

DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

D3KB4A THRU D3KB4M

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 4.0 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

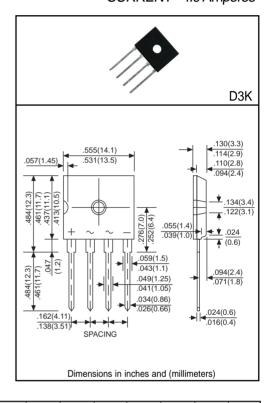
* Terminals: MIL-STD-202E, Method 208 guaranteed

* 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%.



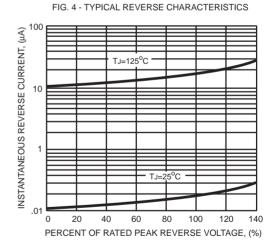
		SYMBOL	D3KB 4A	D3KB 4B	D3KB 4D	D3KB 4G	D3KB 4J	D3KB 4K	D3KB 4M	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage		VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified output Current @Tc=100°C (with heatsink)		IF(AV)	4.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	120						Amps	
Maximum Forward Voltage Drop per element at 4.0A DC		VF	1.1						Volts	
Maximum DC Reverse Current at Rated	@TJ = 25°C	l _R	10 500							μAmps
DC Blocking Voltage per element	@TJ = 125°C	IK IK								
I ² t Rating for Fusing (t<8.3ms)		I ² t	64.84						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		Тѕтс	-55 to +150							°C

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RATING AND CHARACTERISTIC CURVES (D3KB4A THRU D3KB4M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PEAK FORWARD SURGE CURRENT, (A) 150 8.3ms Single Half Sine-Wave (JEDEC Mathod) 120 90 60 30 0 2 50 5 10 20 100 NUMBER OF CYCLES AT 60Hz

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS 20 INSTANTANEOUS FORWARD CURRENT, (A) 10 TC=25°C 1.0 .1 Pulse Width=300ms % Duty Cycle 0 0 .2 .6 .8 1.2 1.4 INSTANTANEOUS FORWARD VOLTAGE, (V)



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