ShinDengen

D30FDC4S

Schottky Barrier Diodes
40V, 30A

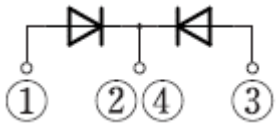
Feature

- SMD
- Low V_F
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): FD
Package (JEITA Code): SC-83 similar

Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	℃
Junction temperature	Tj		-55 to 150	℃
Repetitive peak reverse voltage	V_{RRM}		40	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, With heatsink, Tc=114℃	30	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25℃	300	A

※ :See the original Specifications

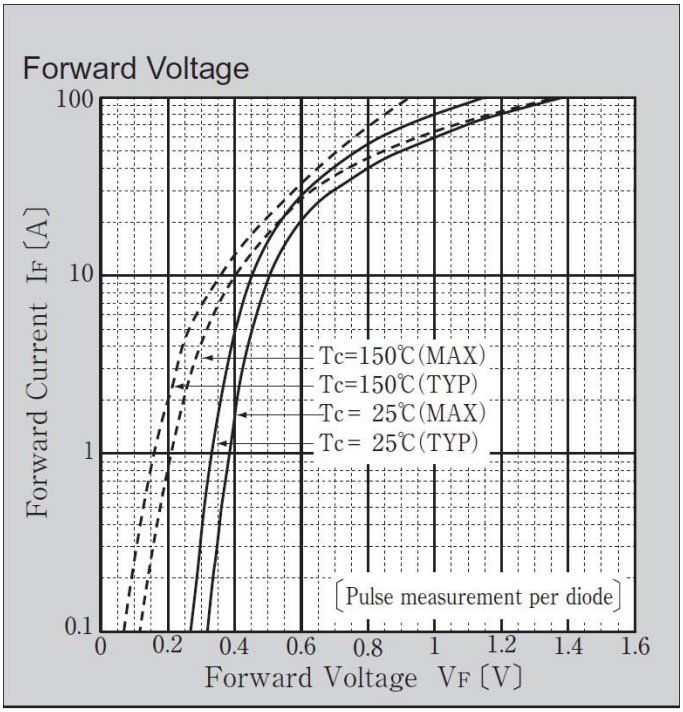
Electrical Characteristics (unless otherwise specified : Tc=25℃)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=15A, Pulse measurement, per diode			0.55	V
Reverse current	I_R	VR=40V, Pulse measurement, per diode			1.5	mA
Total capacitance	Ct	f=1MHz, VR=10V, per diode		415		pF
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			1.6	℃/W

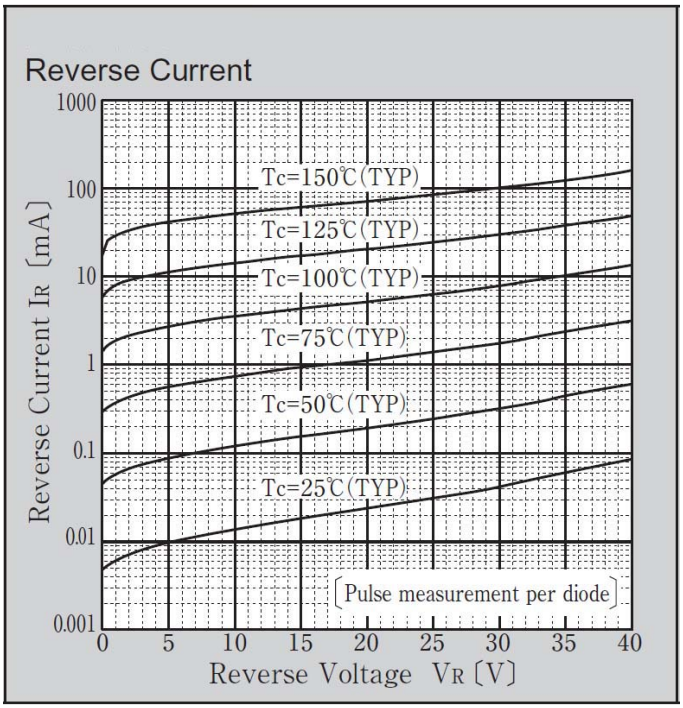
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

