

DE5SC3ML

Schottky Barrier Diodes  
30V, 5A

Feature

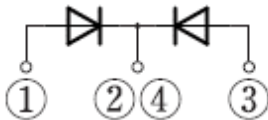
- SMD
- High Recovery Speed
- Low  $V_F$
- Pb free terminal
- RoHS:Yes

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		150	°C
Repetitive peak reverse voltage	$V_{RRM}$		30	V
Repetitive peak surge reverse voltage	$V_{RRSM}$	Pulse width 0.5ms, duty=1/40	35	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Rating for each diode $I_F(AV)/2$ , Tc=110°C	5	A
Surge forward current	$I_{FSM}$	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	90	A
Repetitive peak surge reverse power	$P_{RRSM}$	Pulse width 10μs, Tj=25°C, per diode	330	W

※ :See the original Specifications

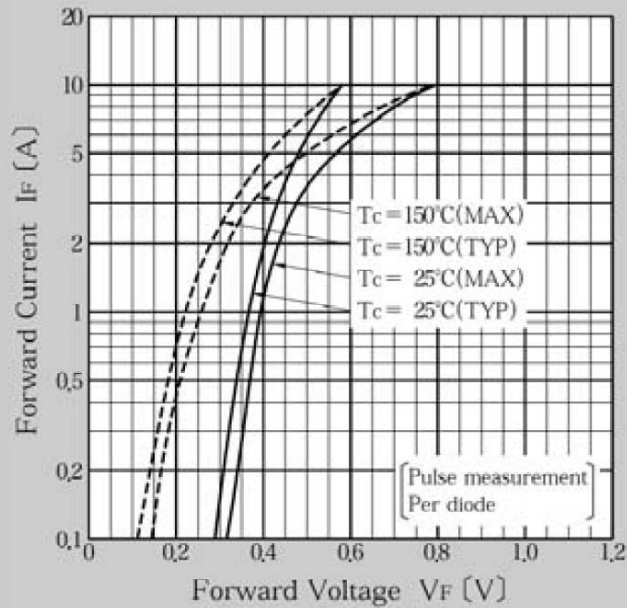
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	IF=2.5A, Pulse measurement, per diode			0.45	V
Reverse current	$I_R$	VR=30V, Pulse measurement, per diode			3.5	mA
Total capacitance	Ct	f=1MHz, VR=10V, per diode		190		pF
Thermal resistance	Rth(j-c)	Junction to case			12	°C/W

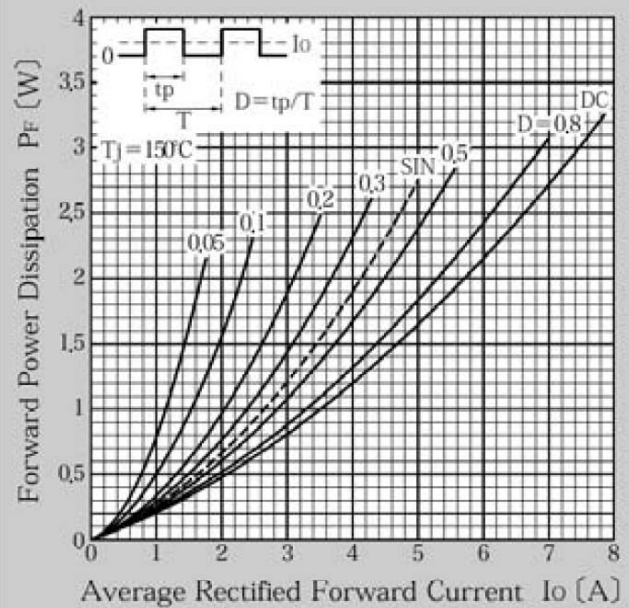
※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS

