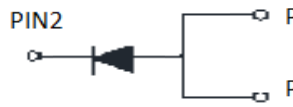


High frequency operation  
 Low forward voltage drop  
 High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance  
 Guard ring for enhanced ruggedness and long term reliability  
 Meets MSL level 1 per J-STD-020, LF maximum peak of 260

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



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

Device marking code				GF2045MG
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		20
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, $T_a=25^\circ\text{C}$	IFSM	A		325
Current Squared Time @1ms $t \leq 3\text{ms}$ $T_j=25^\circ\text{C}$	$I^2t$	$\text{A}^2\text{s}$		438
Storage Temperature	$T_{sto}$			$-55 \sim +150$
Junction Temperature IN DC Forward Mode-Forward Operations without reverse bias, $t \leq 1\text{h}$ (Fig. 1)	$T_j$			$-55 \sim +100$

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

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

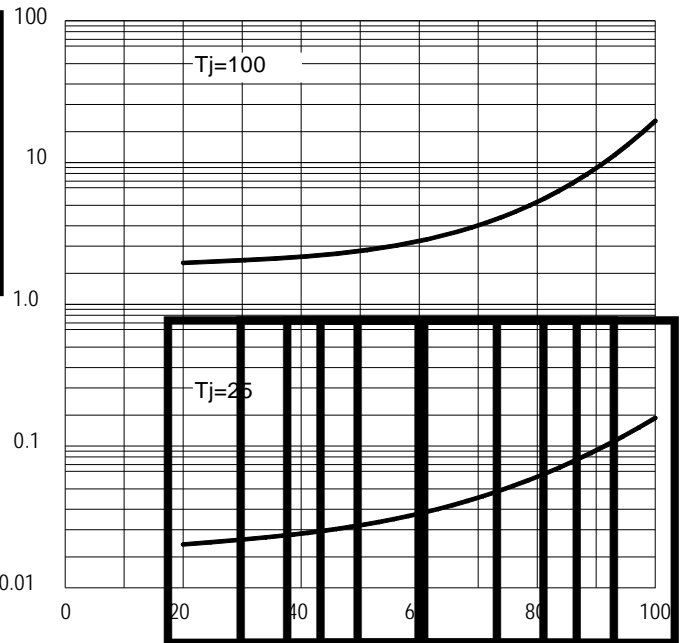
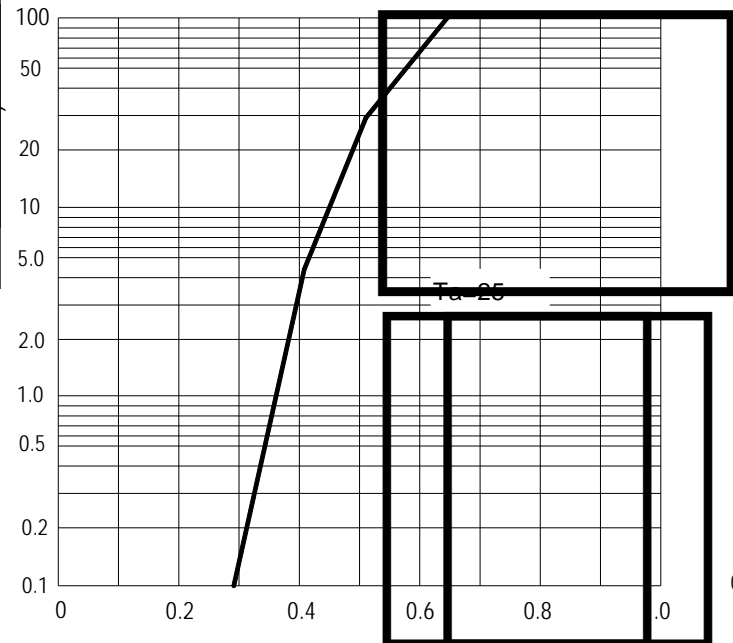
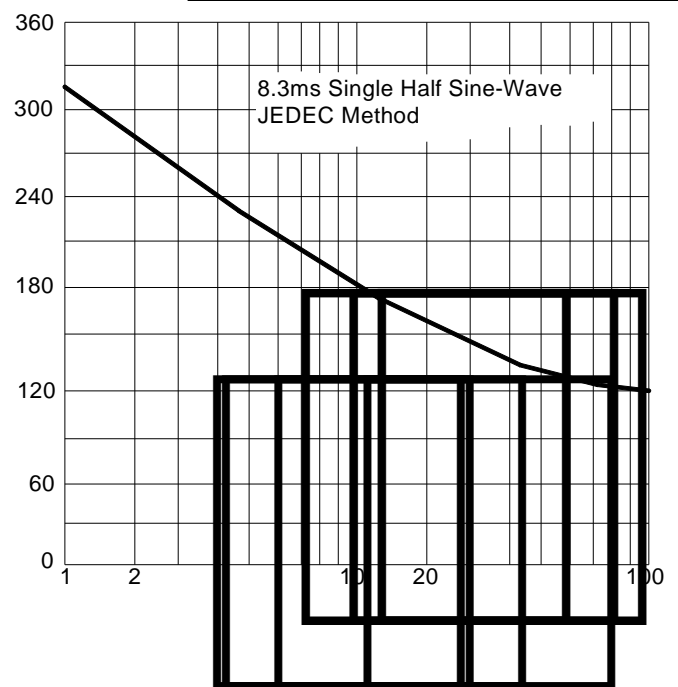
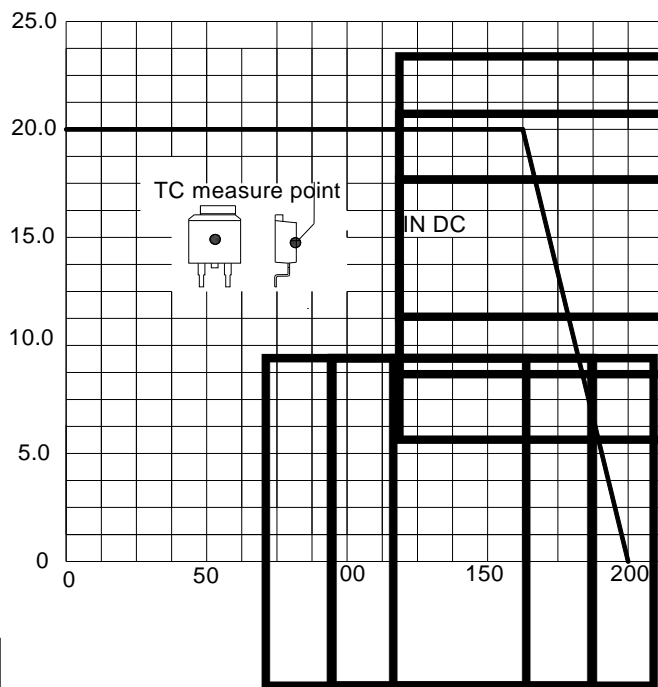
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=20.0A	0.55
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	mA	VRM=VRRM $T_a=25^\circ\text{C}$	0.5
	IRRM2		VRM=VRRM $T_a=100^\circ\text{C}$	50

