

High frequency operation  
 Low forward voltage drop  
 High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance  
 Guard ring for enhanced ruggedness and long term reliability  
 Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

: TO-263

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

: Tin plated leads, solderable per J-STD-002 and JESD22-B102

: As marked

( $T_a=25^\circ\text{C}$  Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			GF3045MG
Repetitive Peak Reverse Voltage	VRRM	V	45
Average Rectified Output Current @60Hz sine wave, R-load, $T_a=25^\circ\text{C}$	$I_o$	A	30
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, $T_a=25^\circ\text{C}$	IFSM	A	375
Current Squared Time @1ms $t \leq 8.3\text{ms}$ $T_j=25^\circ\text{C}$	$I^2t$	$\text{A}^2\text{s}$	590
Storage Temperature	$T_{\text{stg}}$	$^\circ\text{C}$	-55 ~+150
Junction Temperature IN DC Forward Mode-Forward Operations, without reverse bias, $t \leq 1\text{ h}$ (Fig. 1)①	$T_j$	$^\circ\text{C}$	-55 ~+200

Meets the requirements of IEC 61215 Ed. 2 bypass diode thermal test.

( $T_a=25^\circ\text{C}$  Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Value
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=30.0A	0.55
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	mA	VRM=VRRM $T_a=25^\circ\text{C}$	0.5
	IRRM2		VRM=VRRM $T_a=100^\circ\text{C}$	50



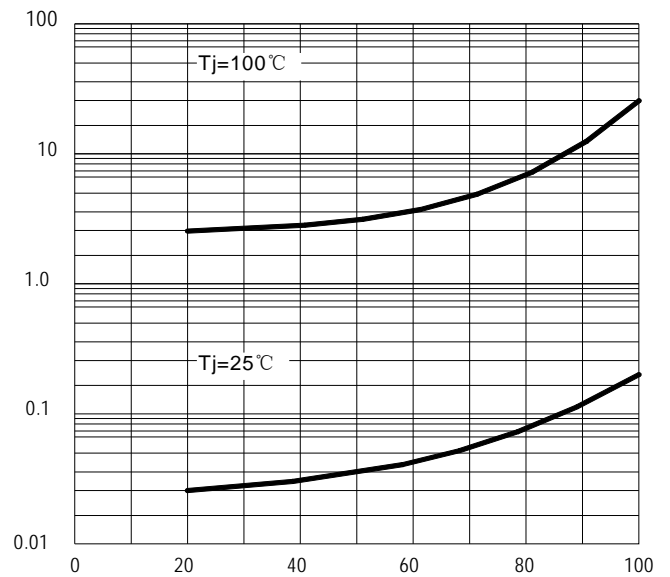
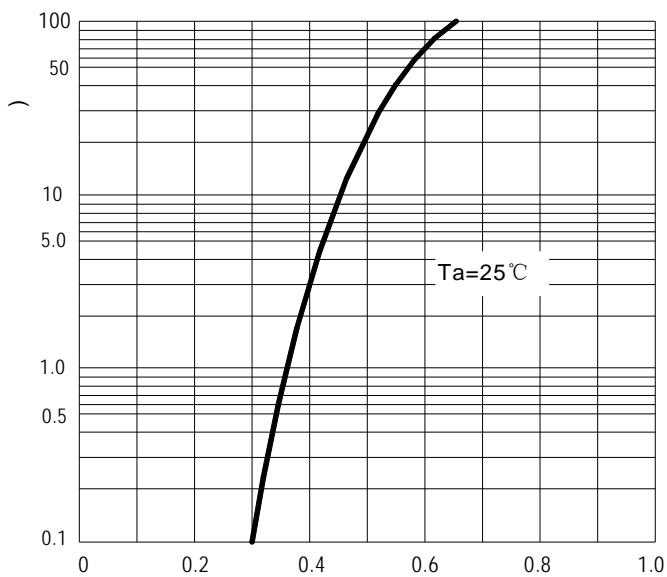
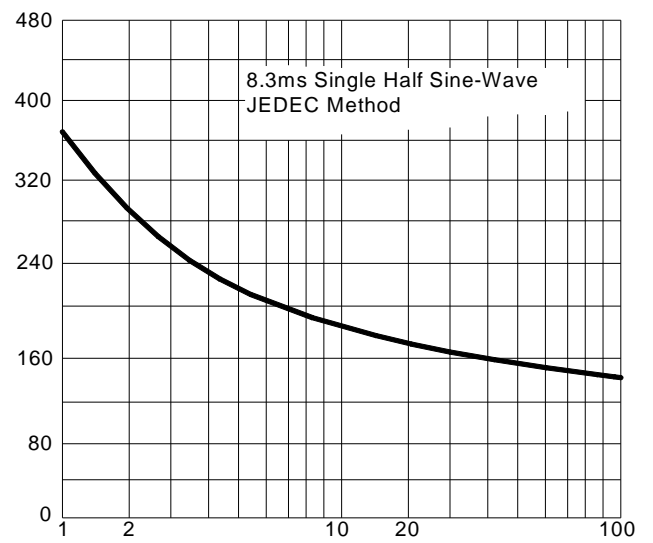
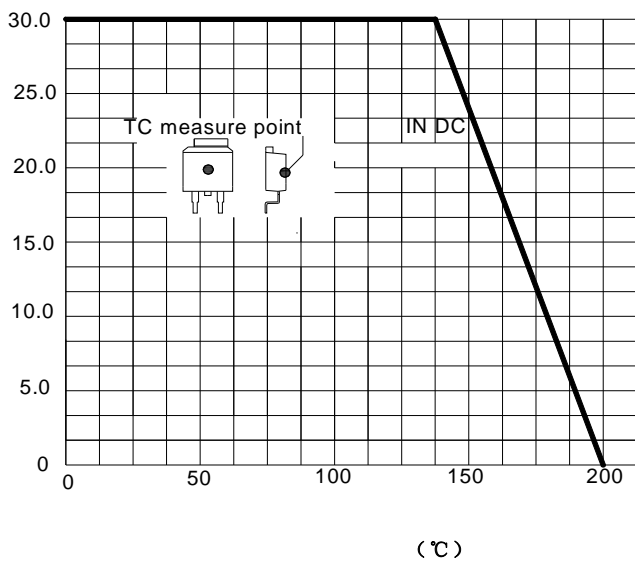
( $T_a=25^{\circ}\text{C}$  Unless otherwise specified)

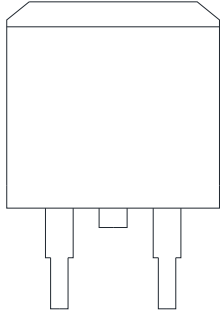
Thermal Resistance	Between junction and case	$R_{J-C}$	$^{\circ}\text{C/W}$	2.0
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(Example)

GF3045MG	Approximate 1.46	50	2000	8000	Tube
GF3045MG	Approximate 1.46	1000	2000	10000	Reel

(Typical)







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