

DG1S6

Schottky Barrier Diodes 60V, 1A

Feature

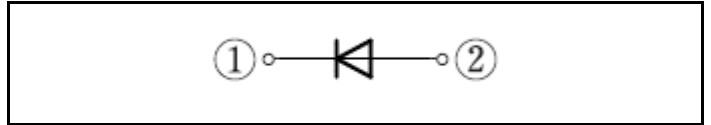
- Ultra-small SMD
- Ultra thin PKG
- Low V_F
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

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 temperature	Tstg		-55 to 150	°C
Junction temperature	Tj		150	°C
Repetitive peak reverse voltage	V_{RRM}		60	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Tl=128°C	1	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Ta=64°C ※	0.7	A
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Ta=40°C ※	0.5	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	30	A

※ :See the original Specifications

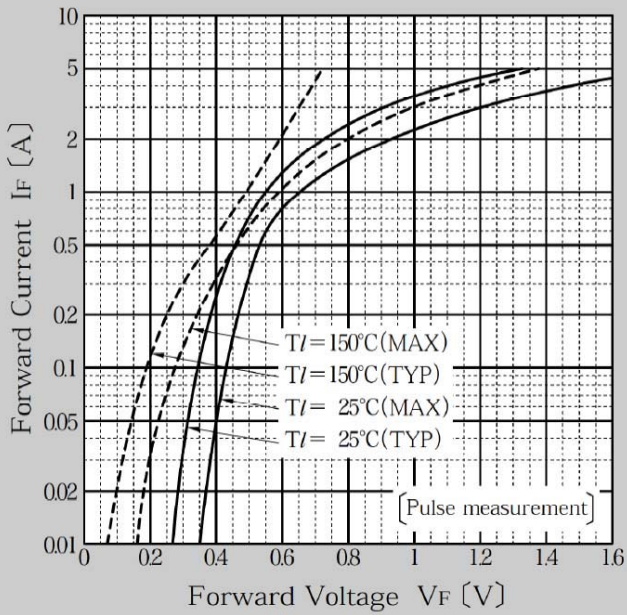
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=0.7A$, Pulse measurement			0.58	V
Reverse current	I_R	$V_R=60V$, Pulse measurement			1	mA
Total capacitance	C_t	$f=1MHz$, $V_R=10V$		32		pF
Thermal resistance	$R_{th(j-l)}$	Junction to lead, On alumina substrate ※			20	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On alumina substrate ※			70	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On paper phenol substrate ※			120	°C/W
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On paper phenol substrate ※			210	°C/W

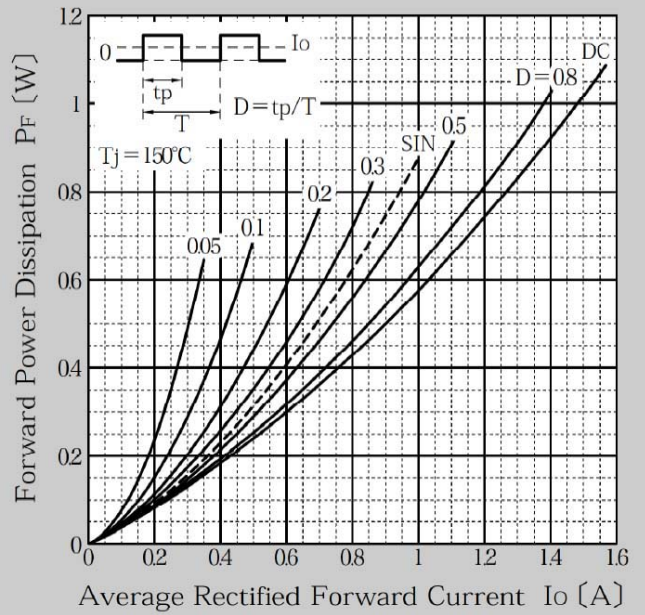
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

