D3UB05 THRU D3UB100

Single Phase 3.0 AMPS. Glass Passivated Bridge Rectifiers

Voltage Range 50 to 1000 Volts Current 3.0 Amperes

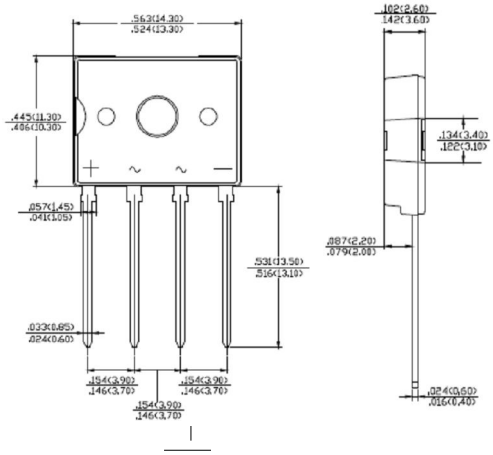
Features

- Ideal for printed circuit boards
- Reliable low cost construction technique results in inexpensive roduct
- High temperature soldering guaranteed: 260℃ / 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

D3K



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ 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_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_C= 100℃ T_A= 40℃	I_F (AV)	3.0(1) 2.0(2)							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	60							A
Maximum Instantaneous Forward Voltage @ 3A	V_F	1.1							V
Rating for fusing (3ms≤ t<8.3ms) Tj=25℃	I^2t	15							A^2sec
Maximum DC Reverse Current @ T_A=25℃ rated DC blocking voltage per leg T_A = 125℃	I_R	5.0 500							μA
Typica l Thermal Resistance (Note)	$R_{\Theta JA}$ $R_{\Theta JL}$	40 15							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

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

RATING AND CHARACTERISTIC CURVES

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

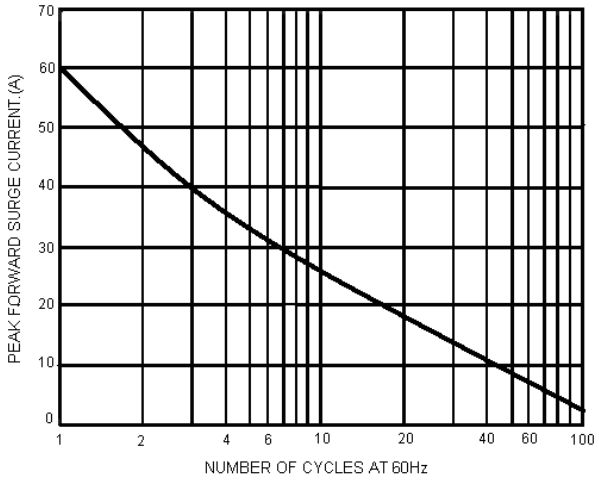


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

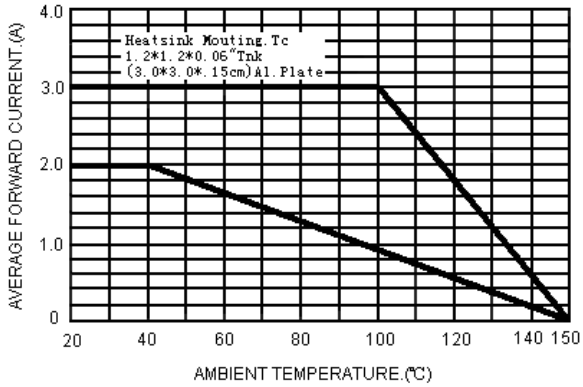


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

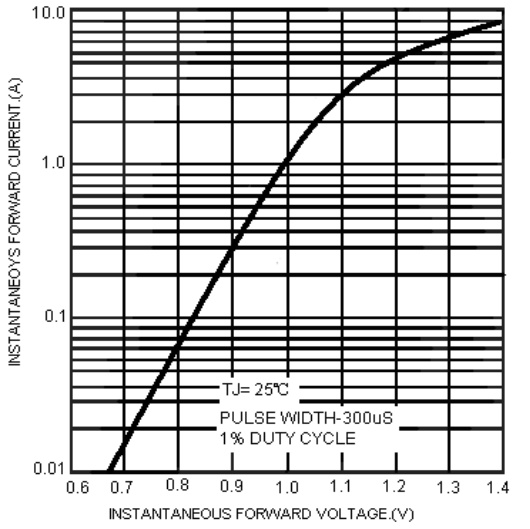


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT