

RD4KB100

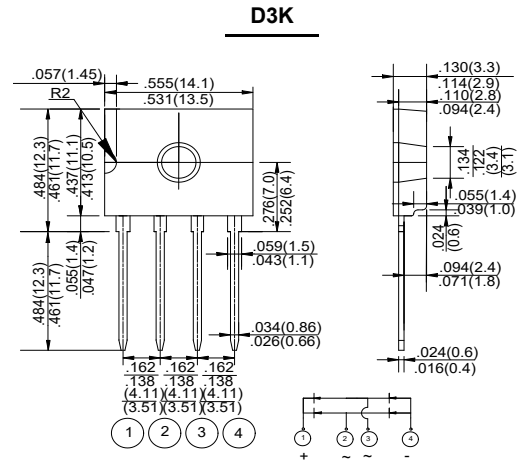
4.0 AMP FAST RECOVERY GLASS PASSIVATED BRIDGE RECTIFIERS

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



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	RD4KB100	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	1000	V
Maximum RMS Voltage	V _{RMS}	700	V
Maximum DC Blocking Voltage	V _{DC}	1000	V
Maximum Average Forward Rectified Output Current @ T _c =138°C (with heatsink)	I _(AV)	4	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave @ T _a =25°C	I _{FSM}	125	A
Maximum Forward Voltage at 4.0A DC	V _F	1.3	V
I ² t Rating for Fusing (1.0ms < t < 8.3ms)	I ² t	64.84	A ² s
Typical Thermal Resistance without heatsink	R _{θJa}	55	°C/W
with heatsink	R _{θJC}	1.5	
without heatsink	R _{θJL}	15	
Maximum DC Reverse Current @ T _a =25°C at Rated DC Blocking Voltage @ T _a =125°C	I _R	5.0 500	μA
Maximum Reverse Recovery Time(Note 1)	T _{RR}	500	ns
Operating Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

NOTES: 1. Measured with I_F=0.5A, I_R=1A, I_{RR}=0.25A

RATING AND CHARACTERISTIC CURVES

FIG.1-DERATING CURVE OUTPUT

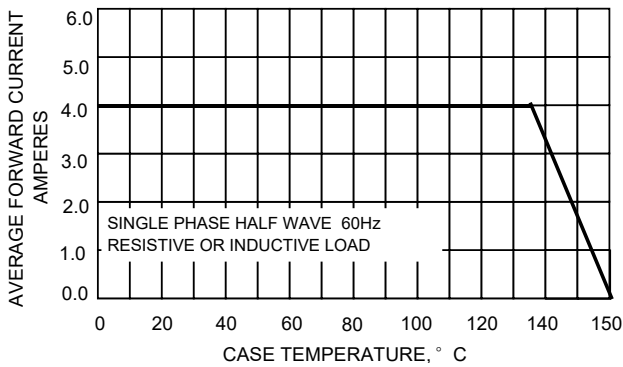


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

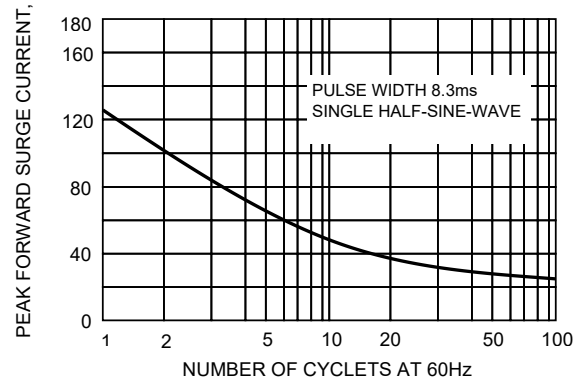


FIG.3-TYPICAL JUNCTION CAPACITANCE

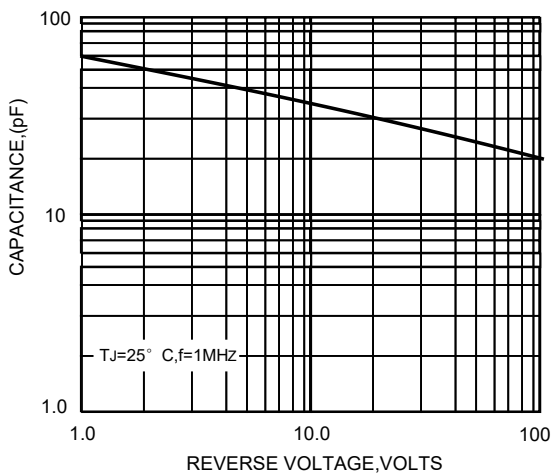


FIG.4-TYPICAL FORWARD CHARACTERISTICS

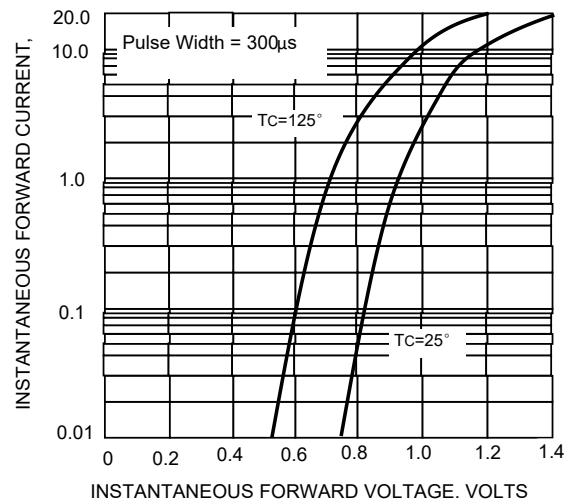


FIG.5-TYPICAL REVERSE CHARACTERISTICS