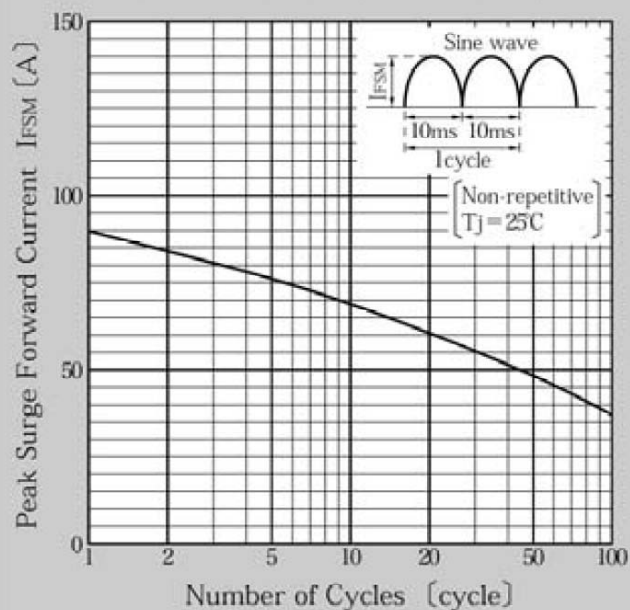
Forward Voltage



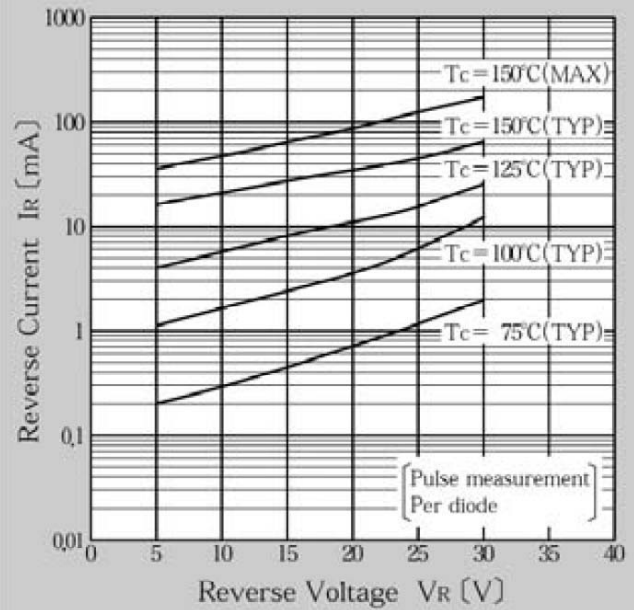
Forward Power Dissipation



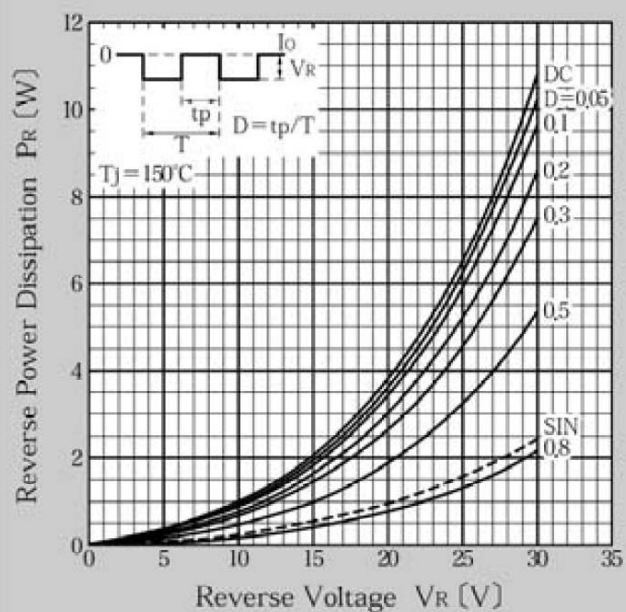
Peak Surge Forward Current Capability



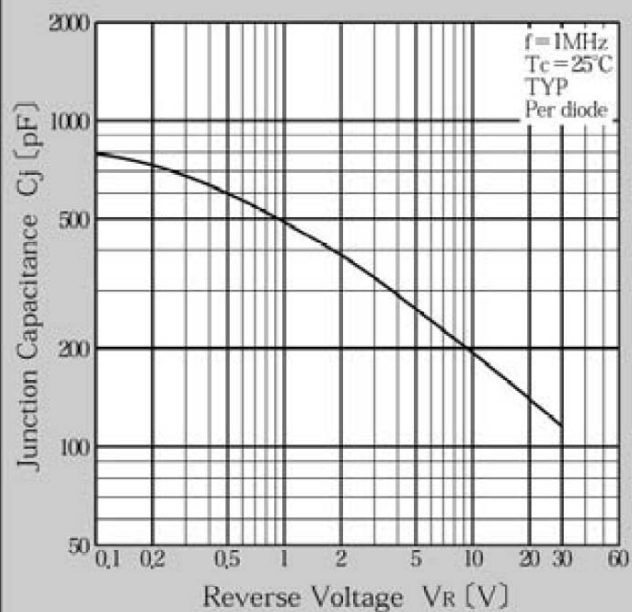
