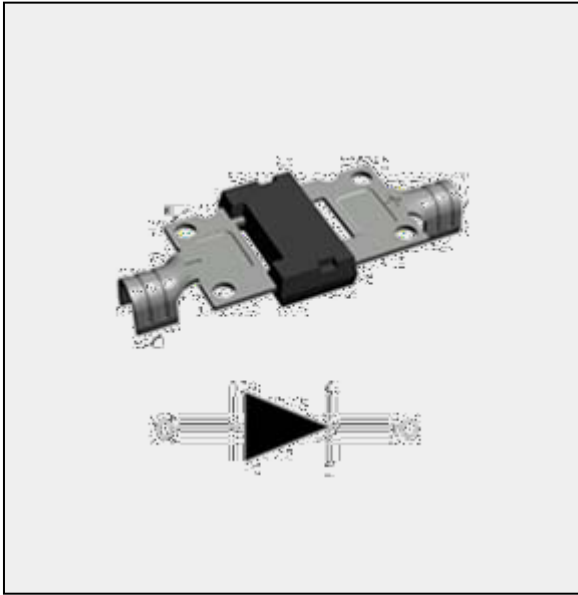




GFMK4045

Schottky Bypass Diode Module



Features

- 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

Typical Applications

Photovoltaic solar cell protection schottky rectifier

Mechanical Data

Package: GF025

Molding compound meets UL 94 V-0 flammability rating,

Terminals: Tin plated leads, solderable per J-STD-002 and JESD 22-B102

Polarity: As marked

Maximum Ratings ($T_a=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GFMK4045
Device marking code			GFMK4045
Repetitive Peak Reverse Voltage	VRRM	V	45
Average Rectified Output Current @60Hz sine wave, R-load, $T_a=25$	IO	A	40
Surge(Non-repetitive)Forward Current @60Hz sine wave, 1 cycle, $T_j=25$	IFSM	A	400
Current Squared Time @1ms $t < 8.3ms$ $T_j=25$, Rating of per diode	I^2t	A ² S	660
Storage Temperature	Tstg		-55 ~+150
Junction Temperature IN DC Forward Mode-Forward Operations without reverse bias, t 1 h (Fig. 1) 1	T_j		-55 ~+200

Note

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

Electrical Characteristics ($T_a=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GFMK4045
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=40A	0.52
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	mA	VRM=VRRM $T_a=25$	0.1
	IRRM2	mA	VRM=VRRM $T_a=100$	12
	IRRM3	mA	VRM=VRRM $T_a=125$	55



GFMK4045

Thermal Characteristics ($T_a=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GFMK4045
Thermal Resistance 1	R J-C	/W	1.5

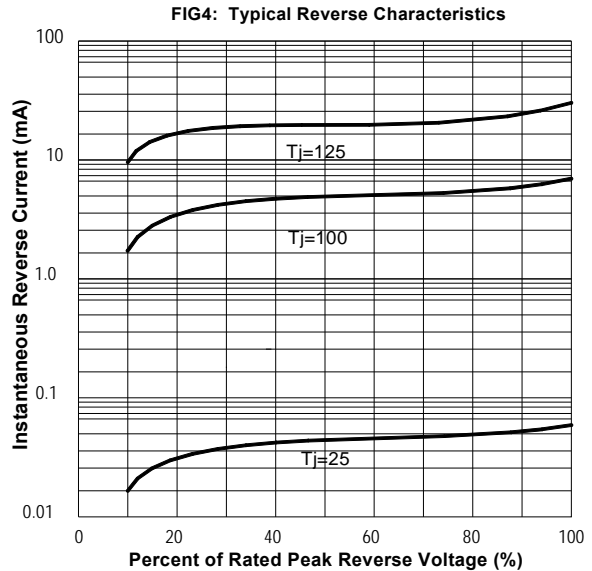
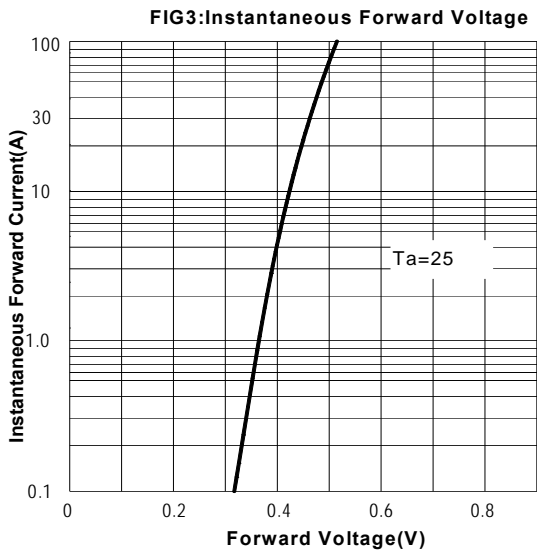
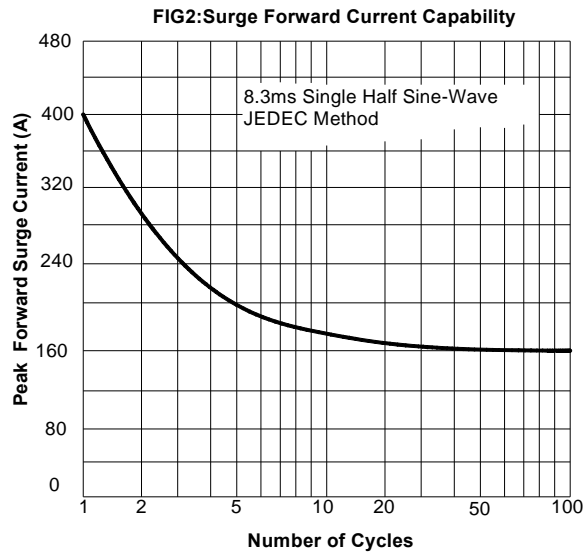
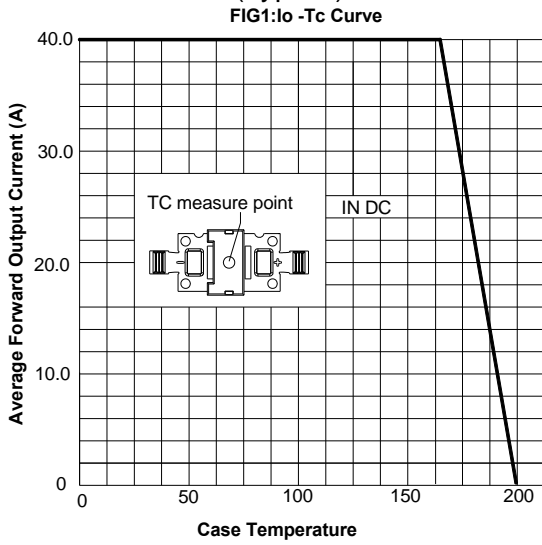
Note

(1) Thermal resistance from Between junction and case, On glass-epoxi substrate.

Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GFMK4045	Approximate 4.0	30	600	2400	Tube

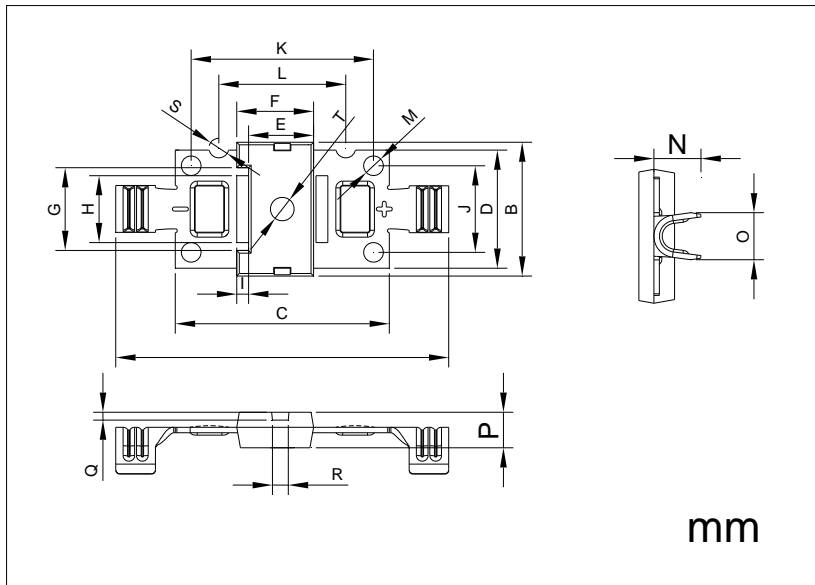
Characteristics (Typical)





GFMK4045

Outline Dimensions (in millimeters)



DIM	MM		NOTE
	MIN	MAX	
A	41.5	42.5	
B	16.5	17.5	
C	26.5	27.5	
D	14.5	15.5	
E	7.9	8.5	
F	9.4	10	
G	10.50REF		
H	8.2	8.8	
I	1.2	1.8	
J	10.7	11.3	
K	22.7	23.3	
L	15.7	16.3	
M	2.35	2.65	
N	5.65	6.25	
O	5.72	6.22	
P	4.4	4.6	
Q	0.7	1.3	
R	1.7	2.3	
S	2.3	2.7	
T	2.7	3.3	



GFMK4045

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