

DG1N15A

Schottky Barrier Diodes

150V, 1.4A

Feature

- Ultra-small SMD
- High Voltage
- Ultra thin PKG
- Low I_R
- Based on AEC-Q101
- Resistance for thermal run-away
- Pb free terminal
- RoHS:Yes

OUTLINE

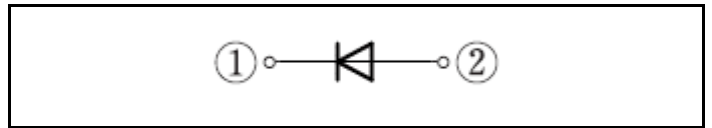
Package (House Name): G1F

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}		150	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Ta=65°C ※	1.4	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Ta=43°C ※	0.7	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, Tj=25°C	30	A

※ :See the original Specifications

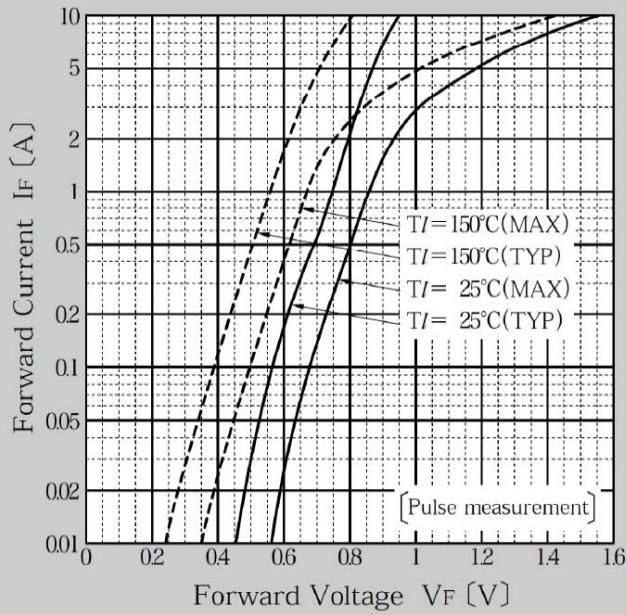
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=1.4A$, Pulse measurement			0.88	V
Reverse current	I_R	$V_R=150V$, Pulse measurement			0.05	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

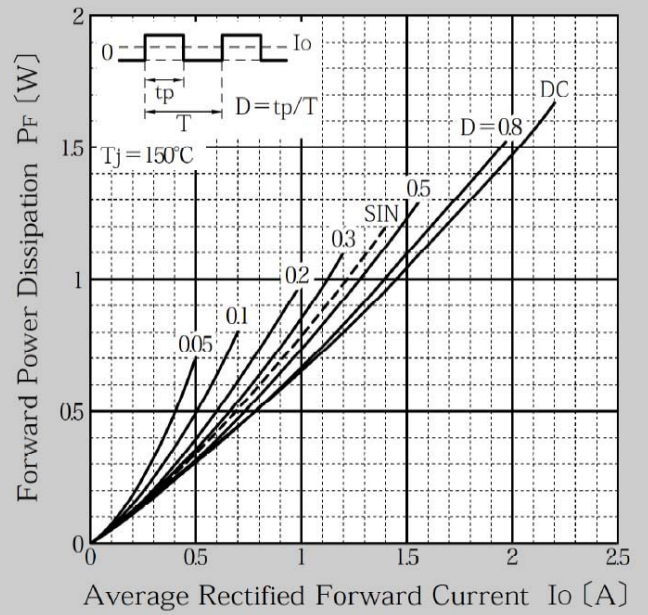
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

