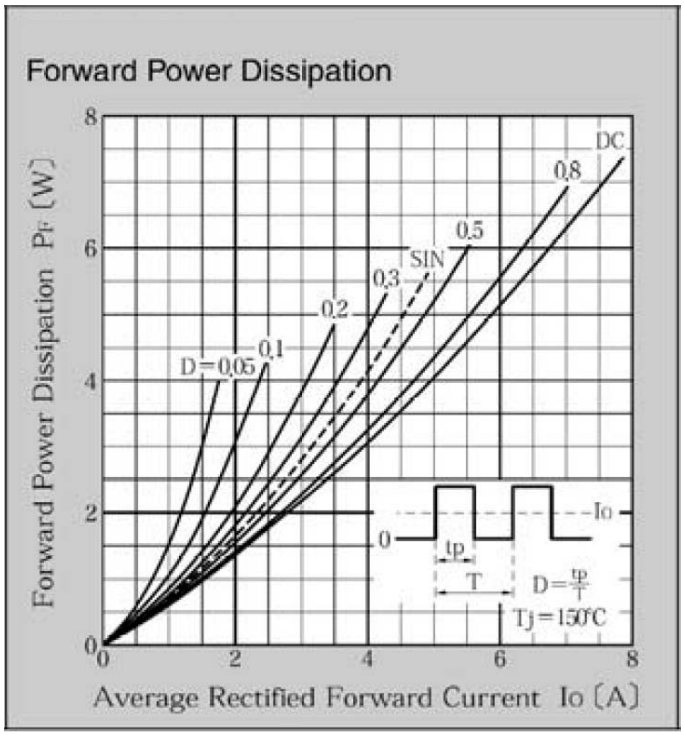
Electrical Characteristics (unless otherwise specified : Tc=25℃)

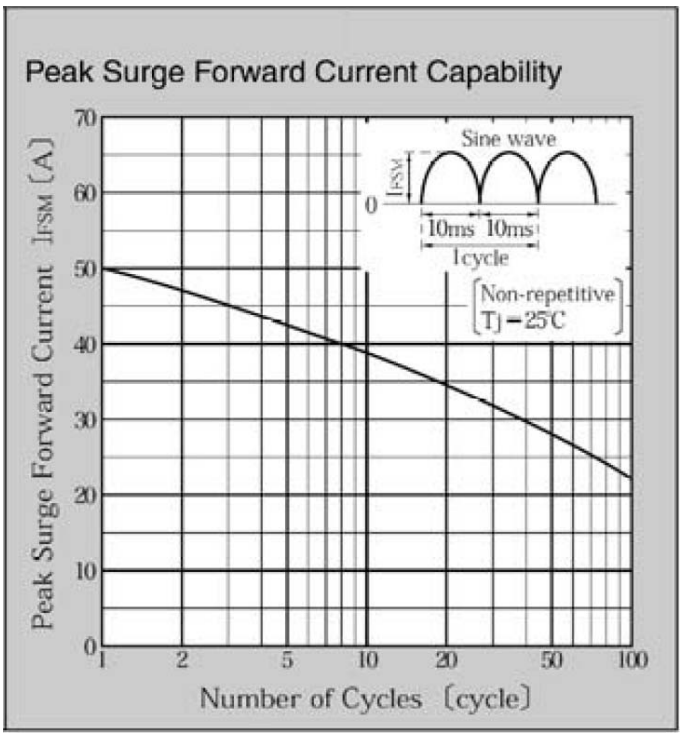
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=2.5A, Pulse measurement, Per diode			0.98	V
Reverse current	I_R	VR=200V, Pulse measurement, Per diode			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1A, Per Diode			35	ns
Thermal resistance	Rth(j-c)	Junction to case			12	℃/W
Thermal resistance	Rth(j-a)	Junction to ambient			55	℃/W

