



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**D3KB3A
THRU
D3KB3M**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 3.0 Amperes

FEATURES

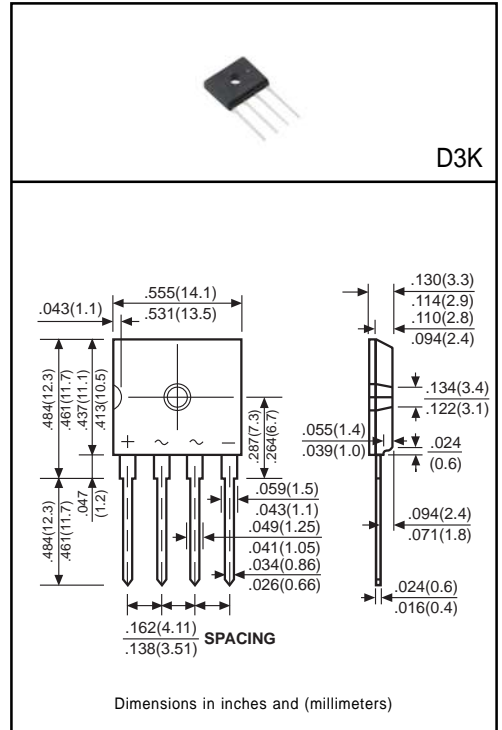
- * Glass passivated junction
- * High case dielectric strength
- * High surge current capability Ideal for printed circuit board

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 1.35 gram

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, derate current by 20%.



Dimensions in inches and (millimeters)

	SYMBOL	D3KB 3A	D3KB 3B	D3KB 3D	D3KB 3G	D3KB 3J	D3KB 3K	D3KB 3M	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	Vdc	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified output Current @Tc=100°C (with heatsink)	IF(AV)					3.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM					60			Amps
Maximum Forward Voltage Drop per element at 2.0A DC	VF					1.1			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	IR					10			μAmps
						500			
I ² t Rating for Fusing (t<8.3ms)	I ² t					15			A ² Sec
Typical Thermal Resistance without heatsink	RθJA					55			°C/W
Typical Thermal Resistance with heatsink	RθJC					1.5			°C/W
Typical Thermal Resistance without heatsink	RθJL					15			°C/W
Operating Temperature Range	TJ					-55 to +150			°C
Storage Temperature Range	TSTG					-55 to +150			°C

RATING AND CHARACTERISTIC CURVES (D3KB3A THRU D3KB3M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

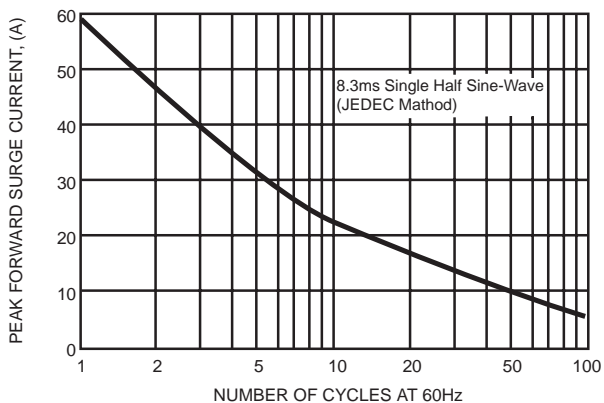


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

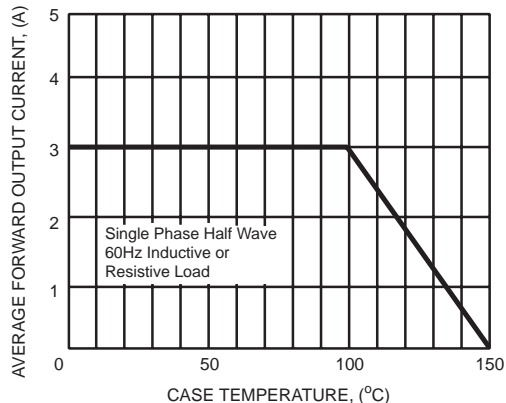


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

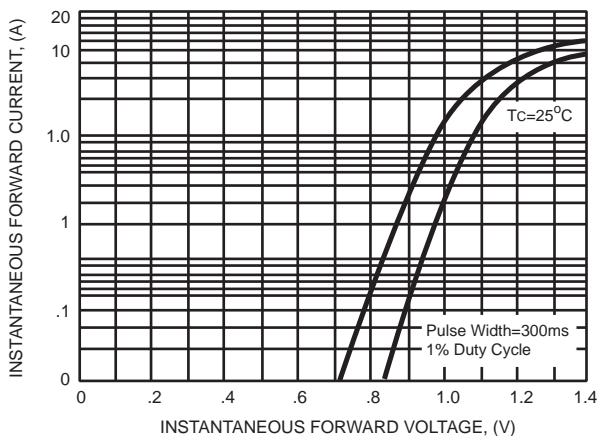


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