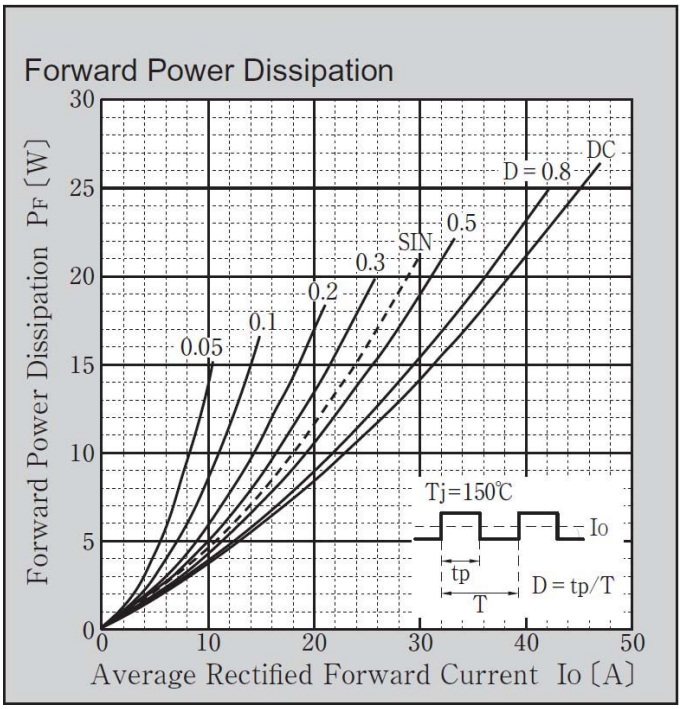
Forward Voltage



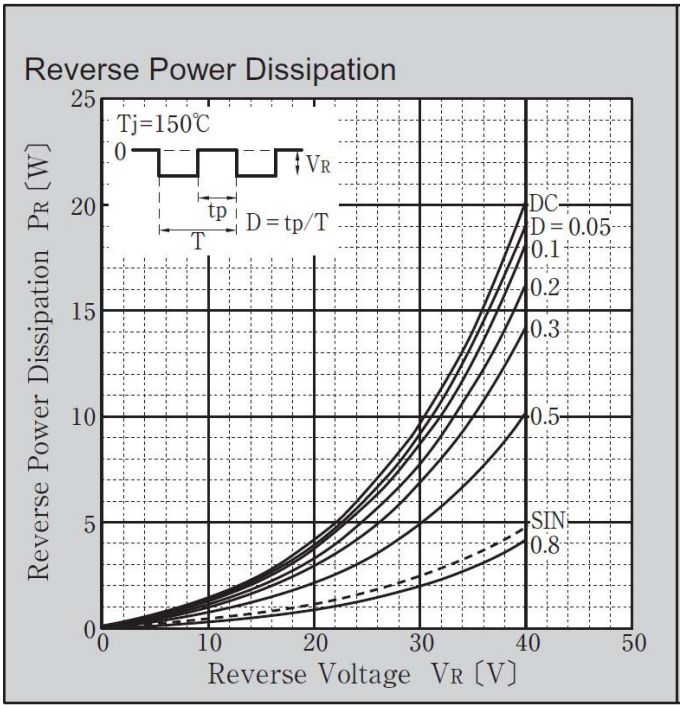
Reverse Current



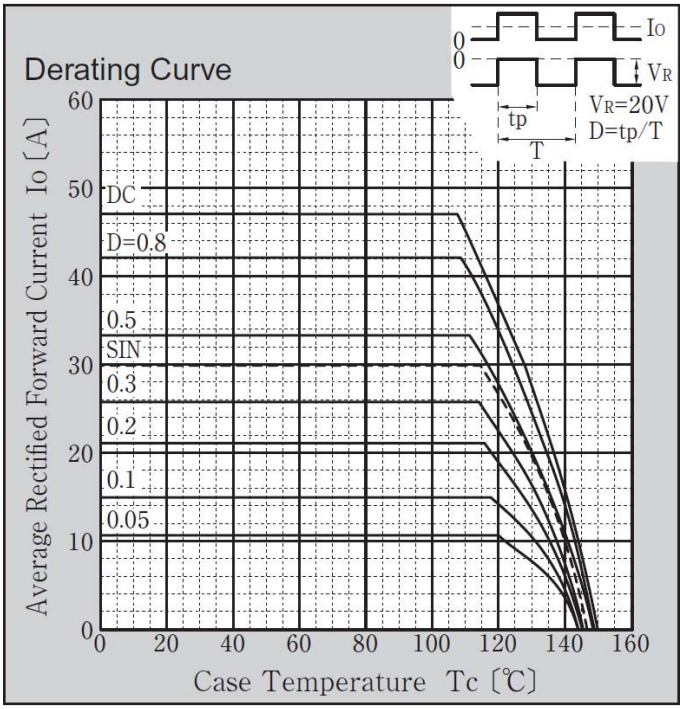
Forward Power Dissipation



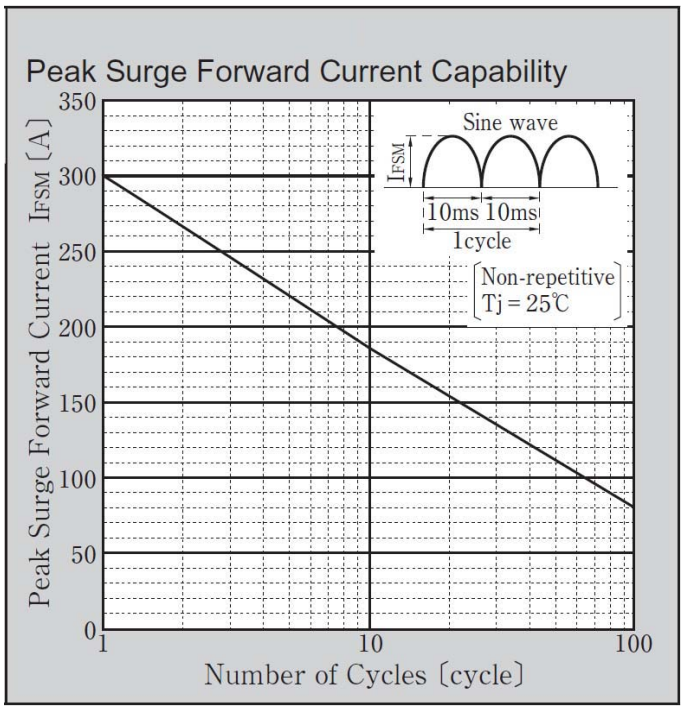
Reverse Power Dissipation