Reverse Current



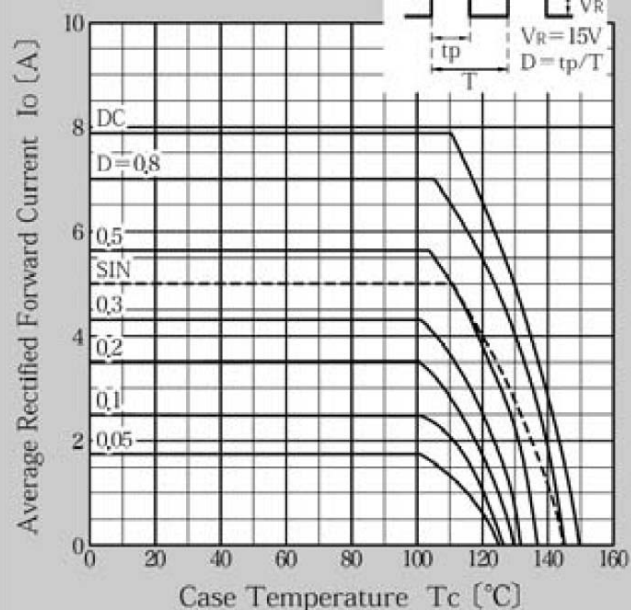
### Reverse Power Dissipation



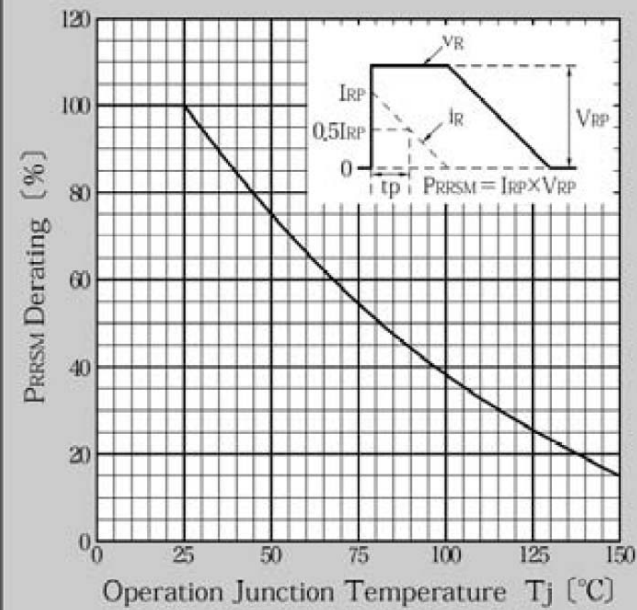
### Junction Capacitance



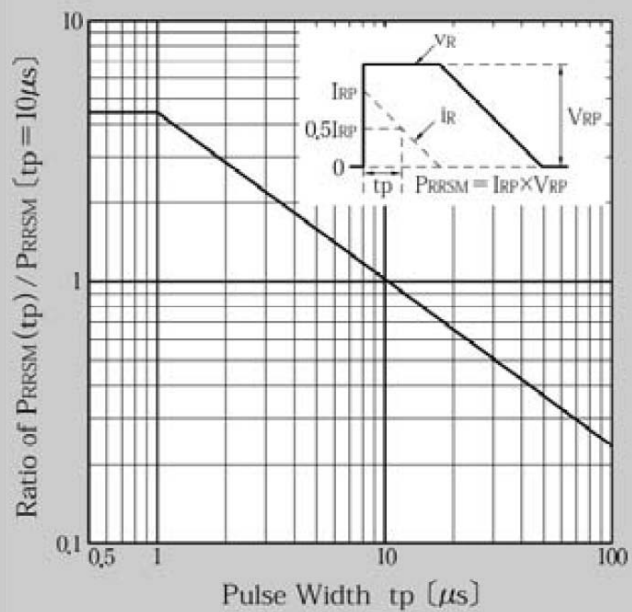