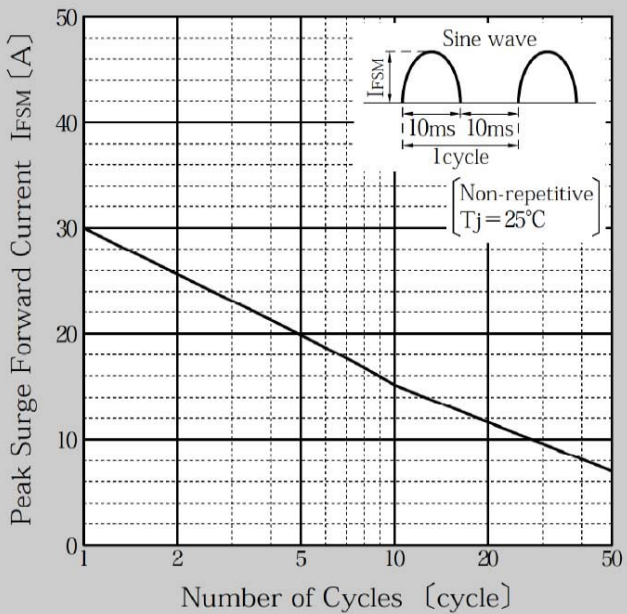
Forward Voltage



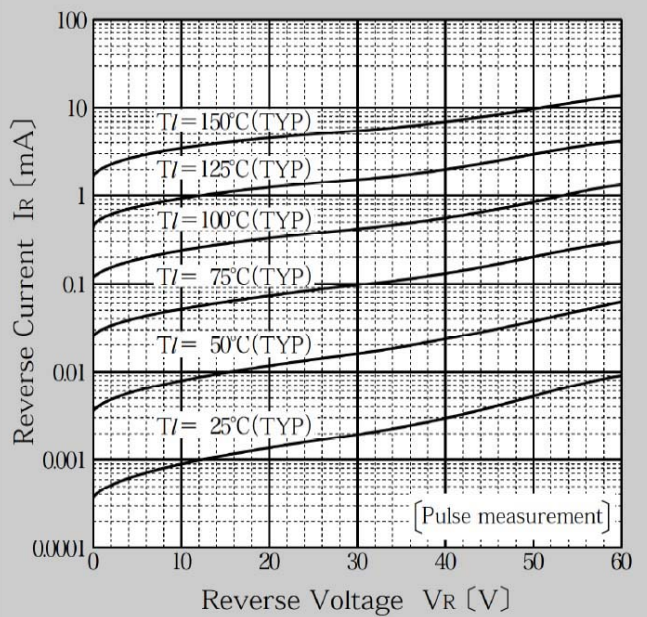
Forward Power Dissipation



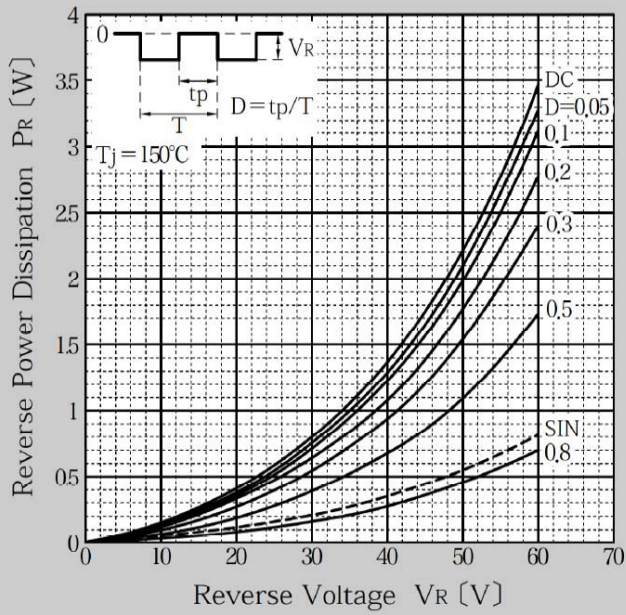
Peak Surge Forward Current Capability



