

DE5LC20U

Fast Recovery Diodes

200V, 5A

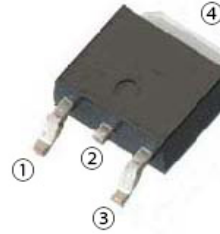
Feature

- SMD
- High Recovery Speed
- Pb free terminal
- RoHS:Yes

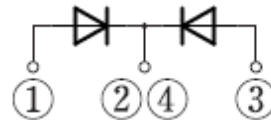
OUTLINE

Package (House Name): E-pack

Package (JEITA Code): SC-63



Equivalent circuit



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

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

※ : See the original Specifications

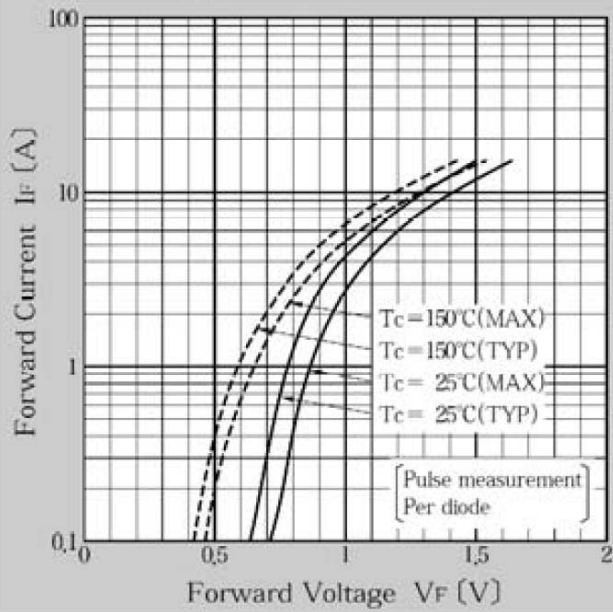
Electrical Characteristics (unless otherwise specified : Tc=25°C)

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

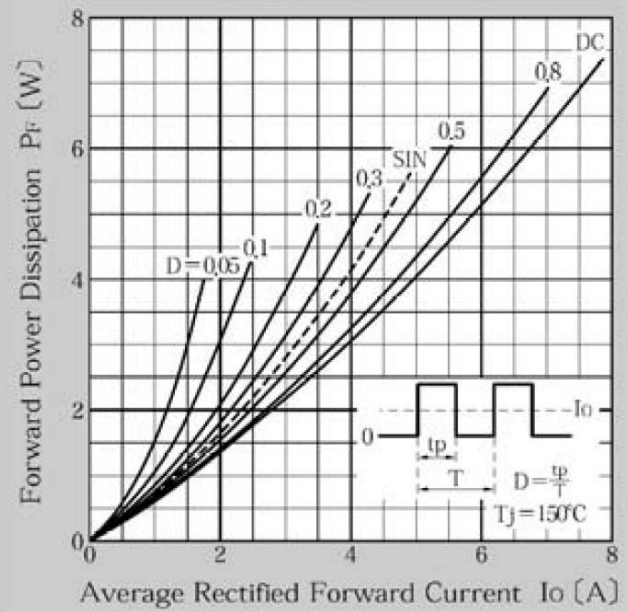
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

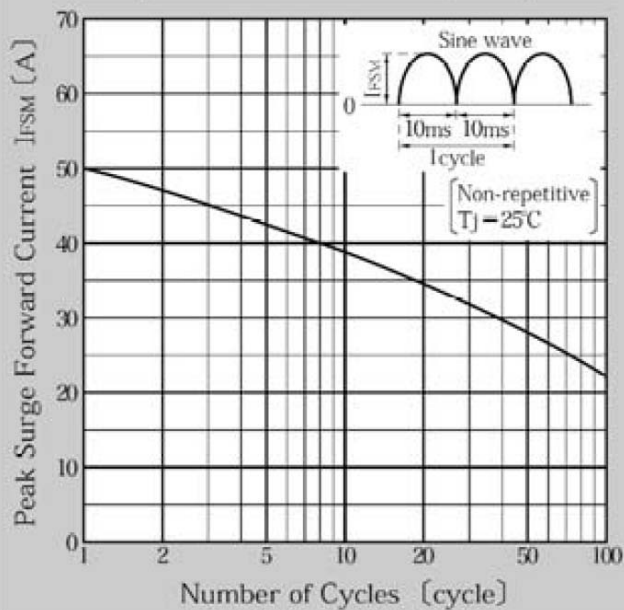
Forward Voltage



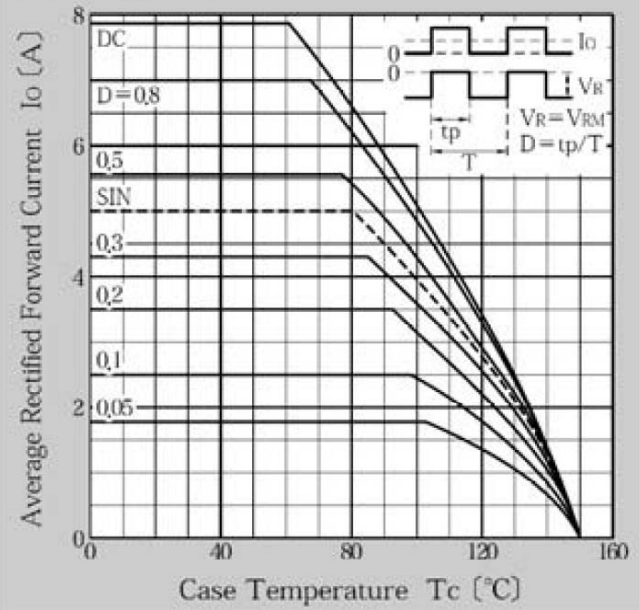
Forward Power Dissipation



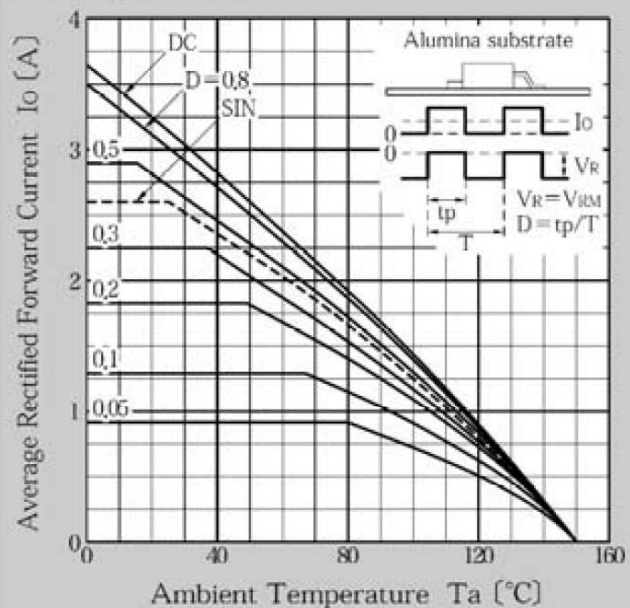
Peak Surge Forward Current Capability



Derating Curve T_c - I_o

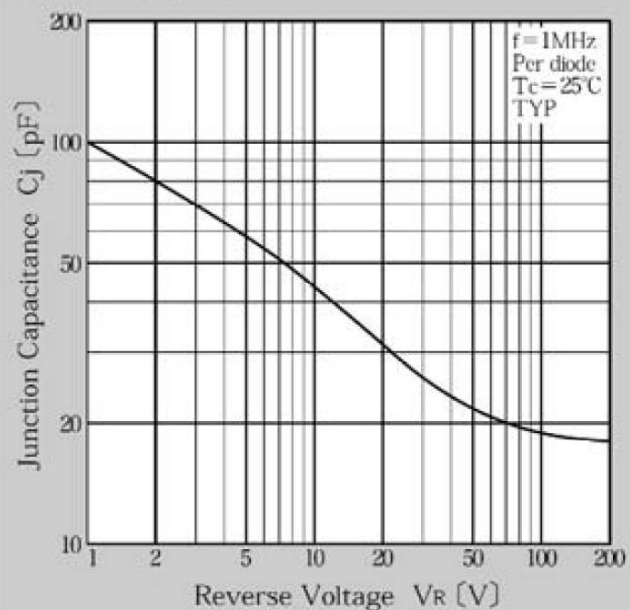


Derating Curve Ta-Io



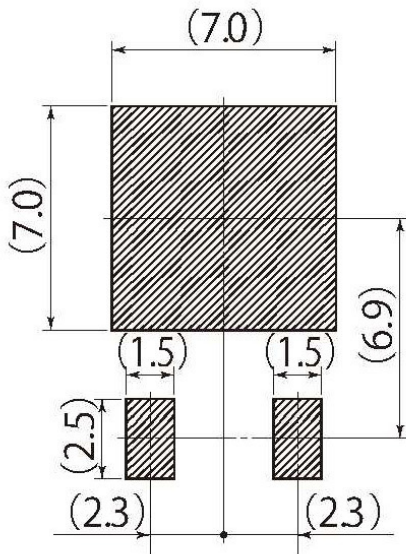
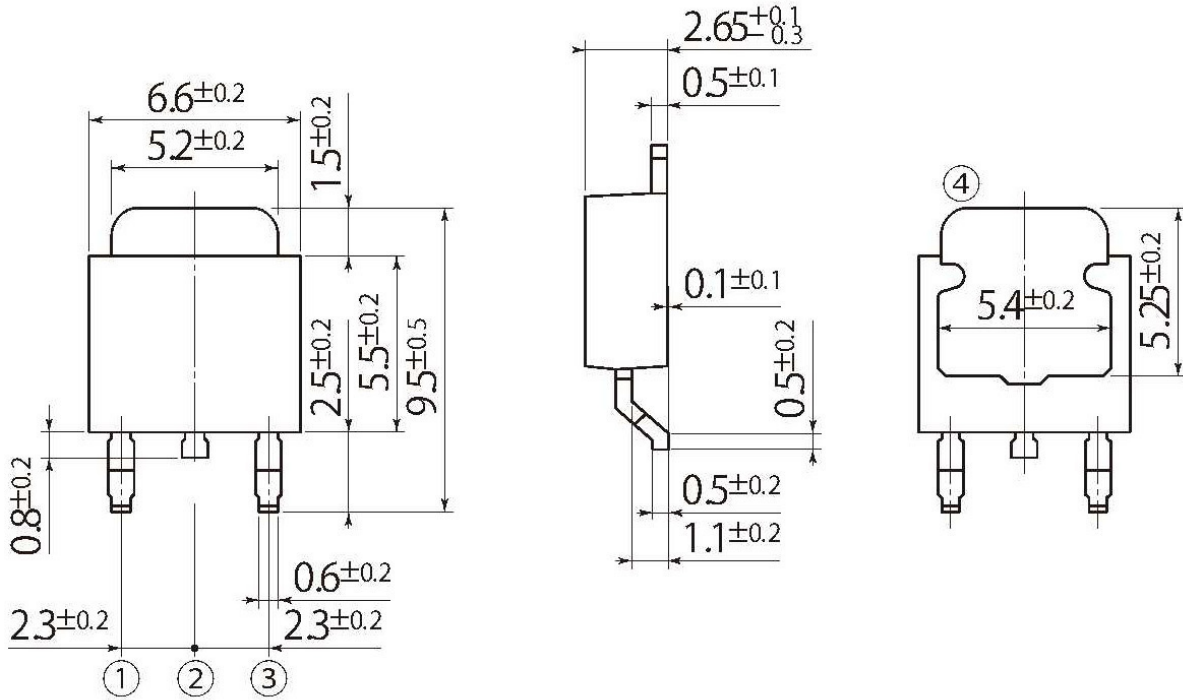
Soldering land of lead wire	1,5×2,5mm
Soldering land of heatsink	7×7mm
Conductor layer	20μm
Substrate thickness	0,64mm

Junction Capacitance



G1

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



Referential Soldering Pad

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

Notes

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