



# D6KB05 thru D6KB10

## GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000Volts  
FORWARD CURRENT - 6.0 Amperes

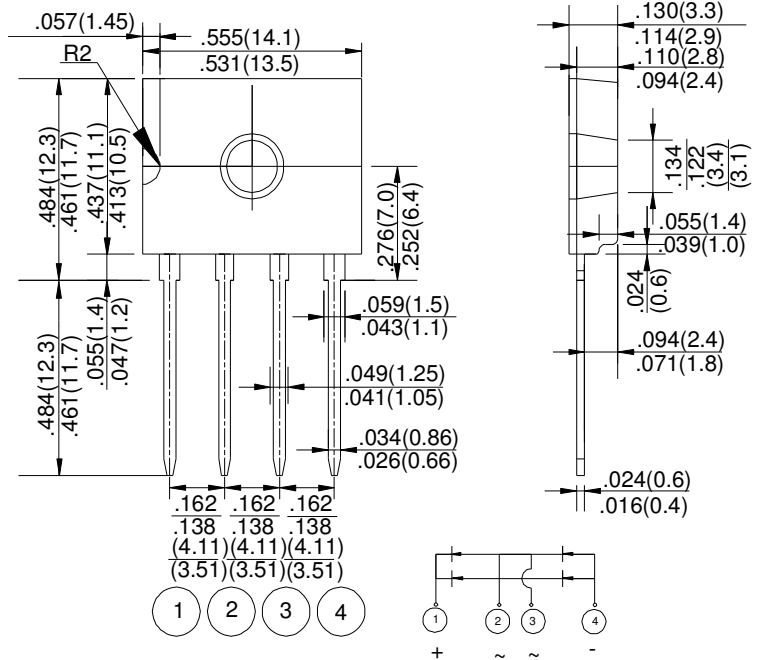
### FEATURES

- Glass passivated chip junction
- High case dielectric strength
- High surge current capability  
Ideal for printed circuit board

### MACHANICAL DATA

- Terminal:Plated leads solderable per MIL-STD 202E,  
Method 208C
- Case:UL-94 Class V-0 recognized Flame Retardant Epoxy
- Polarity:Polarity symbol marked on body
- Mounting position:any

### D3K



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

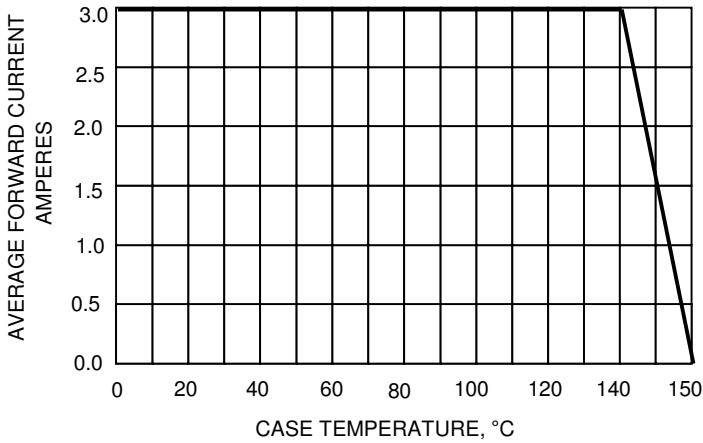
Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

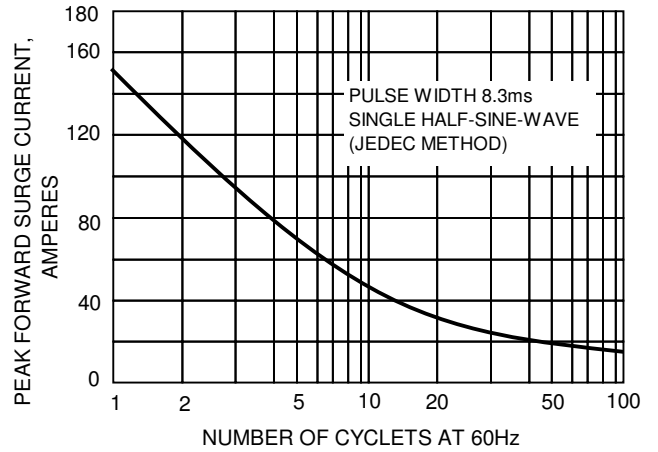
CHARACTERISTICS	SYMBOL	D6KB05	D6KB1	D6KB2	D6KB4	D6KB6	D6KB8	D6KB10	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	v
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	v
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	v
Maximum Average Forward Rectified Output Current @ T <sub>C</sub> =140°C (with heatsink)	I <sub>(AV)</sub>	6							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	150							A
Maximum Forward Voltage at 3.0A DC	V <sub>F</sub>	1.0							V
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	93							A <sup>2</sup> s
Maximum Typical Thermal Resistance without heatsink	R <sub>θJa</sub>	55							°C/W
with heatsink	R <sub>θJc</sub>	1.5							
without heatsink	R <sub>θJL</sub>	15							
Maximum DC Reverse Current @ T <sub>a</sub> =25°C at Rated DC Blocking Voltage @ T <sub>a</sub> =125°C	I <sub>R</sub>	10.0 500							μA
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

REV. 1, 30-Dec-2011

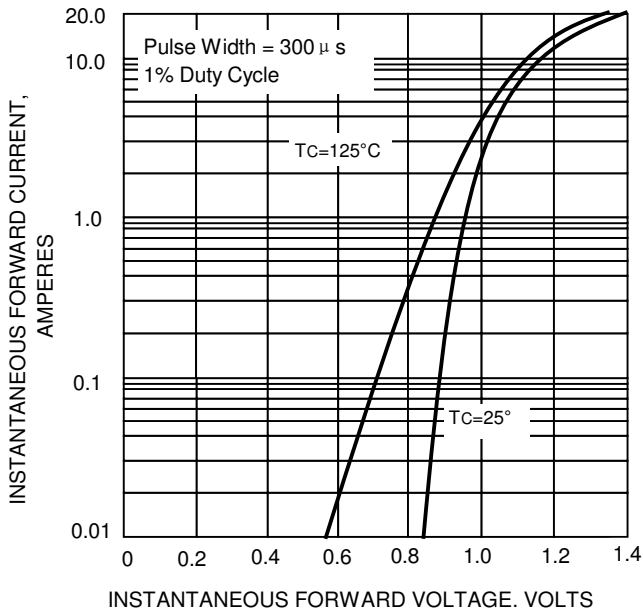
**FIG.1-DERATING CURVE OUTPUT RECTIFIED CURRENT**



**FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3-TYPICAL FORWARD CHARACTERISTICS**



**FIG.5-TYPICAL REVERSE CHARACTERISTICS**

