



20A Schottky Diodes

GF2045MG

Features

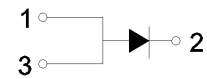
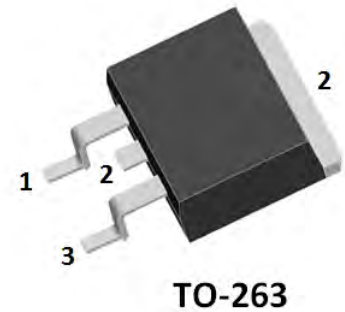
- High Surge Forward Current Capability
- Low Pow Loss, High Efficiency

Applications

- Photovoltaic Solar Cell Protection Schottky Rectifier

Mechanical Data

- Case: TO-263-2L
- Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208



Ordering Information

Part No.	Package	Packing
GF2045MG-TU	TO-263	50pcs / Tube
GF2045MG-TR	TO-263	800pcs / Reel

Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	GF2045MG
Repetitive Peak Reverse Voltage	VRRM	V		45
Average Rectified Output Current	I _O	A	60HZ sine wave, R- load, T _a =25°C	20
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60HZ sine wave, 1 cycle, T _a =25°C	320
Current Squared Time	I ² _t	A ² s	1ms≤t<8.3ms T _j =25°C	427
Storage Temperature	T _{stg}	°C		-55 ~ +150
Junction Temperature	T _j	°C	IN DC Forward Mode-Forward Operations, without reverse bias, t≤1 h (Fig. 1) ①	-55 ~ + 200



Electrical Characteristics @T_A = 25°C unless otherwise specified

Item	Symbol	Unit	Test Condition		Max
Peak Forward Voltage	V _{FM}	V	I _{FM} =20A		0.55
Peak Reverse Current	I _{RRM1}	mA	V _{RM} =V _{RRM}	T _a =25°C	0.5
	I _{RRM2}			T _a =100°C	20
Thermal Resistance(Typical)	R _{θJ-c}	°C/W	Between junction and case		2.0

Note:

- ① Meets the requirements of IEC 61215 Ed. 2 bypass diode thermal test.

Characteristics(Typical)

