ShinDengen

DG1H3

Schottky Barrier Diodes

30V, 1A

Feature

- Ultra-small SMD
- Ultra thin PKG
- Low V_F
- Available for automotive use
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): G1F
Package (JEDEC Code): DO-219AB similar
Package (JEITA Code): SC-109

Equivalent circuit

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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 125	°C
Junction temperature	Tj		125	°C
Repetitive peak reverse voltage	V_{RRM}		30	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, Tl=113°C ※	1	A
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, Ta=46°C ※	0.7	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	20	A

※ ：See the original Specifications

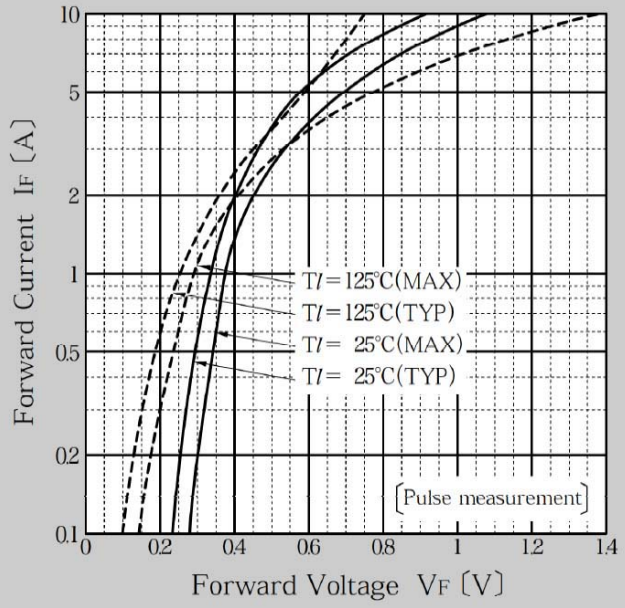
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=0.7A, Pulse measurement			0.36	V
Forward voltage	V_F	IF=0.2A, Pulse measurement			0.3	V
Reverse current	I_R	VR=30V, Pulse measurement			1	mA
Total capacitance	Ct	f=1MHz, VR=10V		37		pF
Thermal resistance	Rth(j-l)	Junction to lead, On alumina substrate ※			20	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On alumina substrate ※			70	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On paper phenol substrate ※			120	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On paper phenol substrate ※			210	°C/W

