

# RD6KB100

## 6.0 A GLASS PASSIVATED BRIDGE RECTIFIERS

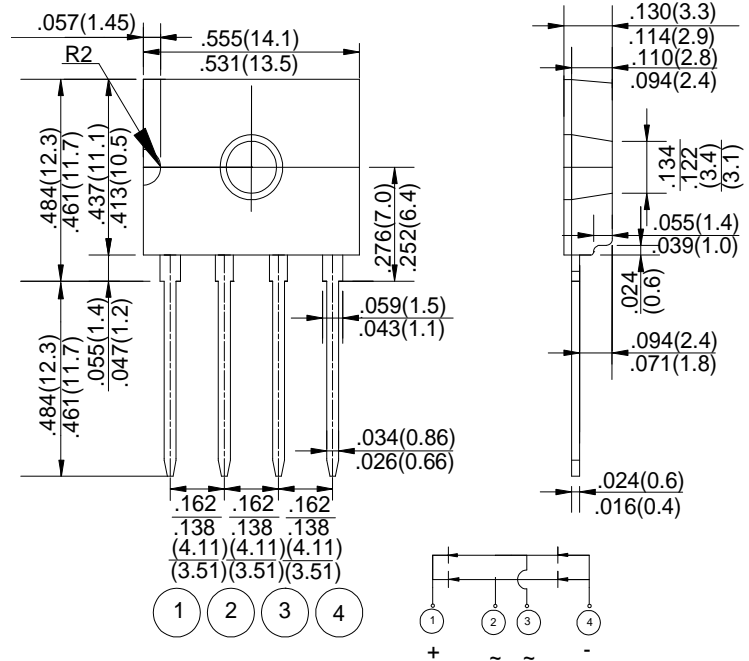
### FEATURES

- 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 (milimeters)

### 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	RD6KB100	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	1000	V
Maximum Average Forward Rectified Output Current @ T <sub>c</sub> =138°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 instantaneous forward voltage drop per leg @ I <sub>f</sub> = 6.0A	V <sub>F</sub>	1.3	V
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	93.37	A <sup>2</sup> s
Typical Thermal Resistance to case (with heatsink )	R <sub>θJC</sub>	4.0	°C/W
Maximum Reverse Recovery Time(Note 1)	T <sub>RR</sub>	500	ns
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>	5 500	μA
Operating Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

NOTES: 1.Measured with I<sub>F</sub>=0.5A,I<sub>R</sub>=1A,IRR=0.25A

# RATING AND CHARACTERISTIC CURVES

FIG.1-FORWARD DERATING CURRENT

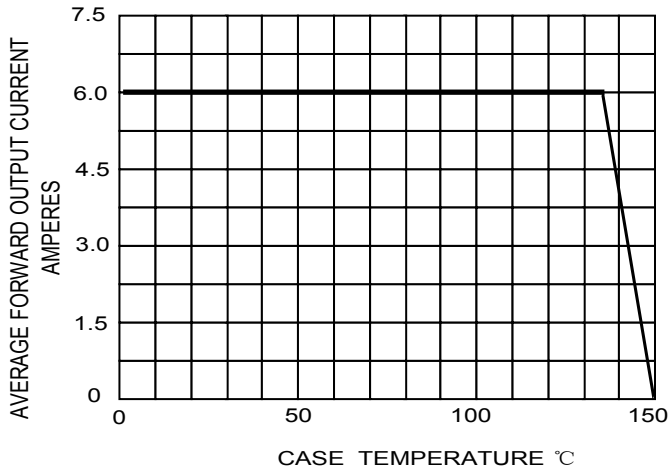


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

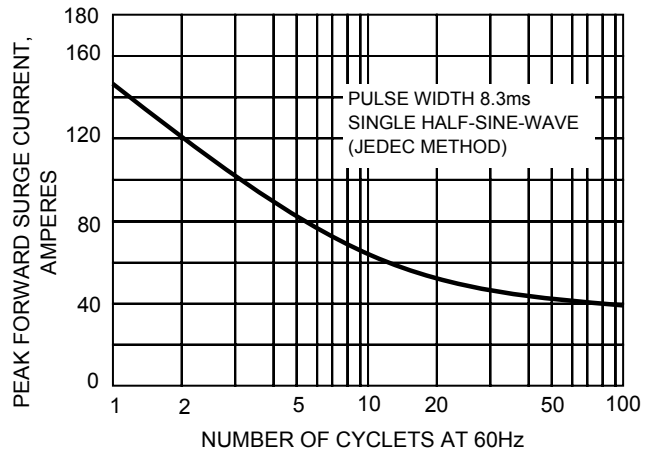


FIG.3-TYPICAL FORWARD CHARACTERISTICS

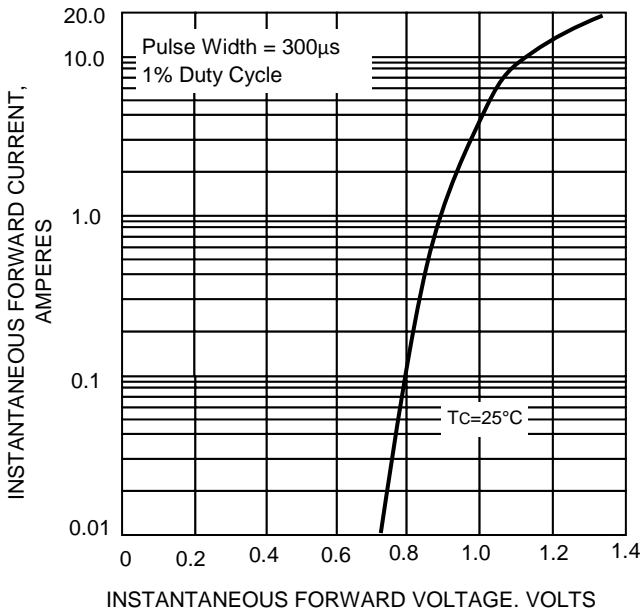


FIG.4-TYPICAL REVERSE CHARACTERISTICS

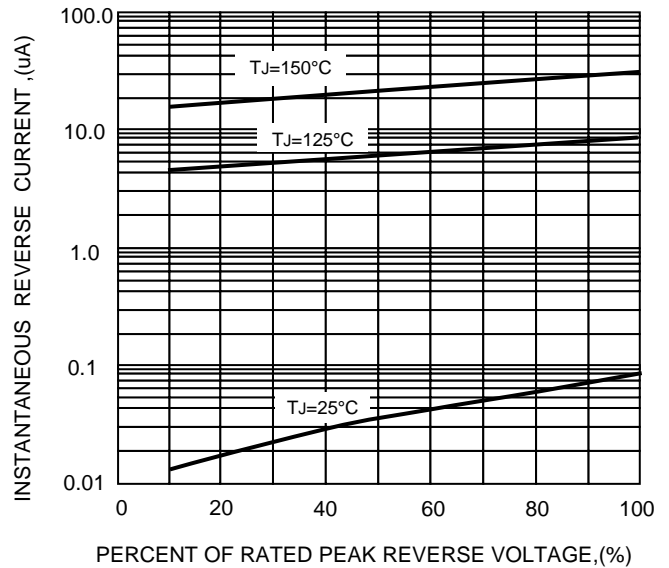


FIG.5-TYPICAL JUNCTION CAPACITANCE