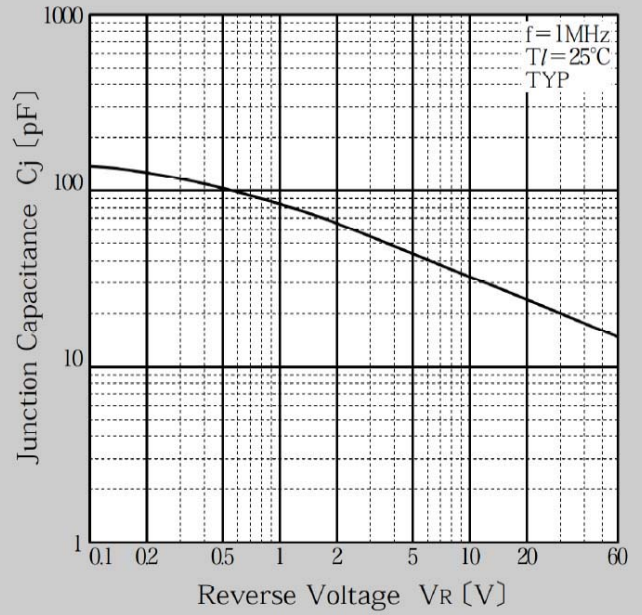
Reverse Current



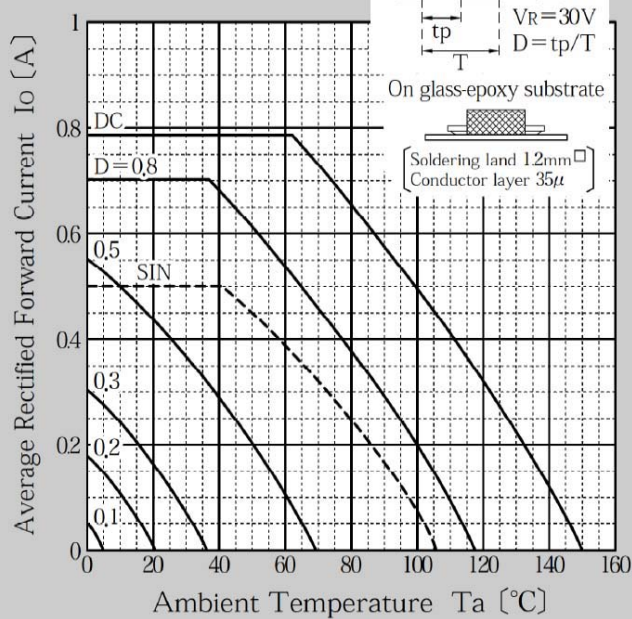
Reverse Power Dissipation



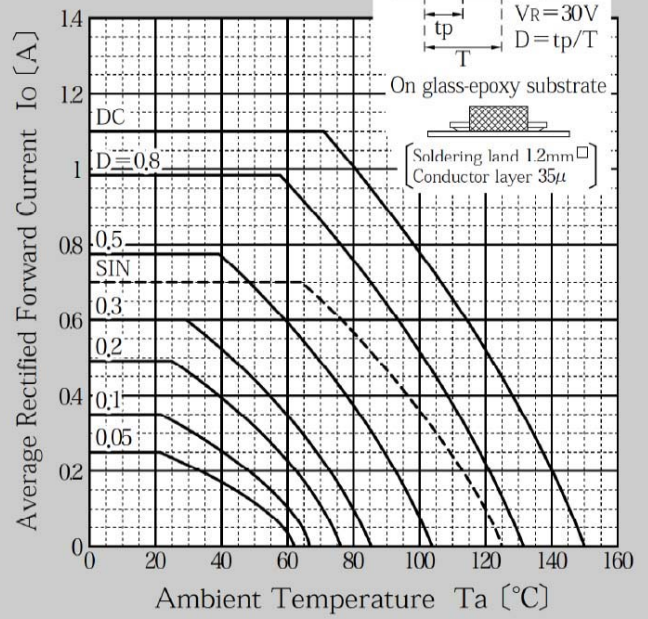
Junction Capacitance



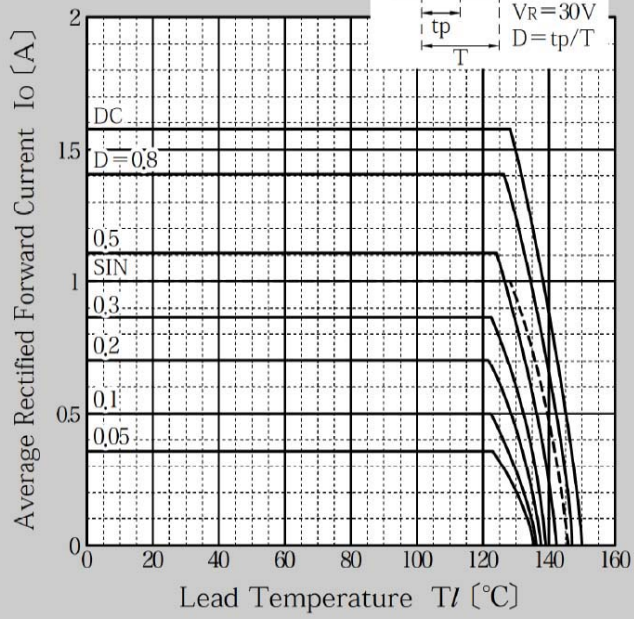
Derating Curve Ta-Io