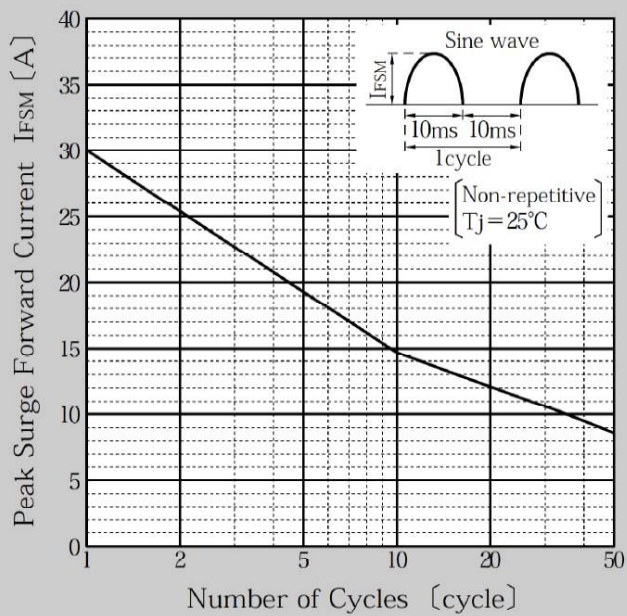
Forward Voltage



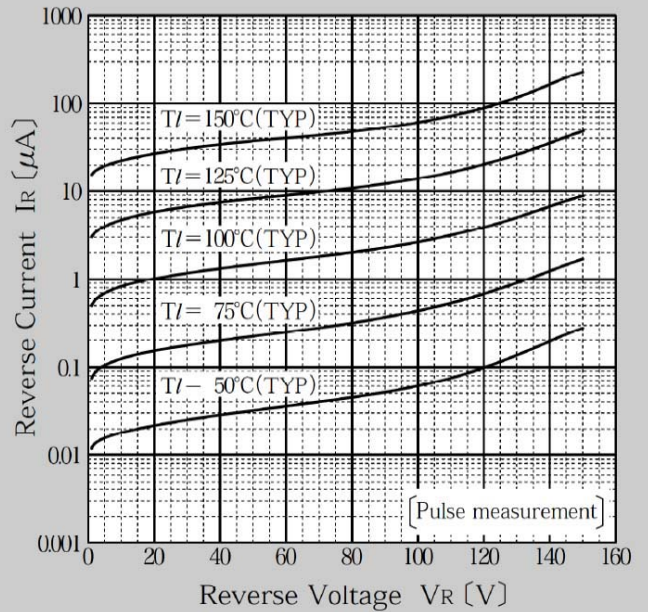
Forward Power Dissipation



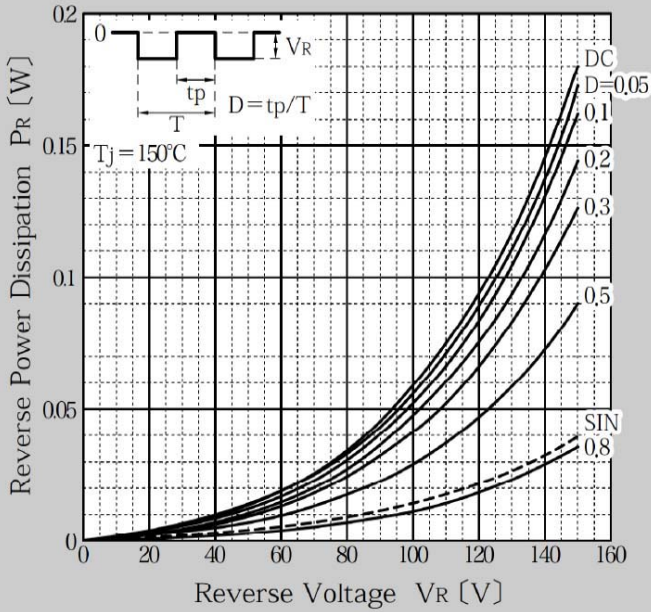
Peak Surge Forward Current Capability



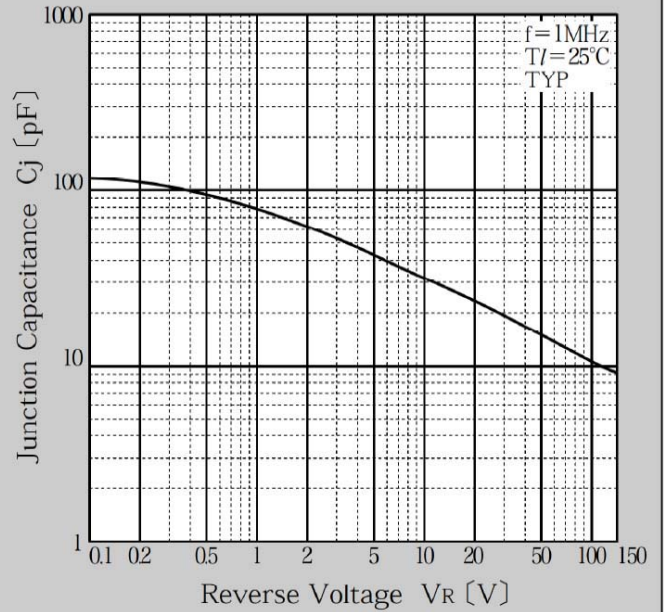
Reverse Current



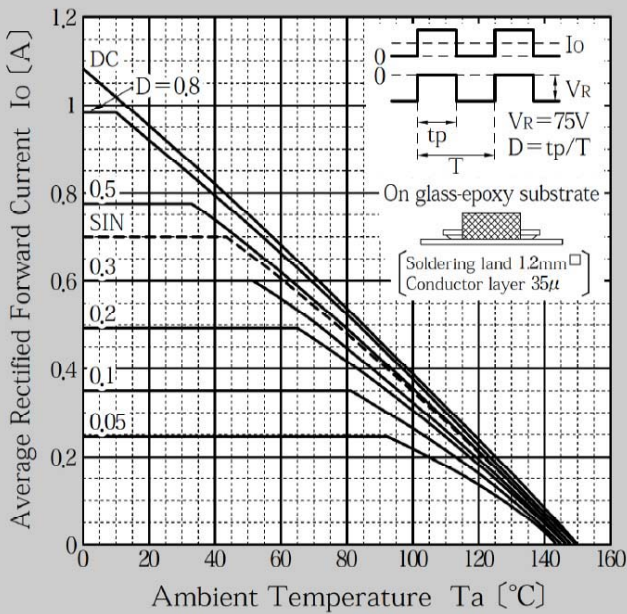
