

## UG3KB005 THRU UG3KB100 BRIDGE RECTIFIERS



**VOLTAGE** 50 THRU 1000 Volts

**CURRENT** 3.0 Amperes

**D3K**

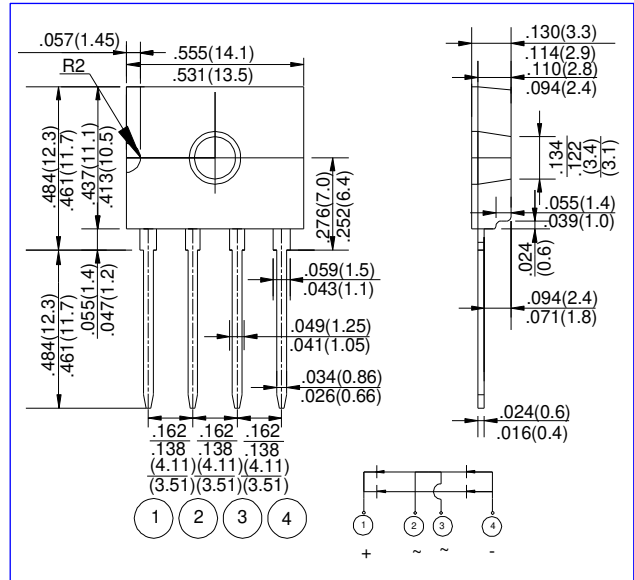
Unit:(mm)

### FEATURES

- \* Ideal for printed circuit board mounting
- \* The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- \* Built-in printed circuit board stand-offs
- \* High case dielectric strength
- \* High temperature soldering guaranteed 265°C /10 seconds at 5 lbs (2.3kg) tension

### MECHANICAL DATA

- \* Case: Reliable low cost construction utilizing molded plastic technique
- \* Terminals: Plated leads solderable per MIL-STD-202, Method 208
- \* Mounting Position: Any
- \* Weight: 0.065 ounce, 2.2 grams (approx)



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C(UNLESS OTHERWISE NOTED))

Resistive or Inductive load,60HZ. For Capacitive load derate by20%.

		UG3KB 005	UG3KB 010	UG3KB 020	UG3KB 040	UG3KB 060	UG3KB 080	UG3KB 100	
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=50°	IF(AV)	3							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	60							A
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t	15.0							A <sup>2</sup> sec
Typical thermal resistance per element (1)	RthJA	10.0							°C / W
Typical junction capacitance per element (2)	Cj	25.0							pF
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

### Electrical Characteristics

Rating at 25° ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.  
For Capacitive load derate by 20 %.

Parameter	Symbol	UG3KB 005	UG3KB 010	UG3KB 020	UG3KB 040	UG3KB 060	UG3KB 080	UG3KB 100	Unit
Maximum instantaneous forward voltage drop per leg at 1.5A	VF	1.1							V
DC blocking voltage per element TA =125°C	IR	10 500							μA

**Notes:** (1)Thermal resistance from Junction to Ambient on P.C.board mounting.  
(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

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## RATING AND CHARACTERISTIC CURVES (TA=25°C (UNLESS OTHERWISE NOTED))

