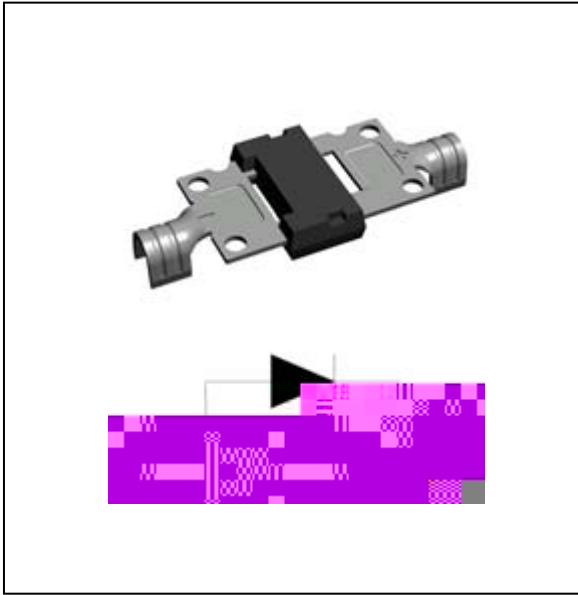




GFMK4045C

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	GFMK4045C
Device marking code			GFMK4045C
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	650
Current Squared Time @1ms $t < 8.3ms$ $T_j=25$, Rating of per diode	I^2t	A ² S	1750
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	GFMK4045C
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=40A	0.51
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	mA	VRM=VRRM $T_a=25$	0.12
	IRRM2	mA	VRM=VRRM $T_a=100$	13
	IRRM3	mA	VRM=VRRM $T_a=125$	60



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

PARAMETER	SYMBOL	UNIT	GFMK4045C
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
GFMK4045C	Approximate 4.0	30	600	2400	Tube

Characteristics (Typical)

FIG2: Surge Forward Current Capability

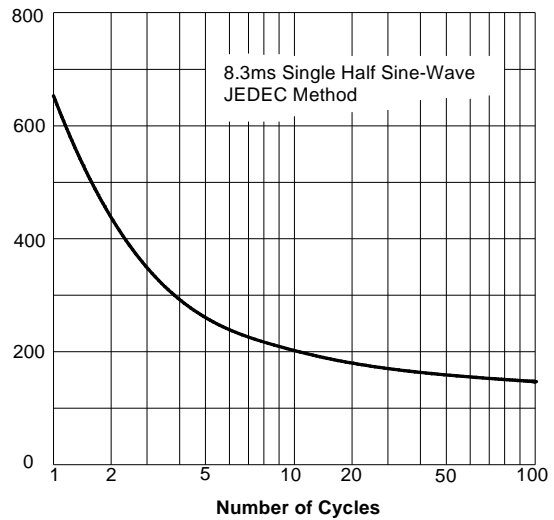
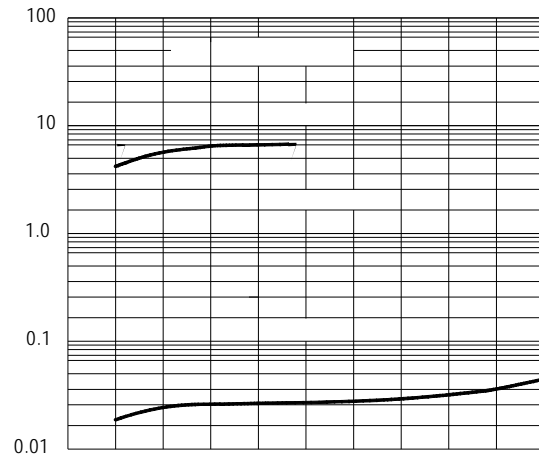
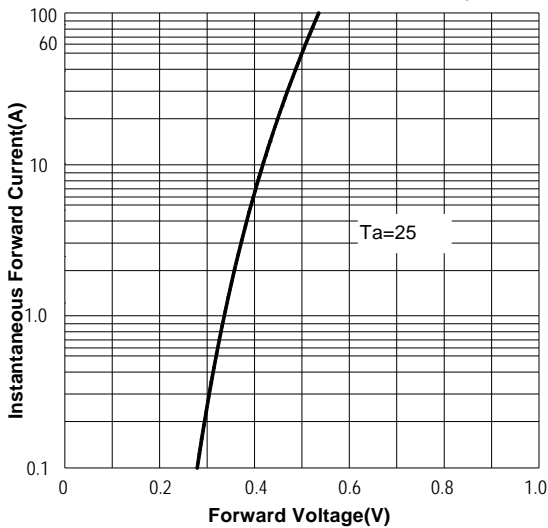
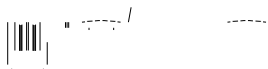


FIG3: Instantaneous Forward Voltage





Outline Dimensions (in millimeters)





GFMK4045C

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