DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

D3KB2A THRU D3KB2M

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts *CURRENT - 2.0 Amperes*

FEATURES

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

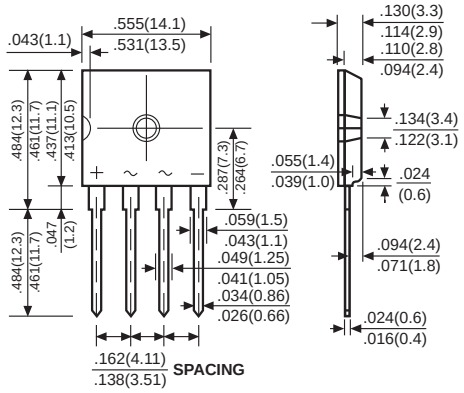
MECHANICAL DATA

* 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%.

D3K



Dimensions in inches and (millimeters)

		SYMBOL	D3KB 2A	D3KB 2B	D3KB 2D	D3KB 2G	D3KB 2J	D3KB 2K	D3KB 2M	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified output Current @Tc=100°C (with heatsink)		$I_{F(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	35							Amps
Maximum Forward Voltage Drop per element at 2.0A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@T_J = 25°C	I_R	10							μAmps
	@T_J = 125°C		500							
I^2t Rating for Fusing (t<8.3ms)		I^2t	3.5							A^2Sec
Typical Thermal Resistance without heatsink		$R\theta_{JA}$	55							°C/W
Typical Thermal Resistance with heatsink		$R\theta_{JC}$	1.5							°C/W
Typical Thermal Resistance without heatsink		$R\theta_{JL}$	15							°C/W
Operating Temperature Range		T_J	-55 to +150							°C
Storage Temperature Range		T_{STG}	-55 to +150							°C

RATING AND CHARACTERISTIC CURVES (D3KB2A THRU D3KB2M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

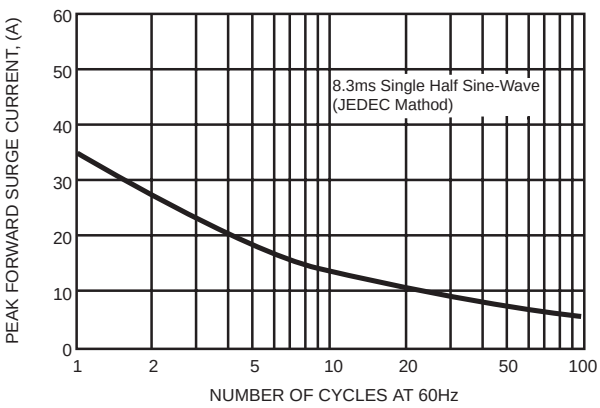


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

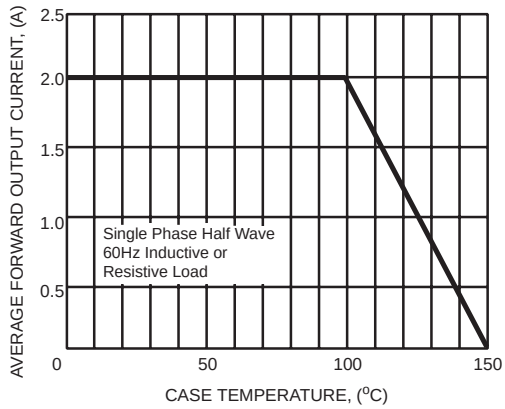


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

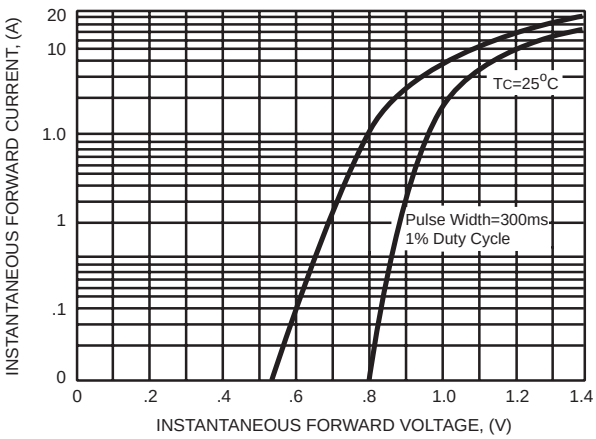


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS