

# Kingtronics®

# D3UB05 THRU D3UB100

## Single Phase 3.0 AMPS. Glass Passivated Bridge Rectifiers

Voltage Range 50 to 1000 Volts Current 3.0 Amperes

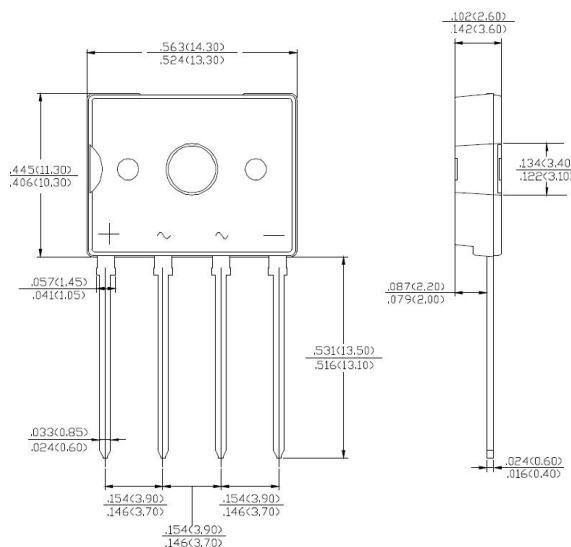
### FEATURES

- ◆ Ideal for printed circuit boards
- ◆ Reliable low cost construction technique results in inexpensive product
- ◆ High temperature soldering guaranteed:  
260°C / 10 seconds
- ◆ UL Recognized File number: E347214

### MECHANICAL DATA

- ◆ Case: Molded plastic
- ◆ Lead: solder plated
- ◆ Polarity: As marked on body
- ◆ Mounting Torque: 0.8N·m
- ◆ Recommended Torque: 0.5N·m

### Package: D3K



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

Type Number		D3UB 05	D3UB 10	D3UB 20	D3UB 40	D3UB 60	D3UB 80	D3UB 100	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at	I <sub>F(AV)</sub>				3.0 <sup>(1)</sup>				A
					2.0 <sup>(2)</sup>				
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>				60				A
Maximum Instantaneous Forward Voltage @ 3A	V <sub>F</sub>				1.1				V
Rating for fusing (3ms ≤ t < 8.3ms) T <sub>J</sub> = 25°C	I <sup>2</sup> t				15				A <sup>2</sup> sec
Maximum DC Reverse Current @ T <sub>A</sub> = 25°C	I <sub>R</sub>				5.0				μA
rated DC blocking voltage per leg T <sub>A</sub> = 125°C					500				
Typical Thermal Resistance (Note)	R <sub>θJA</sub> R <sub>θJL</sub>				40 15				°C/W
Operating Temperature Range	T <sub>J</sub>				-55 to +150				°C
Storage Temperature Range	T <sub>STG</sub>				-55 to +150				°C