### Derating Curve $T_c$ - $I_o$



### Repetitive Surge Reverse Power Derating Curve

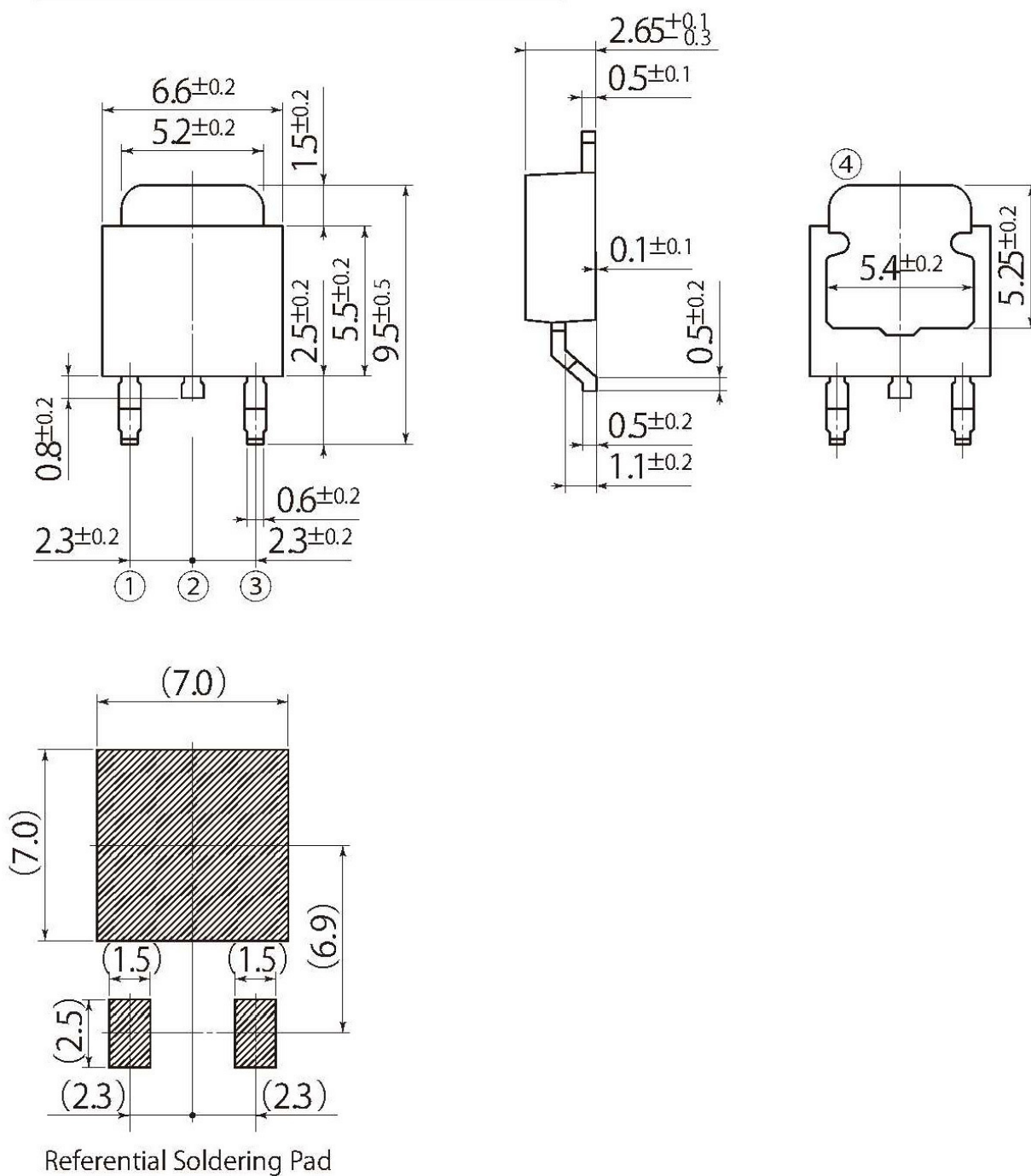


# Repetitive Surge Reverse Power Capability



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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