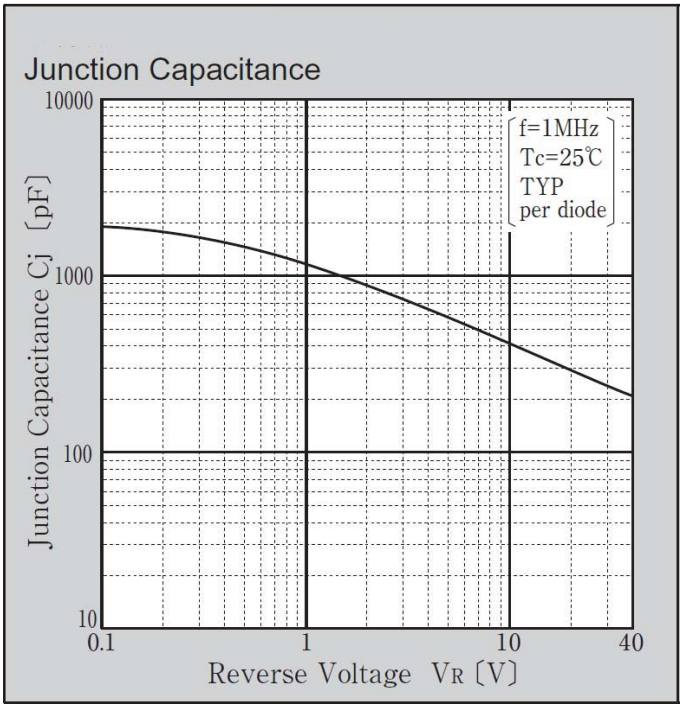
Derating Curve



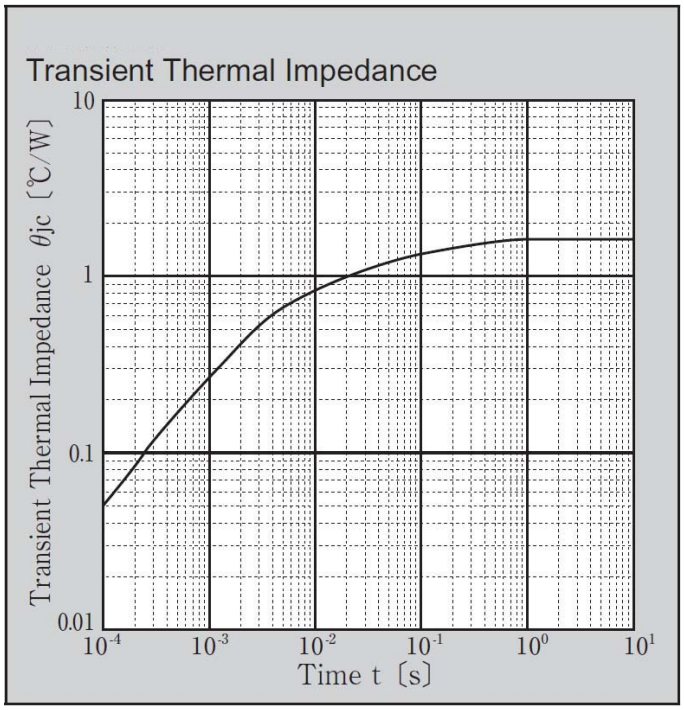
Peak Surge Forward Current Capability



Junction Capacitance



Transient Thermal Impedance



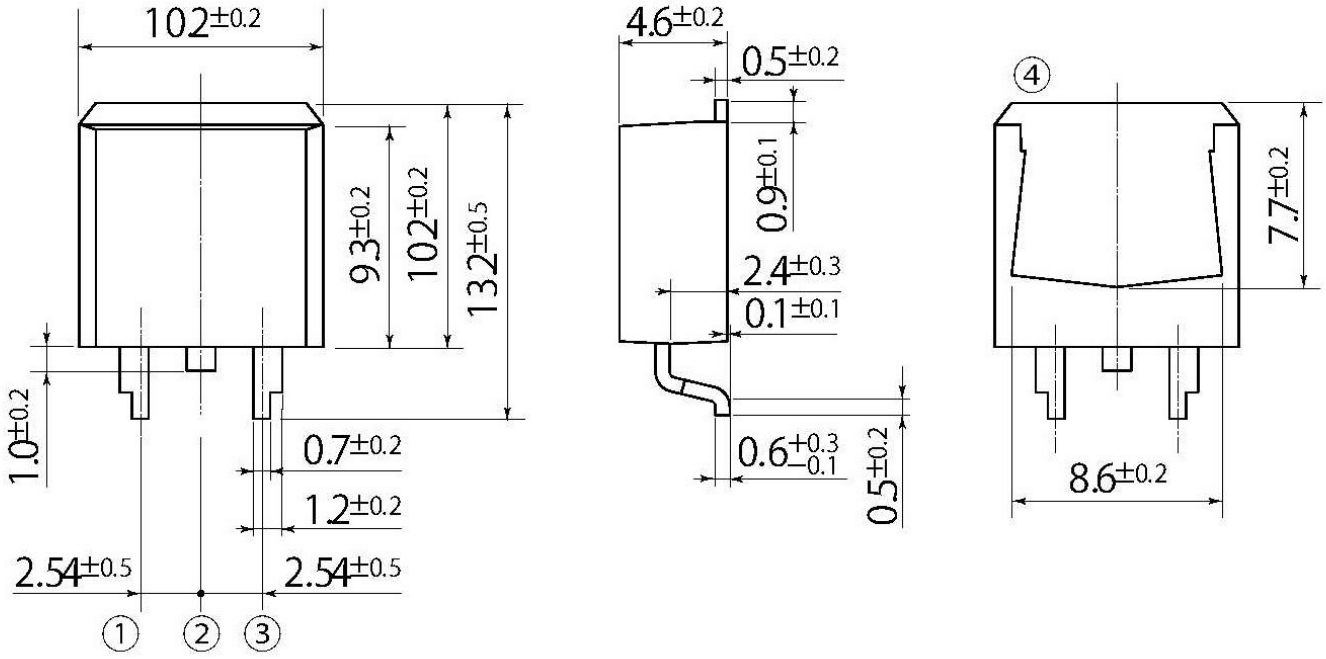
Outline Dimensions

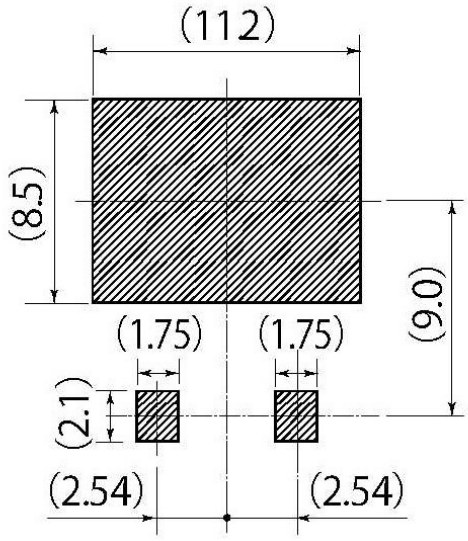
unit:mm

scale: 3/1

H2

JEDEC Code	–
JEITA Code	SC-83 similar
House Name	FD





Referential Soldering Pad

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

Notes

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