

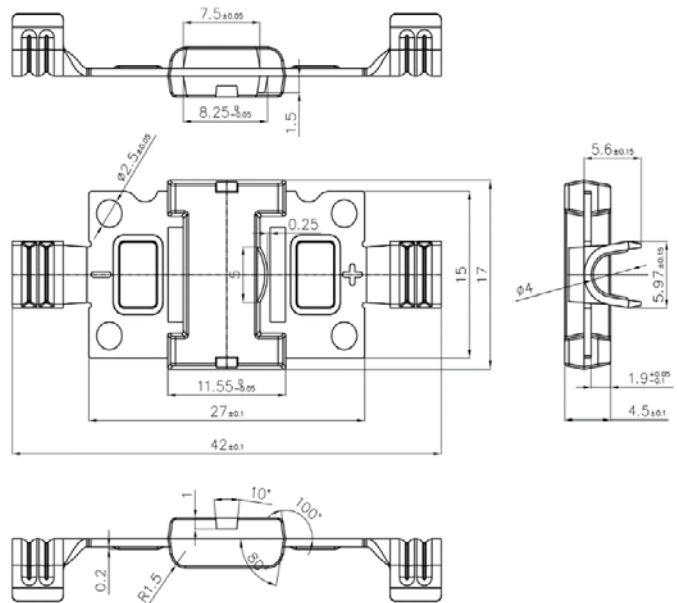
REVERSE VOLTAGE - 45 Volts
FORWARD CURRENT - 30 Amperes

FEATURES

- Metal of silicon rectifier , majority carrier conduction
- Guard ring for transient protection
- Low power loss,high efficiency
- High current capability,low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MECHANICAL DATA

- Case: MK molded plastic
- Polarity: As marked on the body
- Mounting position :Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	GFM3045	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	45	V
Maximum RMS Voltage	V _{RMS}	31.5	V
Maximum DC Blocking Voltage	V _{DC}	45	V
Maximum Average Forward Rectified Current (See Fig.1) @T _C =125 °C	I _(AV)	30	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	300	A
Peak Forward Voltage at 30A DC Per leg(Note1)	V _F	0.60	V
Maximum DC Reverse Current @T _J =25°C	I _R	0.5	mA
at Rated DC Bolcking Voltage @T _J =100°C		50	
Typical Thermal Resistance(Note2) @T _c =170°C	R _{θJc}	1.5	°C/W
Operating Temperature Range	T _J	-55 to +200	°C
Storage Temperature Range	T _{STG}	-55 to +200	°C

NOTES:1.300us pulse width,2% dudy cycle.

2.Thermal Resistance Junction to case(without heatsink).

Ratings And Characteristic Curves

Fig. 1 - Forward Current Derating Curve

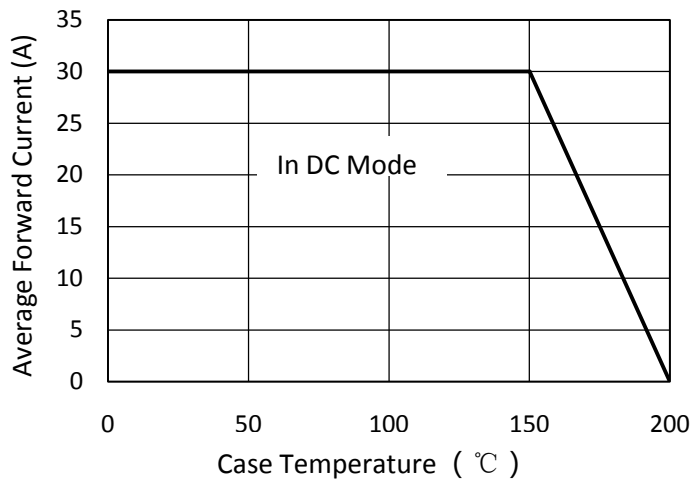


Fig. 2 - Maximum Non-Repetitive Surge Current

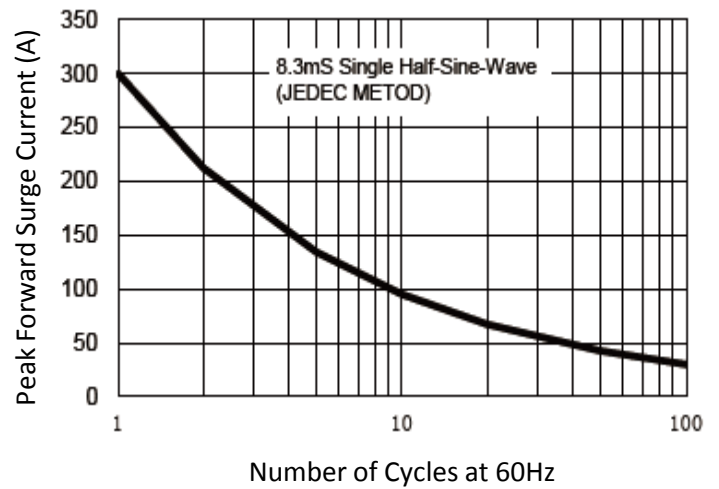


Fig. 3 - Typical Reverse Characteristics

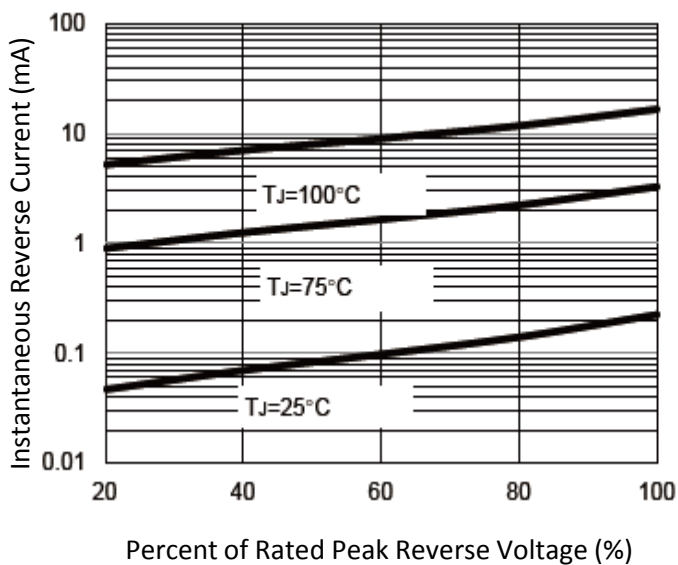


Fig. 4 - Typical Forward Characteristics