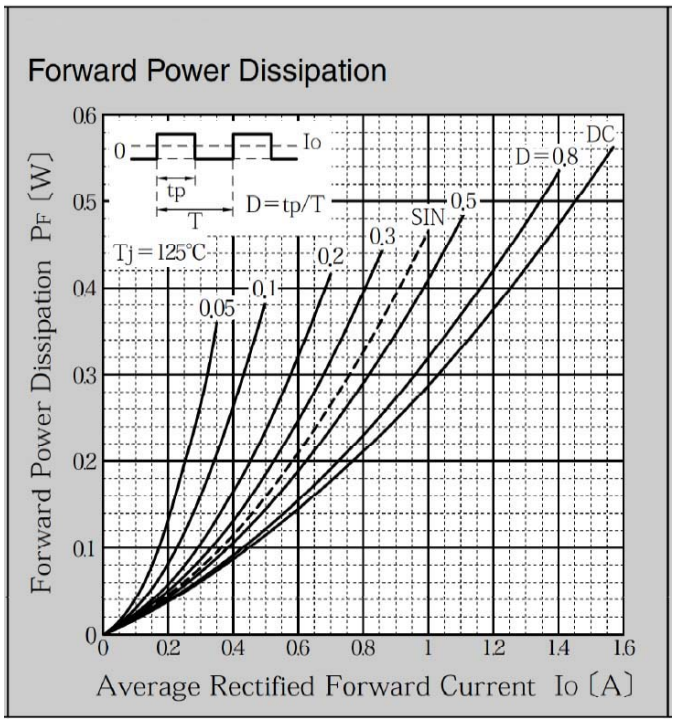
※ ：See the original Specifications

CHARACTERISTIC DIAGRAMS

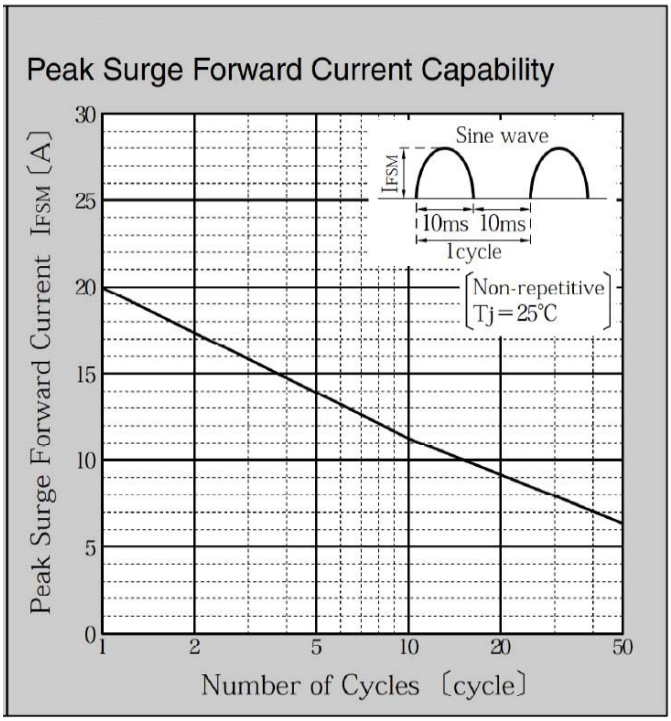
Forward Voltage



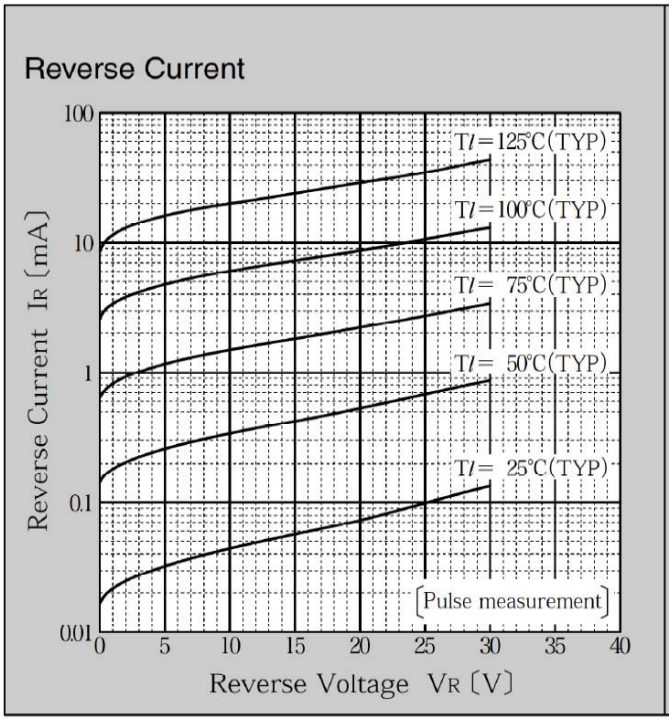
Forward Power Dissipation



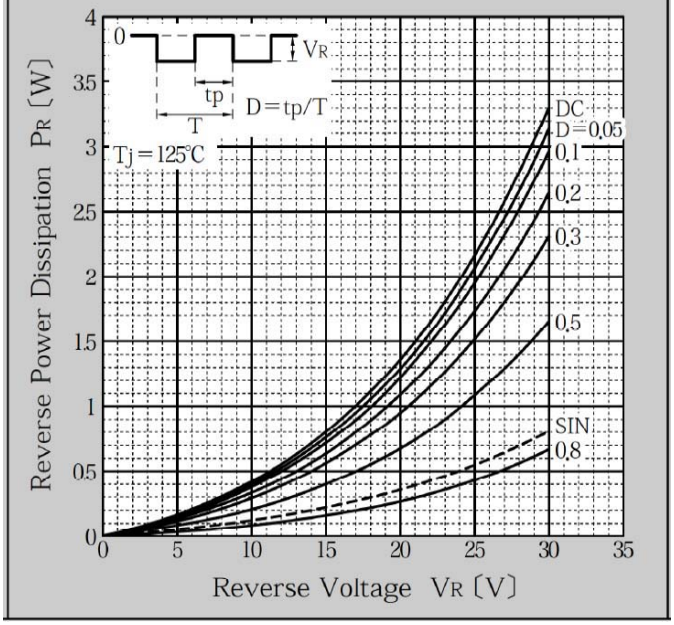
Peak Surge Forward Current Capability



