

MK4045

Typical Applications/

Photovoltaic solar cell protection schottky rectifier/

Mechanical Data/

Package/ : GF030S

Molding compound meets UL 94 V-0 flammability rating / UL 94 V-0

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

J-STD-002 JESD 22-B102

Polarity/ : As marked/

Maximum Ratings (T_a=25 Unless otherwise specified / (Ta=25)

| PARAMETER | SYMBOL | UNIT | MK4045 |
|---|------------------|------------------|-----------|
| Device marking code | | | MK4045 |
| Repetitive Peak Reverse Voltage | V _{RRM} | V | 45 |
| Average Rectified Output Current @60Hz half sine-wave, R-load, T _a =25 *SZ Ta=25 | I _o | A | 40 |
| Surge(Non-repetitive)Forward Current@60Hz half sine-wave, 1 cycle, T _a =25 fl L *SZ Tj 1& L | I _{FSM} | A | 350 |
| Current Squared Time @1ms t<8.3ms T _j =25 fl ng hOS ' ng Tj 1& L | I ² t | A ² s | 505 |
| Storage Temperature | T _{stg} | | -55 ~+150 |
| Junction Temperature/ IN DC Forward Mode-Forward Operations without reverse bias, t 1 h (Fig. 1)fl L 1h 1 | T _j | | -55 ~+200 |

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

Electrical Characteristics T_a=25 Unless otherwise specified / (Ta=25)

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | MK4045 |
|---|-----------------|------|---|--------|
| Maximum instantaneous forward voltage drop per diode | V _{FM} | V | I _F =40.0A | 0.55 |
| Maximum DC reverse current at rated DC blocking voltage per diode | IRRM1 | mA | V _{RM} =V _{RRM} =25 | 0.1 |
| | IRRM2 | | V _{RM} =V _{RRM} =100 | 9.0 |
| | IRRM3 | | V _{RM} =V _{RRM} =125 | |

long term reliability/



MK4045

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

| PARAMETER | SYMBOL | UNIT | MK4045 |
|----------------------|--------|------|--------|
| Thermal Resistance 1 | R J-C | /W | 1.0 |

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

(1) (1) Pn

Ordering Information (Example) / ()

| PREFERRED P/N | UNIT WEIGHT(g) () | MINIIMUM PACKAGE(pcs) () | OUTER CARTON QUANTITY(pcs) () | DELIVERY MODE |
|---------------|--------------------------|------------------------------|--------------------------------------|---------------|
| MK4045 | Approximate 5.5 5.5 / | 30 | 1500 | Tube |

Characteristics (Typical) / ()

A 0 - " 0 2 0 2 a 0 € , R2 Ve 0 2 0 62 0 2 0 2 0 fV" xu" => 5(fP" , 2 #R, Ve 2 #R, Ve 2

Average Forward Output Current (A)

