

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 / ())

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, $T_a=25$	I_o	A	40
Surge(Non-repetitive)Forward Current@60Hz half sine-wave, 1 cycle, $T_a=25$	I_{FSM}	A	350
Current Squared Time @1ms≤t<8.3ms $T_j=25$	I^2t	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)	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 / ($T_a=25$)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MK4045
Maximum instantaneous forward voltage drop per diode	VFM	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 Ta=25 Unless otherwise specified / (Ta=25)

PARAMETER	SYMBOL	UNIT	MK4045
Thermal Resistance 1	RθJ-C	/W	1.0

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

■Ordering Information (Example) / ()

PREFERED 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 î 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)
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