



# MK5045

## 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 /  
 long term reliability/

### 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  
 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 )

	SYMBOL	UNIT	
Device marking code			MK5045
Repetitive Peak Reverse Voltage	VRRM	V	45
Average Rectified Output Current @60Hz half sine-wave, R-load, Ta=25 60Hz Ta=25	Io	A	50
Surge(Non-repetitive)Forward Current@60Hz half sine-wave, 1 cycle, Ta=25 ( ) 60Hz Tj =25	IFSM	A	700
Current Squared Time @1ms t<8.3ms Tj=25 (1ms t<8.3ms Tj =25 )	I²t	A²s	2030
Storage Temperature	Tstg		-55 ~+150

Junction Temperature/  
 IN DC Forwl Ta at& c auTa at= q » A



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

PARAMETER	SYMBOL	UNIT	MK5045
Thermal Resistance 1	R J-C	°C/W	1.0

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

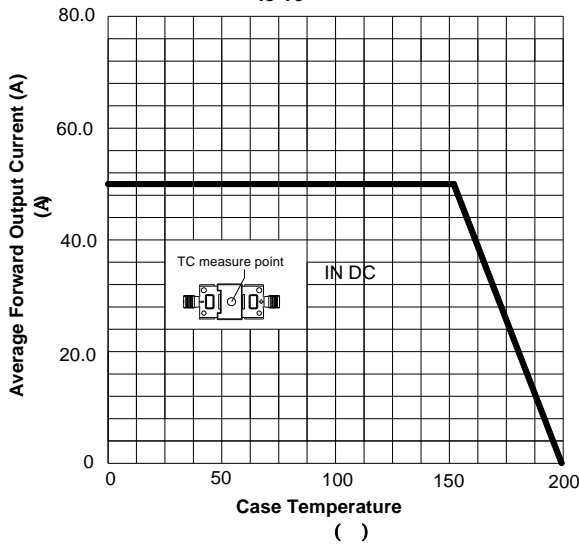
(1) (1) Pn

**Ordering Information** (Example) / ( )

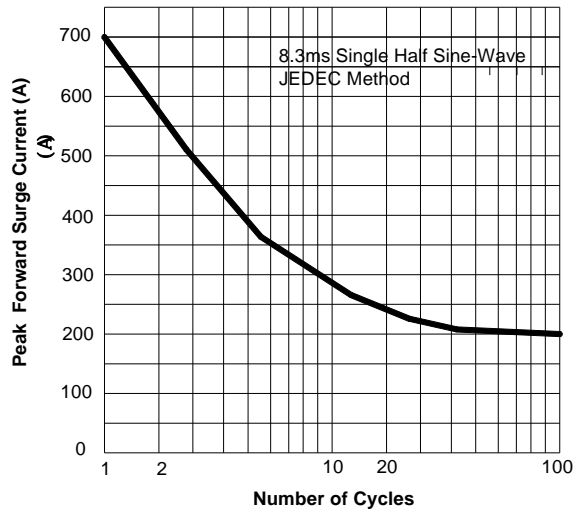
PREFERED P/N	UNIT WEIGHT(g) ( )	MINIIMUM PACKAGE(pcs) ( )	OUTER CARTON QUANTITY(pcs) ( )	DELIVERY MODE
MK5045	Approximate 5.5 5.5 /	30	1500	Tube

**Characteristics** (Typical) / ( )

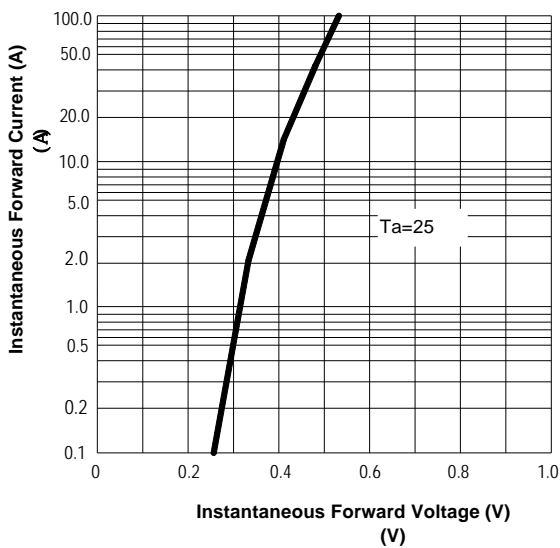
**FIG1:Io -Tc Curve**  
Io-Tc



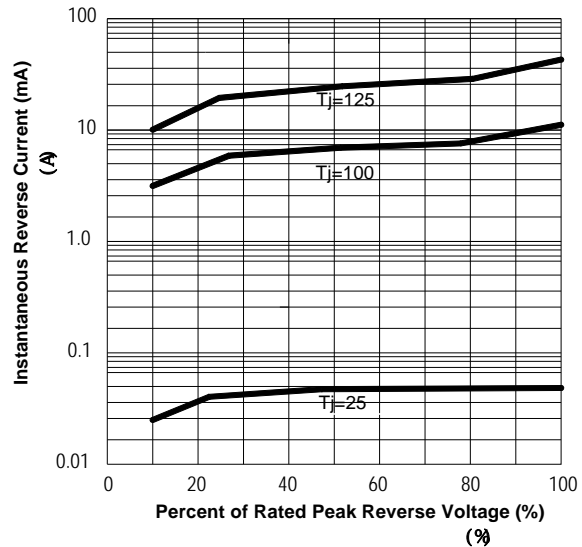
**FIG2:Surge Forward Current Capability**



**FIG3: Forward Voltage**



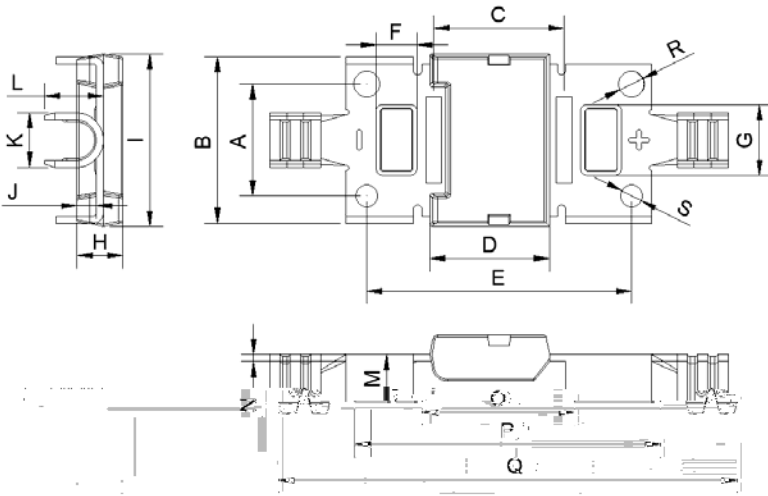
**FIG4: Typical Reverse Characteristics**





# MK5045

## Outline Dimensions /



DIM	MM		NOTE
	MIN	MAX	
A	10.5	11.5	
B	15.9	16.9	
C	12.6	13	
D	11.23	12.23	
E	25.5	26.5	
F	3.5	4.5	
G	6.5	7.5	
H	4.3	4.7	
I	16.5	17.5	
J	1.7	2.1	
K	5	5.8	
L	5.6	6	
M	4.4	5	
N	0.6	0.8	
O	14.73	15.13	
P	29.5	30.5	
Q	44.5	45.5	
R	2.35	2.65	
S	2	2.3	



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