# **D2UB05 THRU D2UB100**

# Single Phase 2.0 AMPS.Glass Passivated Bridge Rectifiers

## Voltage Range 50 to 1000 Volts Current 2.0 Amperes

### FEATURES

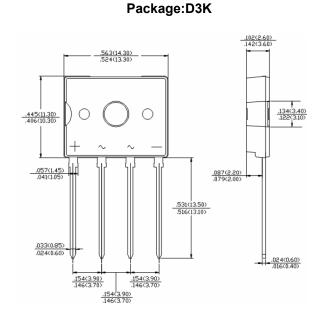
- ◆Ideal for printed circuit boards
- ◆ Reliable low cost construction technique
- results in inexpensive product
- High temperature soldering guaranteed:

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  $^\circ\!\mathrm{C}$  ambient temperature unless otherwise specified.

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

Type Number		D2UB	D2UB	D2UB	D2UB	D2UB	D2UB	D2UB	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	V
Maximum DC blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward $T_{C}$ = 100 $^{\circ}C$	Incom	2.0 <sup>(1)</sup> 1.0 <sup>(2)</sup>							А
Rectified Current at TA= 40 °C	F(AV)								
Peak Forward Surge Current, 8.3 ms Single		35							A
Half Sine-wave Superimposed on Rated Load (JEDEC method)	Іғѕм								
Maximum Instantaneous Forward Voltage @ 2A	VF	1.1							V
Rating for fusing (3ms≤t<8.3ms) Tj=25℃	l <sup>2</sup> t	3.5						A <sup>2</sup> sec	
Maximum DC Reverse Current @ TA=25°C	5.0								
rated DC blocking voltage per leg T_A = 125 $^\circ\!\mathrm{C}$	IR 500							μA	
Typical Thermal Resistance (Note)	Reja	40							°C/W
	Rejc	3.5							
Operating Temperature Range	TJ	-55 to +150						°C	
Storage Temperature Range	Tstg	-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

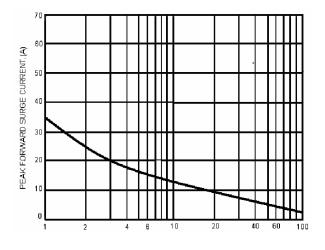
2. Unit mounted on P.C.B. with 0.5\*0.5" (12.7\*1.27mm) copper pads and 0.375" (9.5mm) lead length

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## **RATING AND CHARACTERISTIC CURVES D2UB05 THRU D2UB100**

#### FIG. 1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT

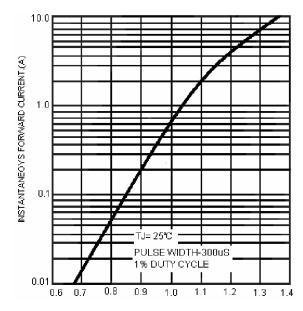
PER BRIDGE ELELMENT



NUMBER OF CYCLES AT 60Hz

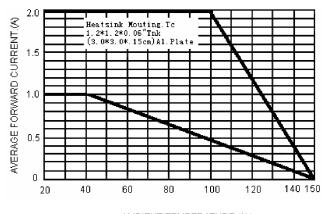
#### FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

PER BRIDGE ELEMENT



INSTANTANEOUS FORWARD VOLTAGE.(V)

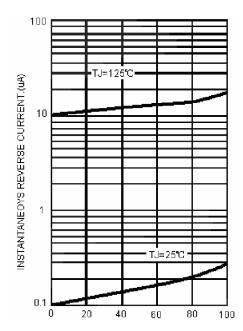
#### FIG. 2-MAXIMUM FORWARD CURRENT DERATING CURVE



AMBIENT TEMPERATURE.(℃)

FIG. 4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE

ELEMENT



PERCENT OF RATED PEAK REVERSE VOLTAGE.(%)