NOTE: 1. Unit case mounted on 1.6\*1.6\*0.06" thick (5.1\*5.1\*0.15cm) Al. Plate

2. Unit mounted on P.C.B. with 0.5\*0.5" (12.7\*12.7mm) copper pads and 0.375" (9.5mm) lead length

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## RATING AND CHARACTERISTIC CURVES D3UB05 THRU D3UB100

FIG. 1-MAXIMUM NONO-REPETITIVE FORWARD SURGE

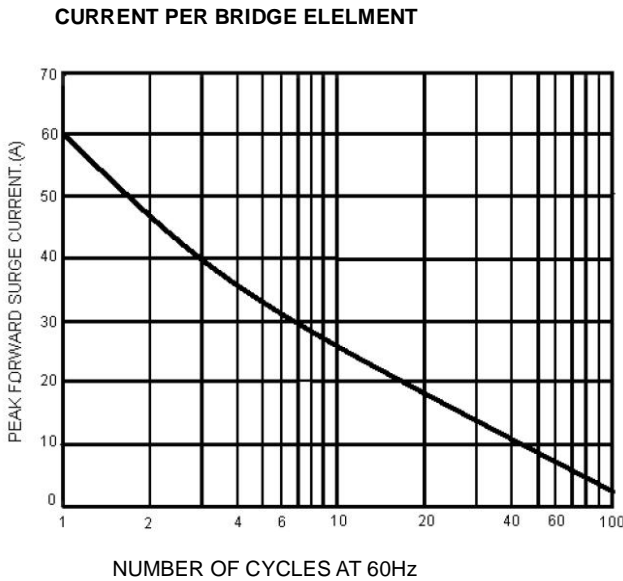


FIG. 2-MAXIMUM FORWARD CURRENT DERATING CURVE

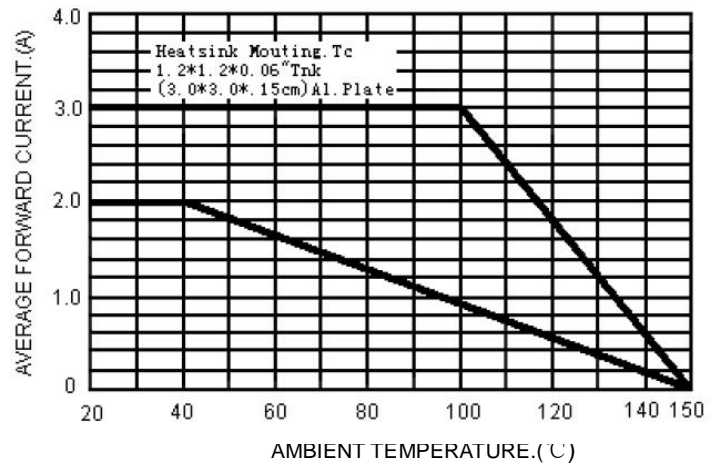


FIG. 3-TYPICAL INSTANTANEOUS FORWARD

CHARACTERISTICS PER BRIDGE ELEMENT

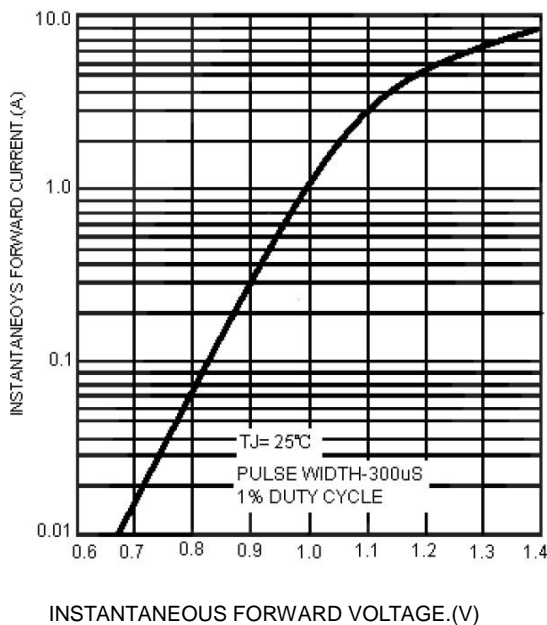
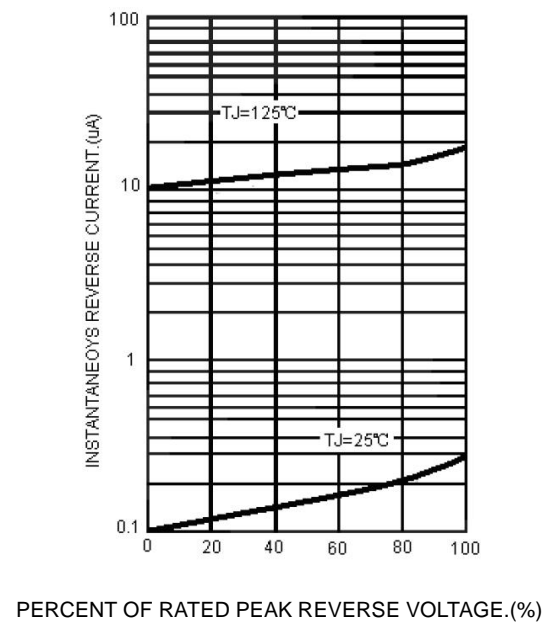


FIG. 4-TYPICAL REVERSE CHARACTERISTICS PER

BRIDGE ELEMENT



Note: Specifications are subject to change without notice.

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