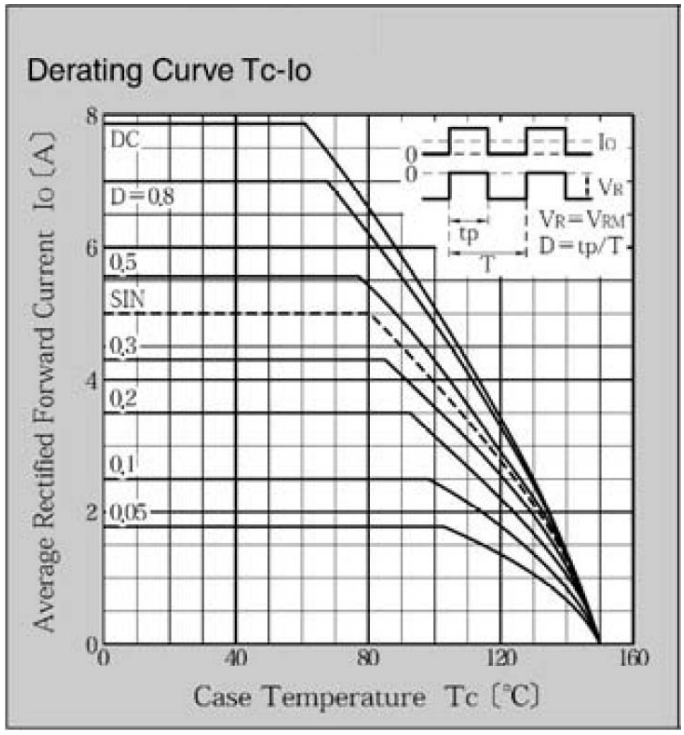
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

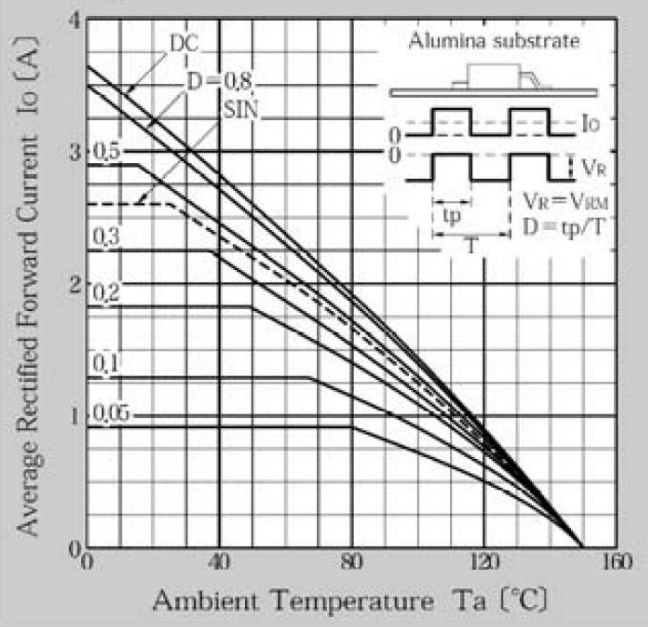






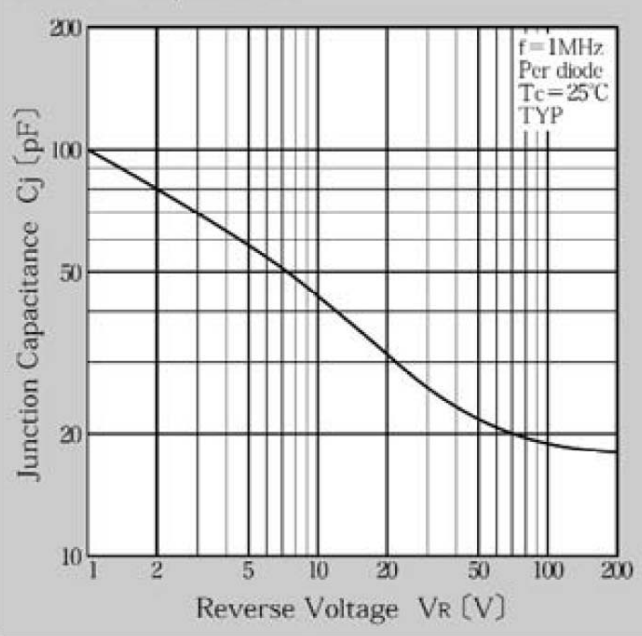


Derating Curve Ta-Io



Soldering land of lead wire	1.5×2.5mm
Soldering land of heatsink	7×7mm
Conductor layer	20μm
Substrate thickness	0.64mm