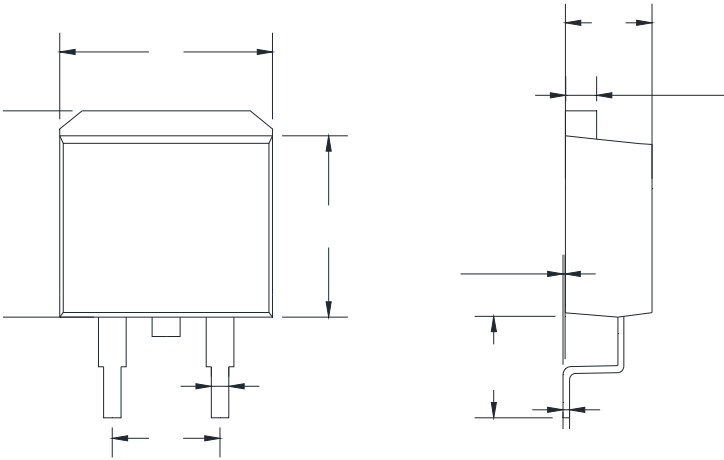
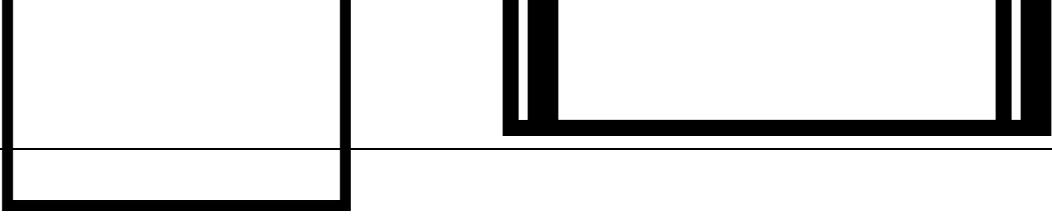


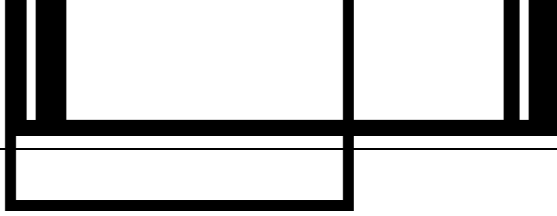
$T_a=25$  Unless otherwise specified

Thermal Resistance	Between junction and case	$R_{j-c}$	/W	2.0	
GF2045MG	Approximate 1.44	50	2000	8000	Tape
GF2045MG	Approximate 1.44	1000	2000	10000	Reel

(Typical)







The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.frxelec.com](http://www.frxelec.com) , or consult your nearest Yangjie's sales office for further assistance.