

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 (Ta=25 Unless otherwise specified / (Ta=25)

PARAMETER	SYMBOL	UNIT	MK4045
Device marking code			MK4045
Repetitive Peak Reverse Voltage	VRRM	V	45
Average Rectified Output Current @60Hz half sine-wave, R-load, Ta=25 60Hz Ta=25	Io	A	40
Surge(Non-repetitive)Forward Current@60Hz half sine-wave, 1 cycle, Ta=25 () 60HZ Tj =25	IFSM	A	350
Current Squared Time @1ms≤t<8.3ms Tj=25 (1ms ≤ t<8.3ms Tj=25)	I²t	A²s	505
Storage Temperature	Tstg		-55 ~+150
Junction Temperature/ IN DC Forward Mode-Forward Operations without reverse bias, t ≤1 h (Fig. 1)(1) ≤1h 1	Tj		-55 ~+200

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

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MK4045
Maximum instantaneous forward voltage drop per diode	VFM	V	IF=40.0A	0.55
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	mA	VRM=VRRM =25	0.1
	IRRM2		VRM=VRRM =100	9.0
	IRRM3		VRM=VRRM =125	

•long term reliability/



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

PARAMETER	SYMBOL	UNIT	MK4045
Thermal Resistance 1	$R_{\theta J-C}$	/W	1.0

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

(1) (1) P_n III

■ 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) / ()

$I_A \sim 0 - 200mA$, $R_{\theta J-C} = 1.0/W$, $T_a = 25^\circ C$, $f = 1kHz$, $V_{fV} = 1.5V$, $I_{fV} = 20mA$, $R_{\theta J-C} = 1.0/W$, $T_a = 25^\circ C$

Average Forward Output Current (A)