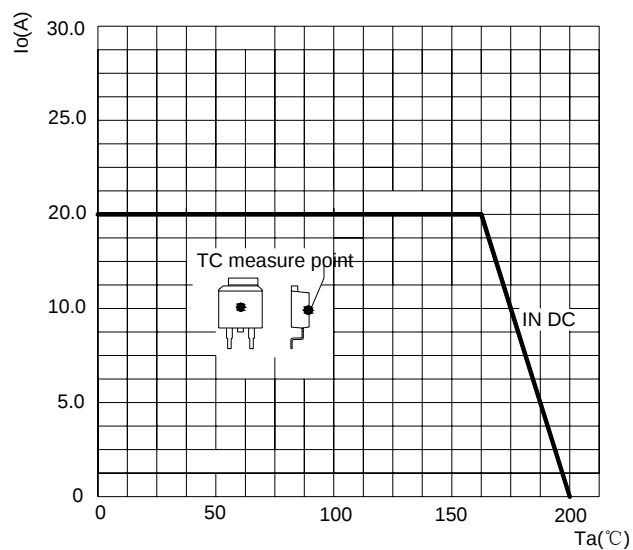


Fig.1: IF(AV)--Tc Derating

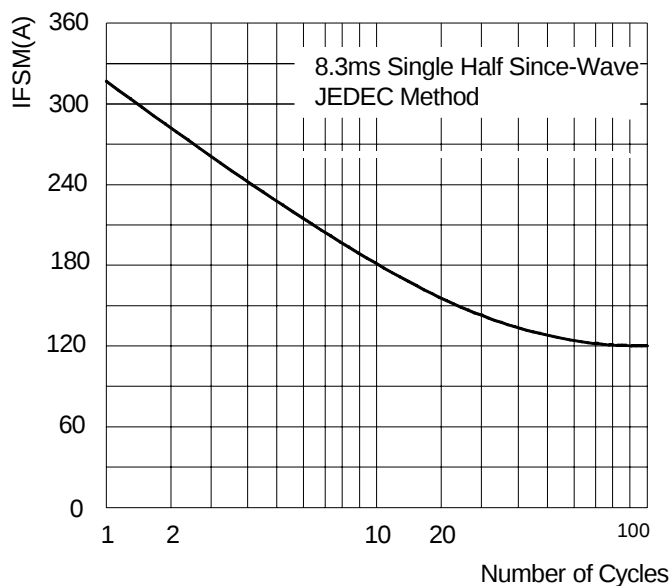


Fig.2: Surge Forward Current Capacity



GF2045MG

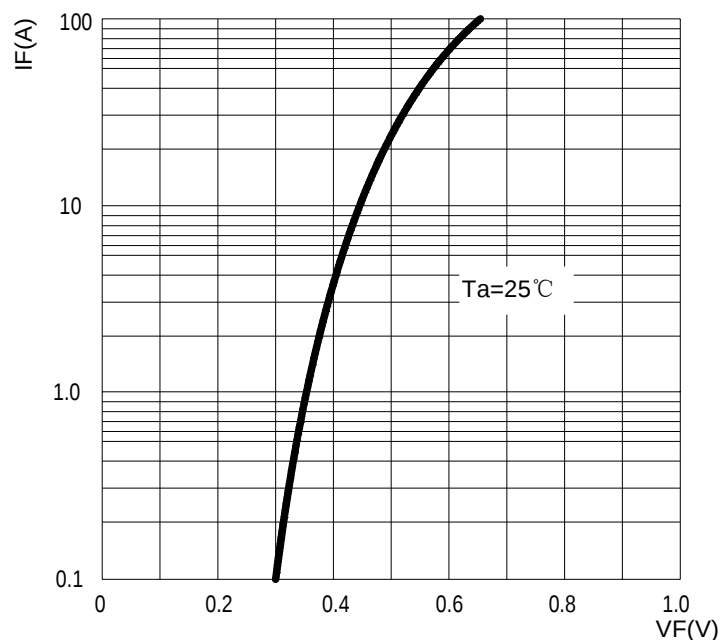


Fig.3:Instantaneous Forward Voltage

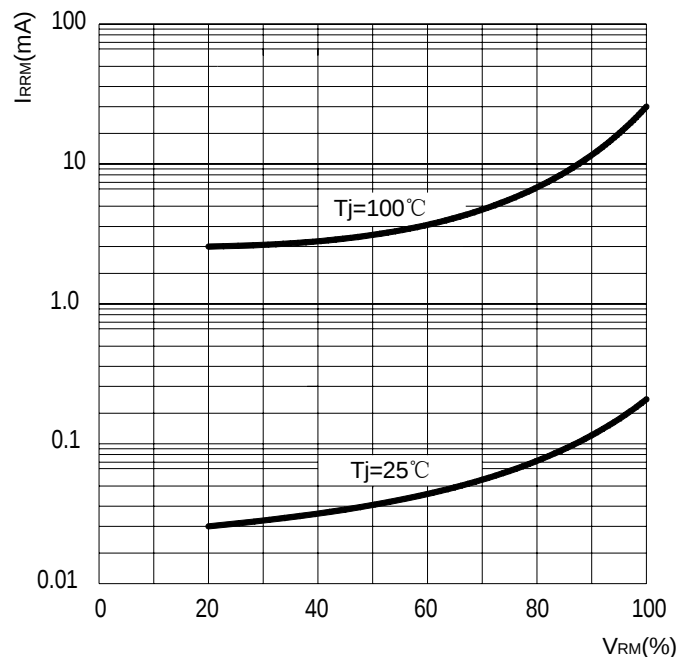
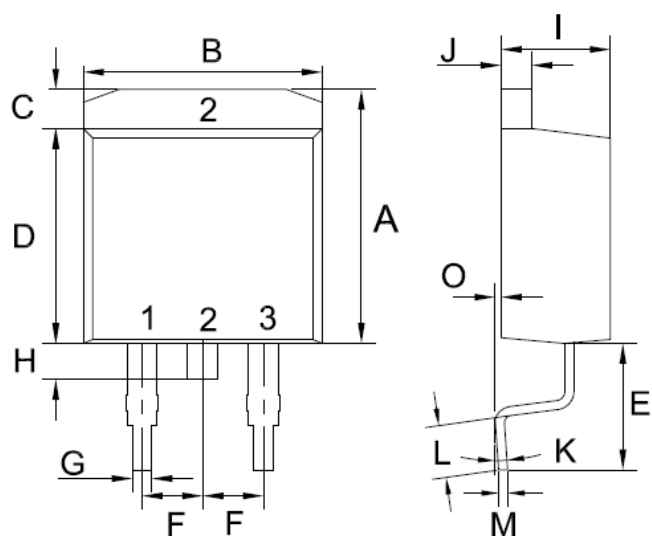


Fig.4:Typical Reverse Characteristics

Package Outline Dimensions



TO-263 (D ² PAK)		
Unit:mm		
DIM	MIN	MAX
A	10.44	10.84
B	9.81	10.21
C	1.44	1.84
D	8.80	9.20
E	4.46	4.66
F	2.44	2.64
G	0.61	1.01
H	0.70	1.30
I	4.27	4.87
J	1.07	1.47
K	0°	8°
L	2.10	2.50
M	0.30	0.46
O	0	0.25