

#### D6KB05~D6KB100

D<sub>3</sub>K

#### Single Phase 6.0Amp Glass passivated Bridge Rectifiers

#### **Features**

The plastic package carries Underwriters Laboratory
 Flammability Classification 94V-0

- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed
  250 C/10 seconds at terminals

	D3K			
Dim.	Min.	Max		
A	14.2	14.7		
В	3.30	3.60		
С	10.2	10.6		
D	13.8	14.4		
E	1.8	2.2		
F	6.65	7.25		
G	3.71	3.91		
н	0.3	0.55 1.42		
1	1.22			
J	0.76	0.86		
0	1.8	2.4		
P	3.0Φ	3.40		

#### **Mechanical Data**

Case: Molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity**: Polarity symbol marking on body

Mounting Position: Any

# **Maximum Ratings And Electrical Characteristics**

Ratings at 25 C ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	D6K B05	D6K B10	D6K B20	D6K B40	D6K B60	D6K B80	D6K B100	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current with heatsink	l(AV)	6.0							А
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	lfsm	175.0							А
Rating for fusing (t=8.3ms, Ta=25 °C)	l <sup>2</sup> t	127.093							A <sup>2</sup> s
Maximum instantaneous forward voltage at 3.0A	VF	1.10							V
Maximum DC reverse current T A =25°C at rated DC blocking voltage Ta=125°C	lR	5.0 500							uA
Typical junction capacitance (Note 1)	Cı	56.0							pF
Typical thermal resistance	RqJA	55.0							*C/W
Operating junction and storage temperature range	ТЈ,Тѕтс	-55 to +150						*C	

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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#### **Ratings And Characteristic Curves**

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

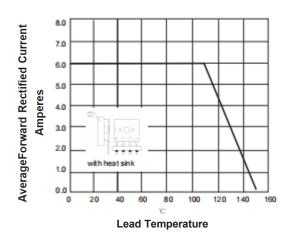


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

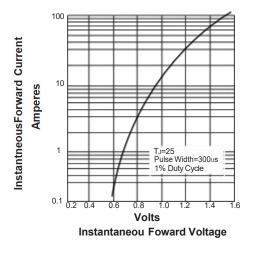
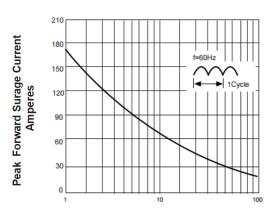
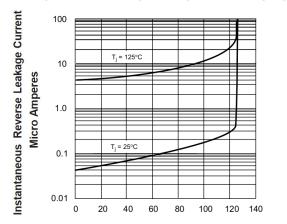


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG



Number of cycles

FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Percent Of Rated Peak Reverse Voltage(%)