Reverse Power Dissipation



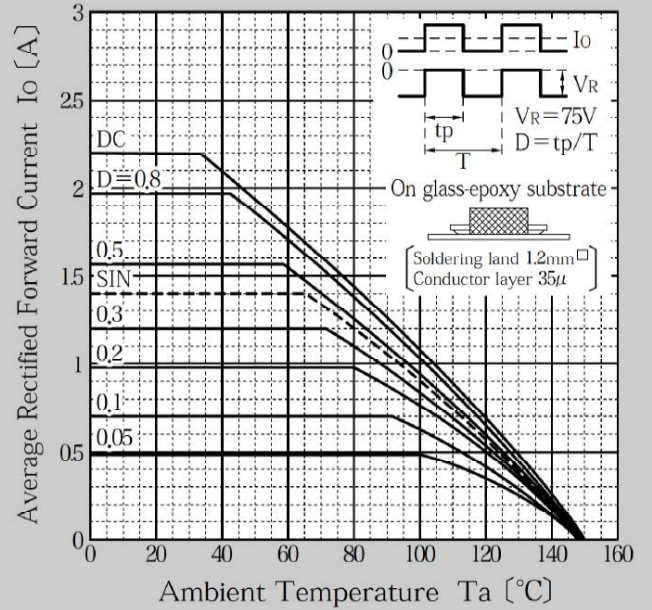
Junction Capacitance



Derating Curve Ta-Io

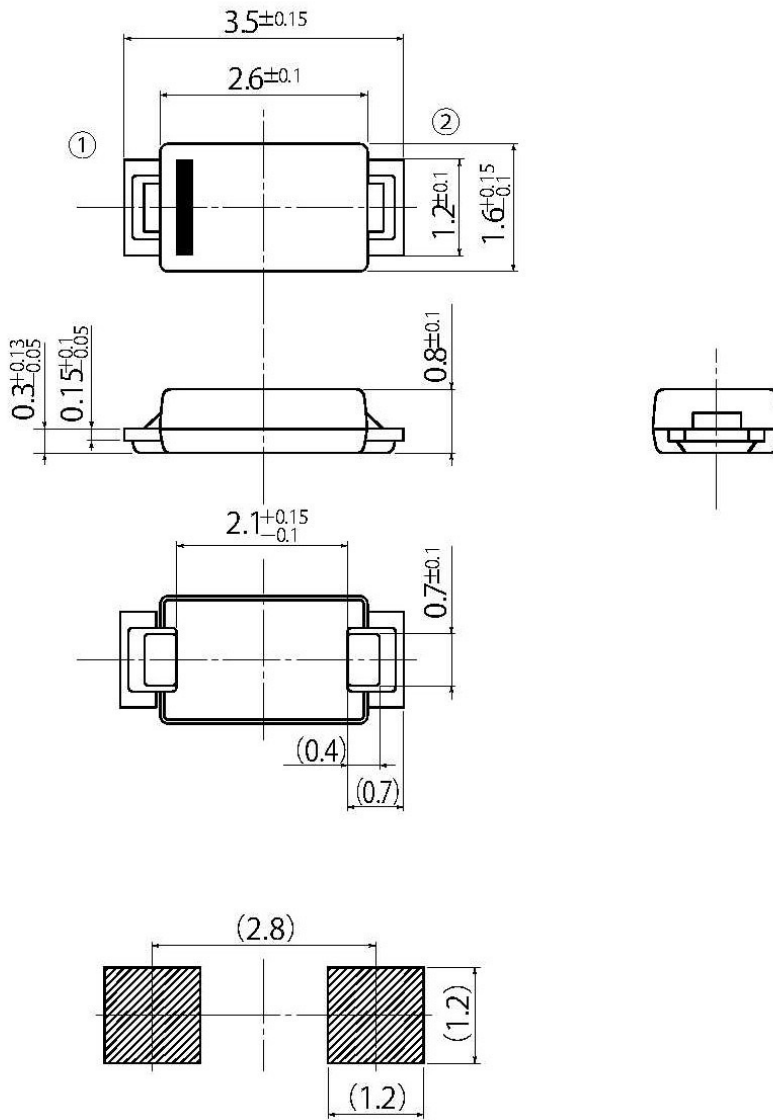


Derating Curve Ta-Io



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.

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