Derating Curve Ta-Io

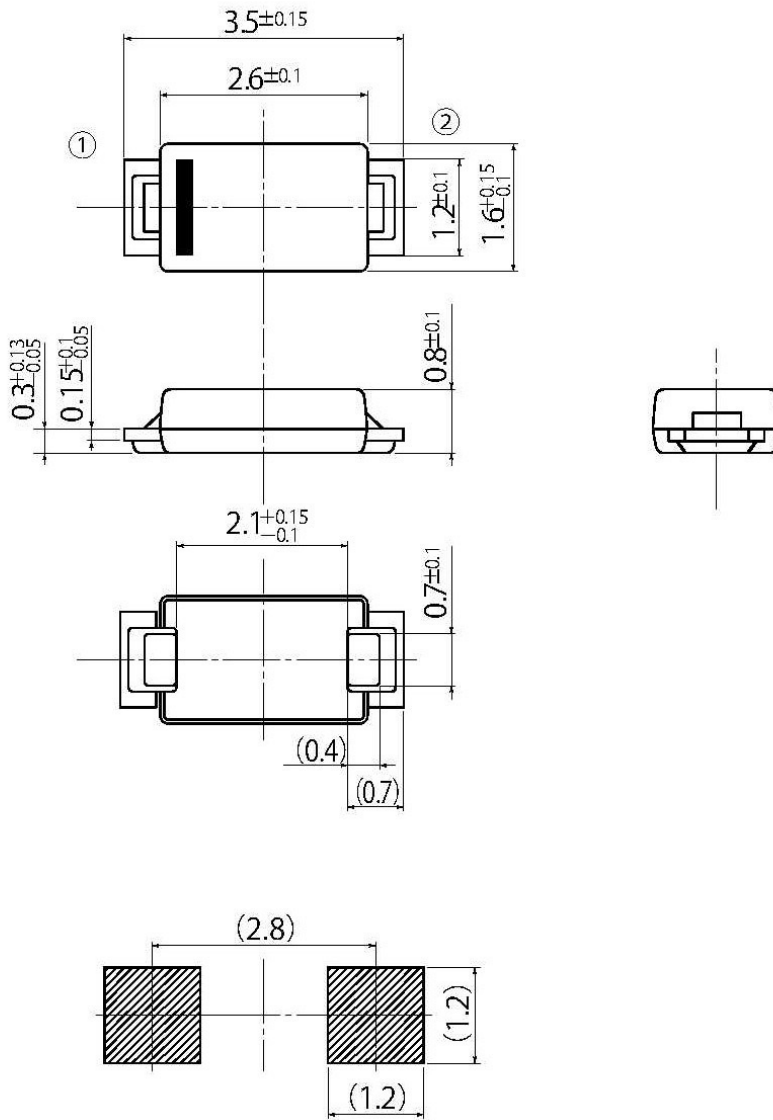


Derating Curve T_l - I_o



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 condition.

Notes

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