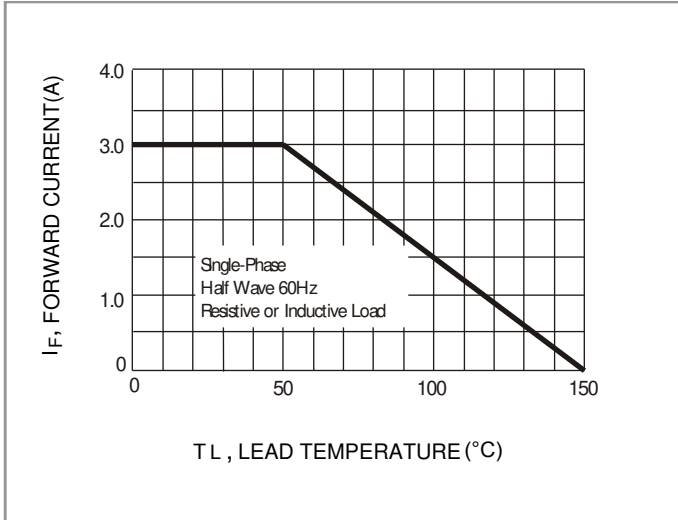


Fig.1-FORWARD CURRENT DERATING CURVE

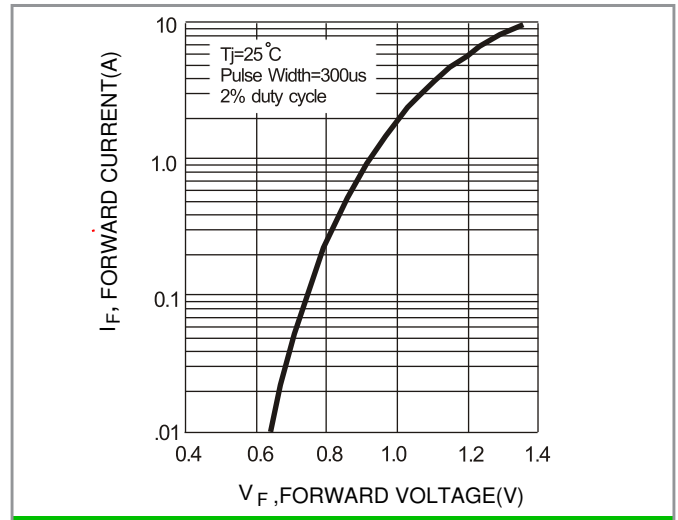


Fig.2-TYPEICAL FORWARD CHARACTERISTICS

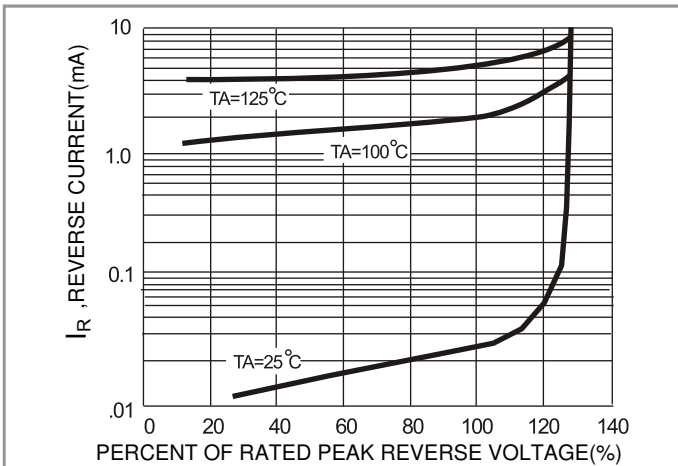


Fig.3-TYPICAL REVERSE CHARACTERISTICS

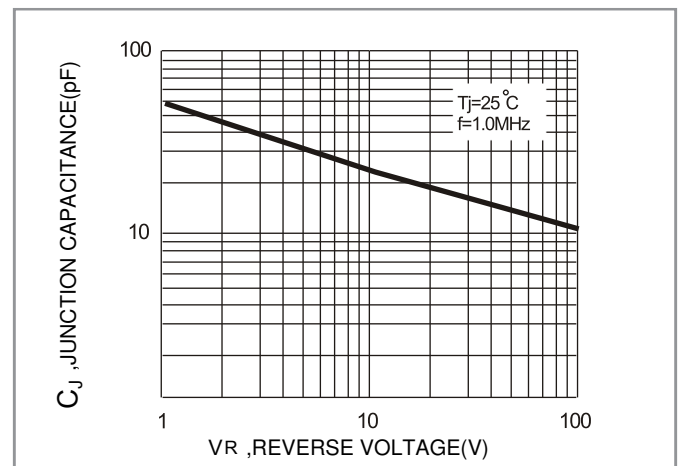


Fig.4-TYPICAL JUNCTION CAPACITANCE

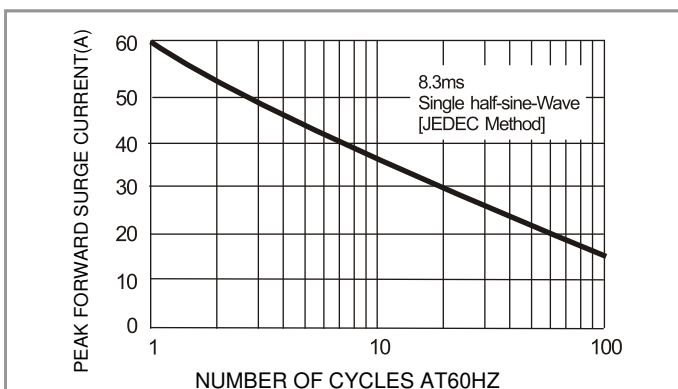


Fig.5-MAX. NON-REPETITIVE SURGE CURRENT



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**ORDER INFORMATION**

- Packing information  
B/P-600pcs Per Box.