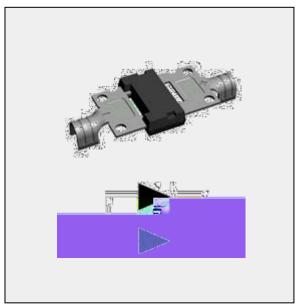


GFMK4045C

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 (Ta=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, Ta=25 | IO | A | 40 |
| Surge(Non-repetitive)Forward Current @60Hz sine wave, 1 cycle, Tj=25 | IFSM | A | 650 |
| Current Squared Time @1ms t<8.3ms Tj=25 , Rating of per diode | l ² t | 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 | Тј | | -55 ~+200 |

Note

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

Electrical Characteristics (Ta=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= ^V RRM Ta=25 | 0.12 |
| | IRRM2 | mA | VRM=VRRM Ta=100 | 13 |
| | I _{RRM3} | mA | VRM=VRRM Ta=125 | 60 |



GFMK4045C

Thermal Characteristics (Ta=25 Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | GFMK4045C |
|----------------------|--------|------|-----------|
| Thermal Resistance 1 | R J-C | /W | 1.5 |

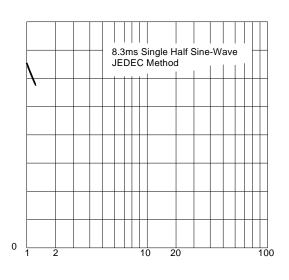
Note

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

Ordering Information (Example)

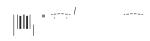
| PREFERRED P/N | UNIT WEIGHT(g) | MINIIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|-----------------|--------------------------|----------------------------|-------------------------------|---------------|
| GFMK4045C | Approximate 4.0 | 30 | 600 | 2400 | Tube |

Characteristics (Typical)





Outline Dimensions (in millimeters)





GFMK4045C

Disclaimer

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