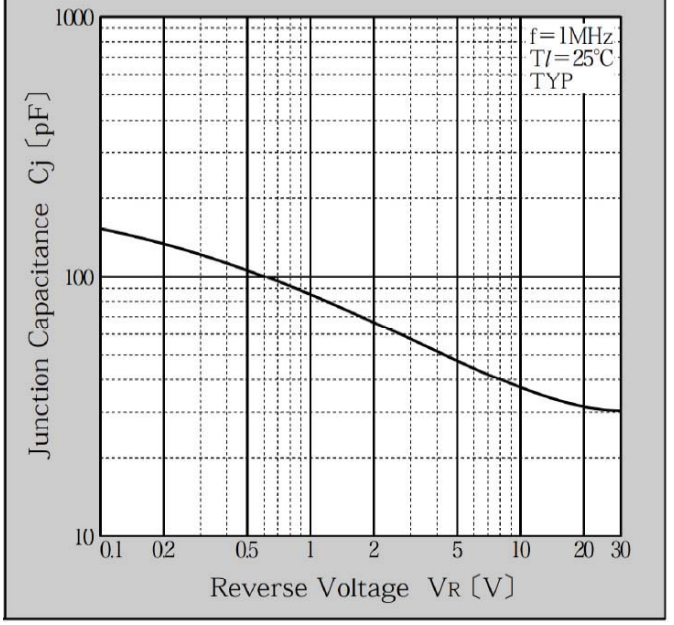
Reverse Current



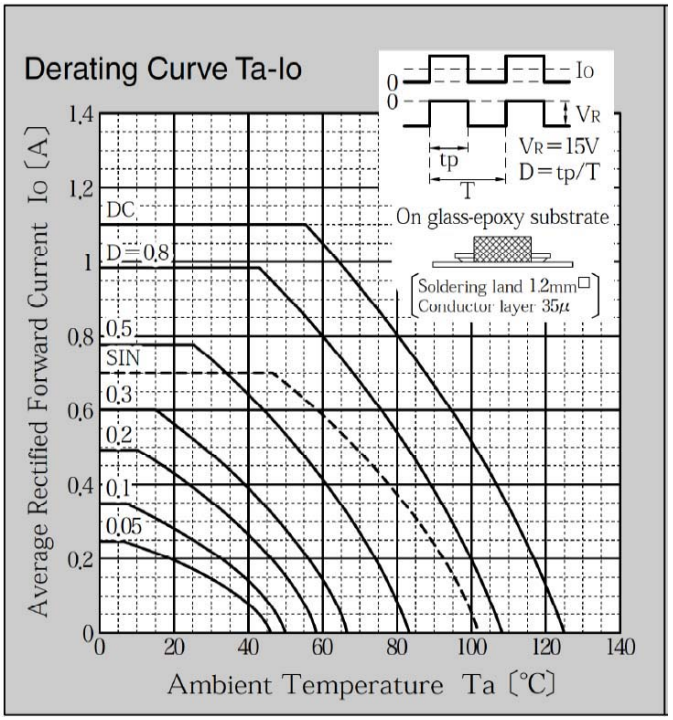
Reverse Power Dissipation



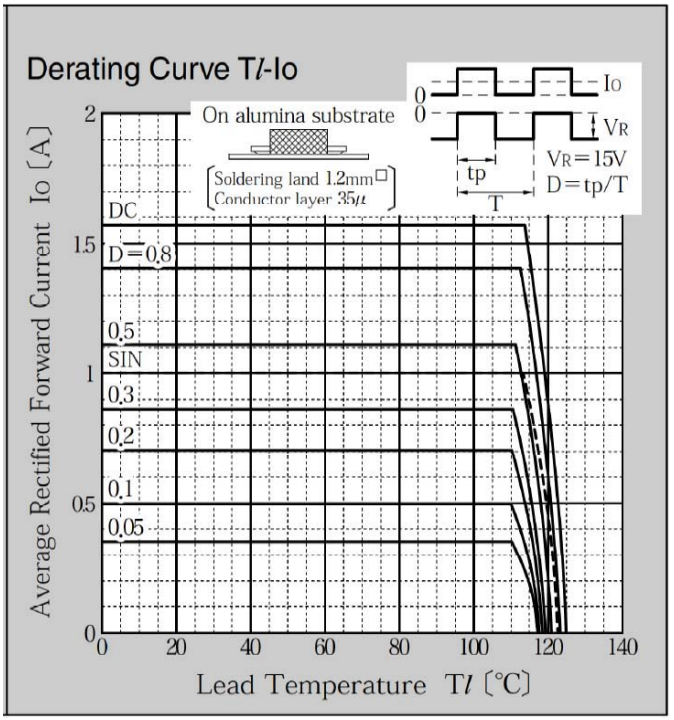
Junction Capacitance



Derating Curve Ta-Io



Derating Curve Tl-Io



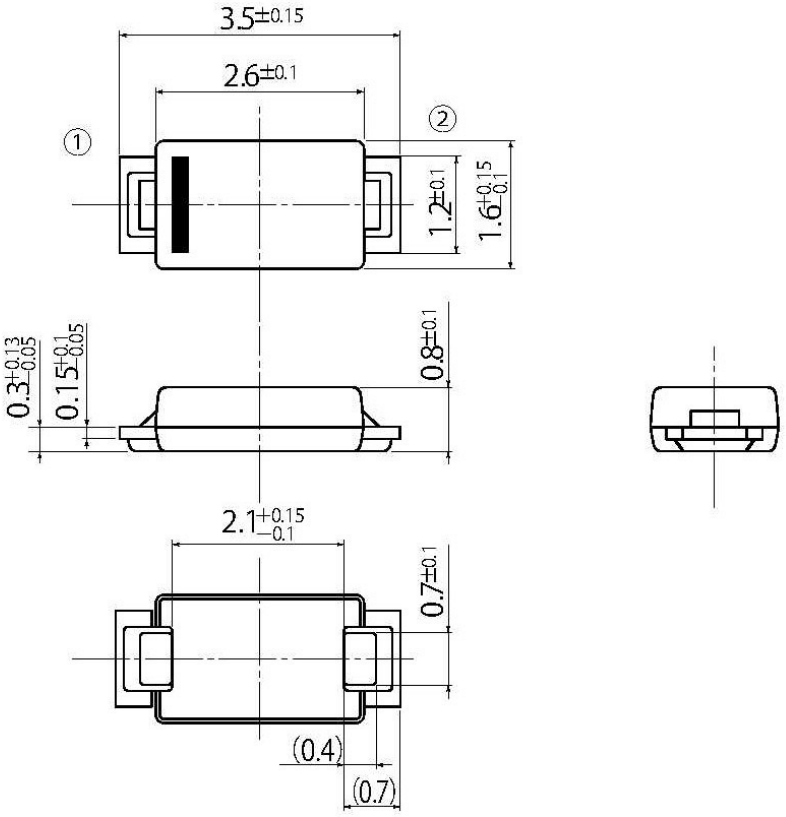
Outline Dimensions

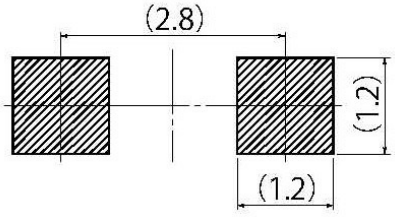
unit:mm

scale: 10/1

B1

JEDEC Code	DO-219AB similar
JEITA Code	SC-109
House Name	G1F





Referential Soldering Pad

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

Notes

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