



**E502650**

## Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 1.5°C/W Junction to Case With Heatsink
- Typical Thermal Resistance: 55°C/W Junction to Ambient Without Heatsink

## Mechanical Data

- Mounting Torque: 0.5 N•m

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UD2KB05	UD2KB05	50V	35V	50V
UD2KB10	UD2KB10	100V	70V	100V
UD2KB20	UD2KB20	200V	140V	200V
UD2KB40	UD2KB40	400V	280V	400V
UD2KB60	UD2KB60	600V	420V	600V
UD2KB80	UD2KB80	800V	560V	800V
UD2KB100	UD2KB100	1000V	700V	1000V

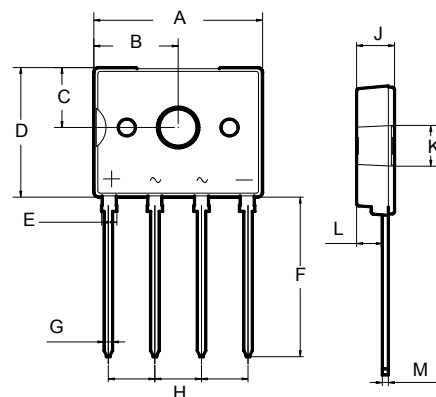
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0A	$T_C = 140^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	75A 65A 150A 130A	$T_J = 25^\circ\text{C}, 8.3\text{ms}, \text{Half Sine}$ $T_J = 125^\circ\text{C}$ $T_J = 25^\circ\text{C}, 1.0\text{ms}, \text{Half Sine}$ $T_J = 125^\circ\text{C}$
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10μA	$T_J = 25^\circ\text{C}$
$I^2t$ Rating for fusing	$I^2t$	23A <sup>2</sup> S	(1ms < t < 8.3ms)

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a

# 2 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts

**D3K**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.524	0.563	13.30	14.30	
B	0.252	0.291	6.40	7.40	
C	0.177	0.217	4.50	5.50	
D	0.406	0.445	10.30	11.30	
E	0.041	0.057	1.05	1.45	
F	0.516	0.531	13.10	13.50	
G	0.024	0.033	0.60	0.85	
H	0.146	0.154	3.70	3.90	
J	0.102	0.142	2.60	3.60	
K	0.122	0.134	3.10	3.40	
L	0.079	0.087	2.00	2.20	
M	0.016	0.024	0.40	0.60	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

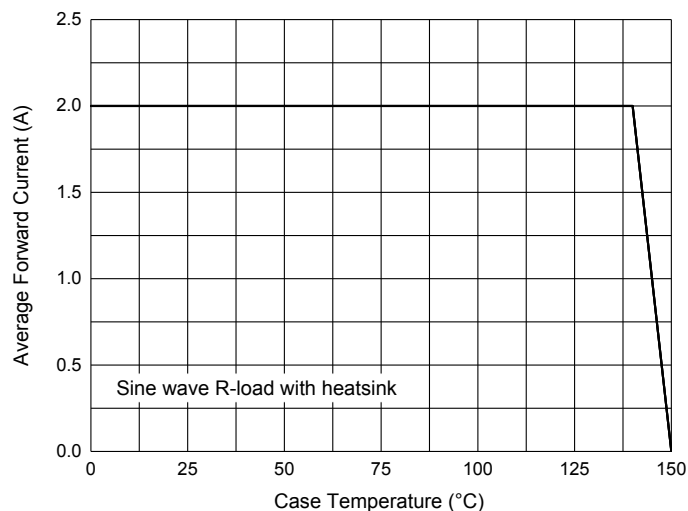


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

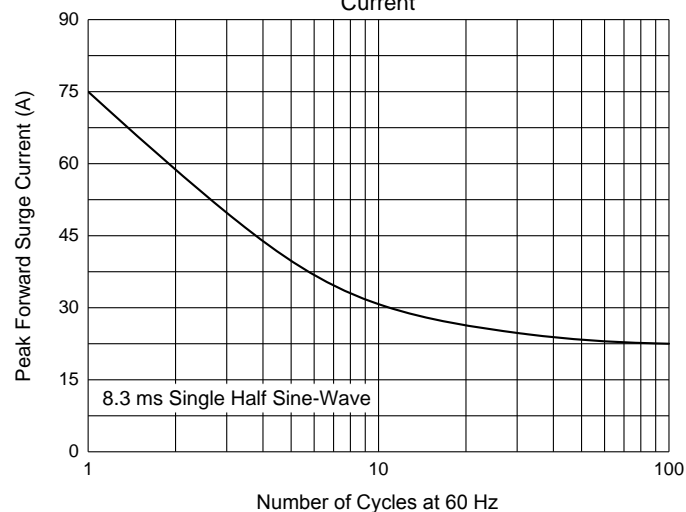


Fig. 3 - Typical Instantaneous Forward Characteristics

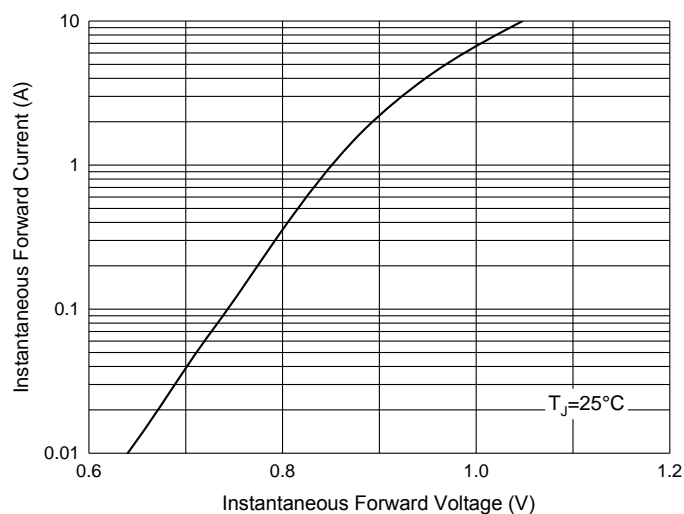
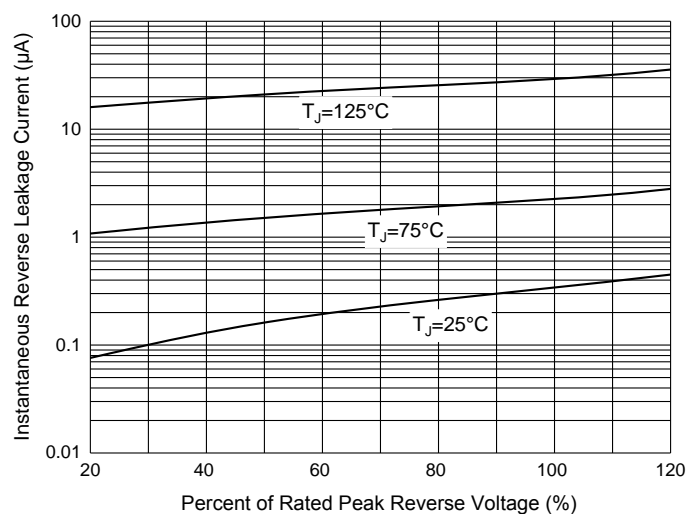


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-BP	Bulk:25pcs/Tube,1500pcs/Box,6Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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