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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

# **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 (Note2)
- 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
UD6KB05	UD6KB05	50V	35V	50V
UD6KB10	UD6KB10	100V	70V	100V
UD6KB20	UD6KB20	200V	140V	200V
UD6KB40	UD6KB40	400V	280V	400V
UD6KB60	UD6KB60	600V	420V	600V
UD6KB80	UD6KB80	800V	560V	800V
UD6KB100	UD6KB100	1000V	700V	1000V

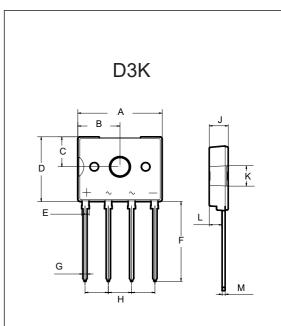
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	6.0A	T <sub>C</sub> =140°C
Peak Forward Surge Current	I <sub>FSM</sub>	170A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.0V	I <sub>FM</sub> =3.0A; 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	93A <sup>2</sup> S	(1ms< t<8.3ms)

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

2. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

# 6 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts



DIMENSIONS					
DIM	INCHES		MM		NOTE
DIIVI	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	
K	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**

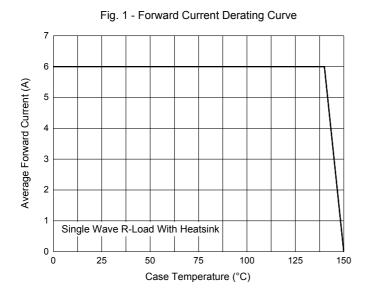


Fig. 3 - Typical Instantaneous Forward Characteristics

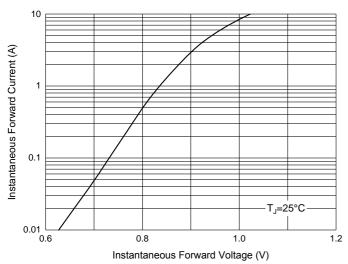


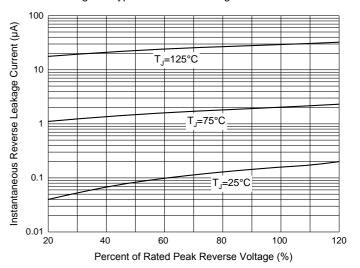
Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

150

8.3 ms Single Half Sine-Wave

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

	Device	Packing
Part Number-BP		Ó″  \KGÍ] &+ÐV″à^ÊFÍ€€] &+ÐÓ[¢ĒĒS] &+ÐÔæd[}

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

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