Junction Capacitance



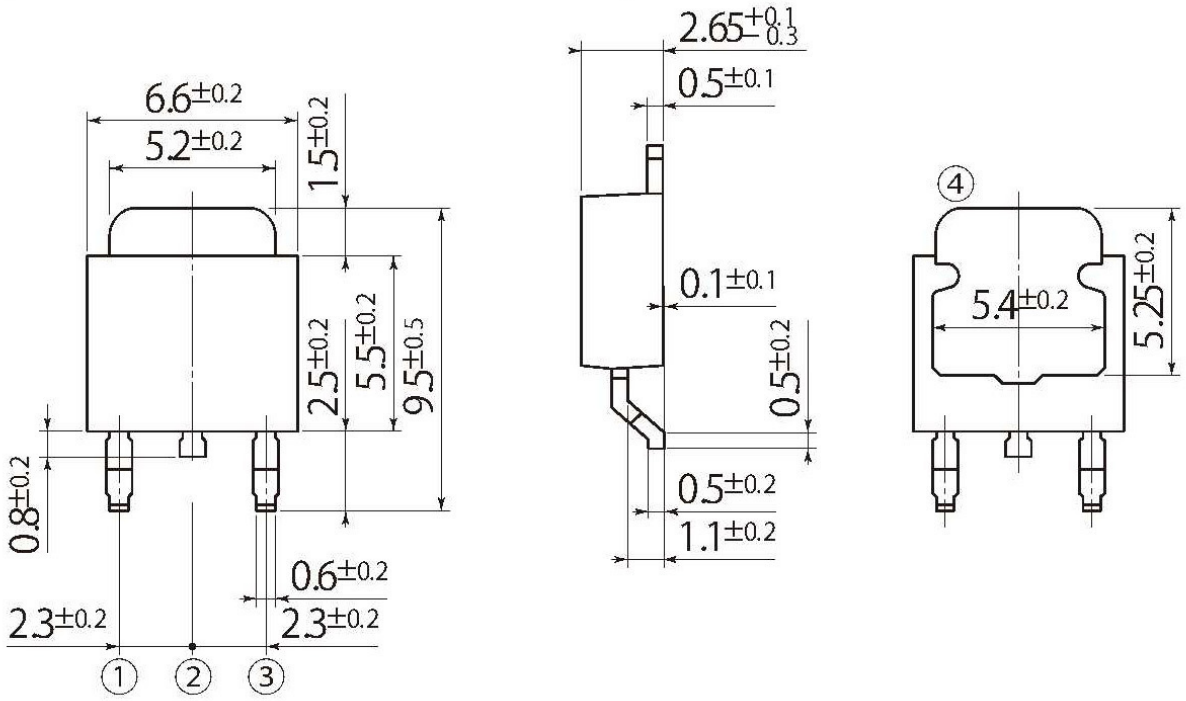
Outline Dimensions

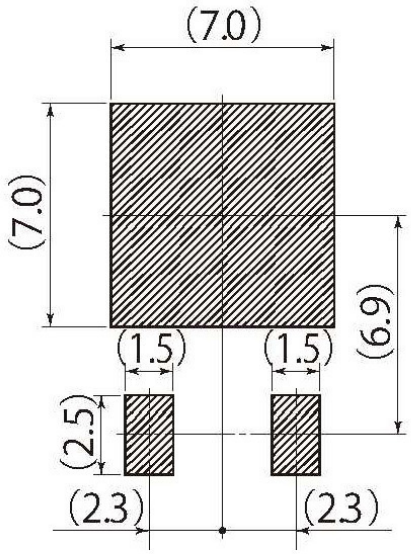
unit:mm

scale: 3/1

G1

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





Referential Soldering Pad

• Optimize soldering pad to the board design and soldering condi tion.

Notes

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