

### E502650

### Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- High Surge Forward Current Capability
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- 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:  $55^{\circ}\mbox{C/W}$  Junction to Ambient Without Heatsink

## **Mechanical Data**

• Mounting Torque: 0.5 N•m

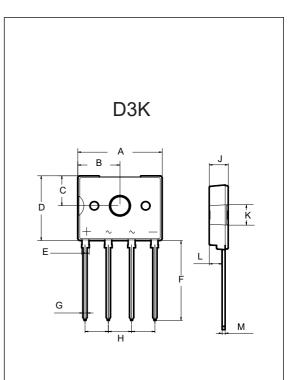
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UD4KB05	UD4KB05	50V	35V	50V
UD4KB10	UD4KB10	100V	70V	100V
UD4KB20	UD4KB20	200V	140V	200V
UD4KB40	UD4KB40	400V	280V	400V
UD4KB60	UD4KB60	600V	420V	600V
UD4KB80	UD4KB80	800V	560V	800V
UD4KB100	UD4KB100	1000V	700V	1000V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

	·		
Average Forward Current	I <sub>F(AV)</sub>	4.0A	T <sub>C</sub> = 140°C
	I <sub>FSM</sub>	130A	T <sub>J</sub> = 25°C,8.3ms, Half Sine
Peak Forward		110A	T <sub>J</sub> = 125°C
Surge Current		260A	T <sub>J</sub> = 25°C,1.0ms, Half Sine
		220A	T <sub>J</sub> = 125°C
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.0V	I <sub>FM</sub> = 2.0A; T <sub>J</sub> = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10µA	T <sub>J</sub> = 25°C
I <sup>2</sup> t Rating for fusing	l²t	70A <sup>2</sup> S	(1ms< t<8.3ms)

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

# 4 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.524	0.563	13.30	14.30	
В	0.252	0.291	6.40	7.40	
С	0.177	0.217	4.50	5.50	
D	0.406	0.445	10.30	11.30	
Е	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	
Н	0.146	0.154	3.70	3.90	
J	0.102	0.142	2.60	3.60	
Κ	0.122	0.134	3.10	3.40	
L	0.079	0.087	2.00	2.20	
М	0.016	0.024	0.40	0.60	



# **Curve Characteristics**

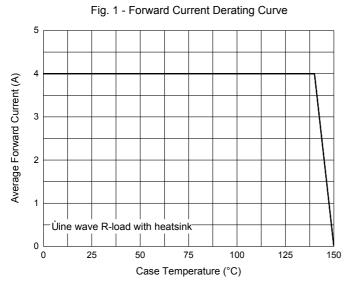
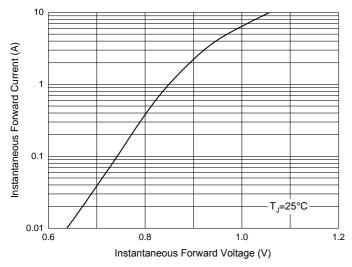
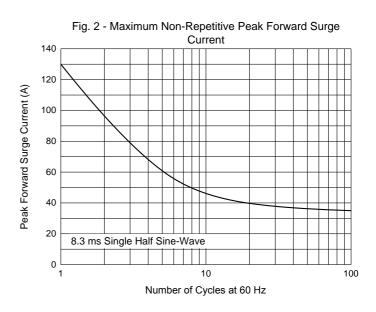
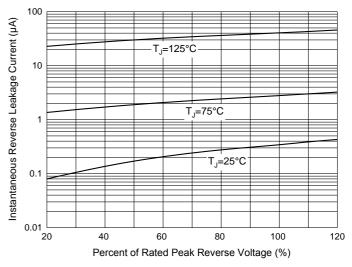


Fig. 3 - Typical Instantaneous Forward Characteristics











# **Ordering Information**

Device	Packing	
Part Number-BP	Ó"  \ KGÍ ] & Đ/ĩ à ^ÊFÍ €€] & ĐÚ[ ¢Ē S] & ĐÔæἰd[ }	

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

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