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# **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

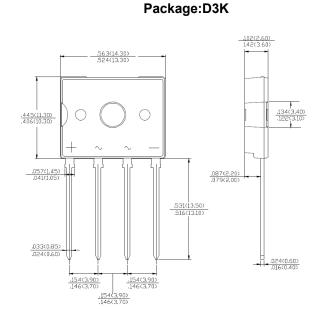
#### **MECHANICAL DATA**

◆Case: Molded plastic◆Lead: solder plated

◆Polarity: As marked on body

◆Mounting Torque: 0.8N • m

◆Recommended Torque: 0.5N • m



## 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	D3UB	D3UB	D3UB	D3UB	D3UB	D3UB	UNITS
		05	10	20	40	60	80	100	
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	٧
Maximum DC blocking Voltage	VDC	50	100	200	400	600	800	1000	٧
Maximum Average Forward Tc= 100 ℃	3.0 <sup>(1)</sup>								А
Rectified Current at T <sub>A</sub> = 40 °C	IF(AV)	$2.0^{(2)}$							
Peak Forward Surge Current, 8.3 ms Single									
Half Sine-wave Superimposed on Rated Load (JEDEC method)	İfsm	60							Α
Maximum Instantaneous Forward Voltage @ 3A	VF	1.1							V
Rating for fusing (3ms≤t<8.3ms) Tj=25℃	l <sup>2</sup> t	15							A <sup>2</sup> sec
Maximum DC Reverse Current @ TA=25 ℃	5.0								μА
rated DC blocking voltage per leg Ta = 125 $^{\circ}\mathrm{C}$	IR 500								
Typical Thermal Resistance (Note)	RөJA	40							°C/W
	Rejl	15							
Operating Temperature Range	TJ	-55 to +150						$^{\circ}$	
Storage Temperature Range	Тѕтс	-55 to +150						$^{\circ}$	

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

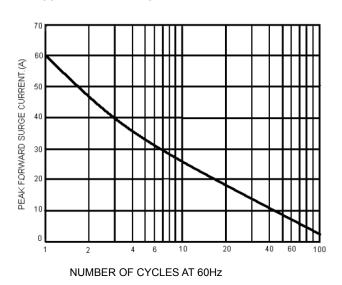
2.Unit mounted on P.C.B. with 0.5\*0.5" (12.7\*1.27mm) copper pads and 0.375" (9.5mm) lead length

4.0

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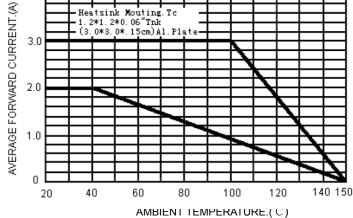
## RATING AND CHARACTERISTIC CURVES D3UB05 THRU D3UB100

FIG. 1-MAXIMUM NONO-REPETITIVE FORWARD SURGE **CURRENT PER BRIDGE ELELMENT** 



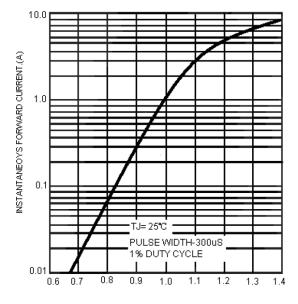
1. 2\*1. 2\*0. 06"Tnk (3. 0\*3. 0\*. 15cm) Al 3.0 2.0

FIG. 2-MAXIMUM FORWARD CURRENT DERATING CURVE



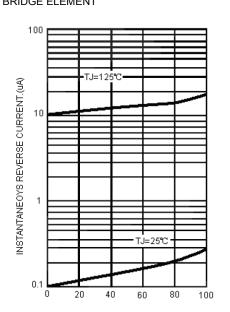
## FIG. 3-TYPICAL INSTANTANEOUS FORWARD

CHARACTERISTICS PER BRIDGE ELEMENT



INSTANTANEOUS FORWARD VOLTAGE.(V)

FIG. 4-TYPICAL REVERSE CHARACTERISTICS PER **BRIDGE ELEMENT** 



PERCENT OF RATED PEAK REVERSE VOLTAGE.(%)

Note: Specifications are subject to change without notice.