

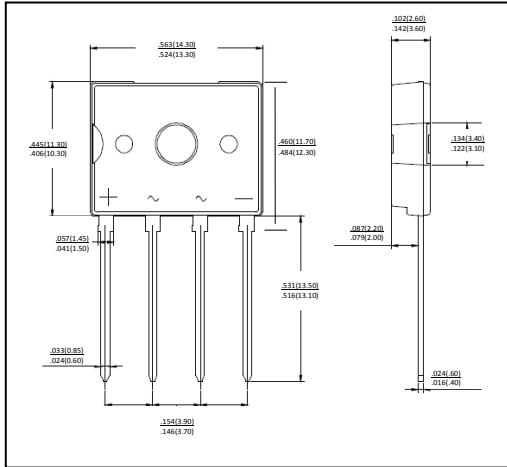


D2UB05 THRU D2UB100

SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 2.0 Ampere

PACKAGE : D3K



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Ideal for printed circuit boards
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed

MECHANICAL DATA

Case: Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols marked on case

Mounting Torque: 0.8 N.M max

Weight: 1.41 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

	SYMBOLS	D2UB05	D2UB10	D2UB20	D2UB40	D2UB60	D2UB80	D2UB100	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum Average Forward Rectified Current at $T_C = 100^\circ C$ $T_A = 40^\circ C$	$I_{(AV)}$	2.0 (NOTE1)						Amps	
		1.0 (NOTE2)							
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35.0						Amps	
Rating for Fusing ($t < 8.3ms$)	I^2t	3.5						A^2s	
Maximum instantaneous forward voltage drop per bridge element at 1.0A	V_F	1.1						Volts	
Maximum DC reverse current at rated DC blocking voltage $T_A = 25^\circ C$ $T_A = 100^\circ C$	I_R	5						μA	
		0.5						mA	
Typical Thermal Resistance (Note 2)	R_{JA}	40						C/W	
Operating junction temperature range	T_J	-55 to +150						C	
storage temperature range	T_{STG}	-55 to +150						C	

NOTES:

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

RATINGS AND CHARACTERISTIC CURVES D2UB05 THRU D2UB100

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

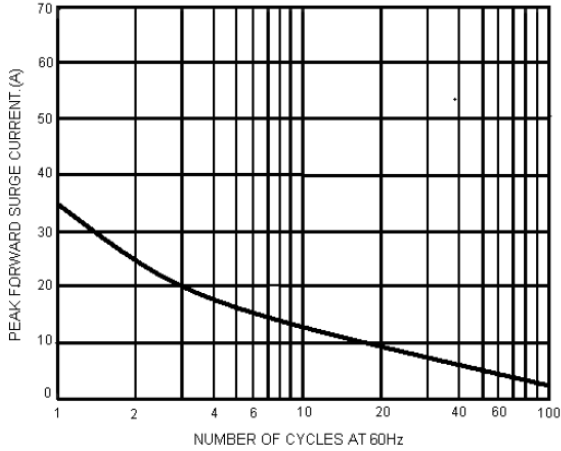


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

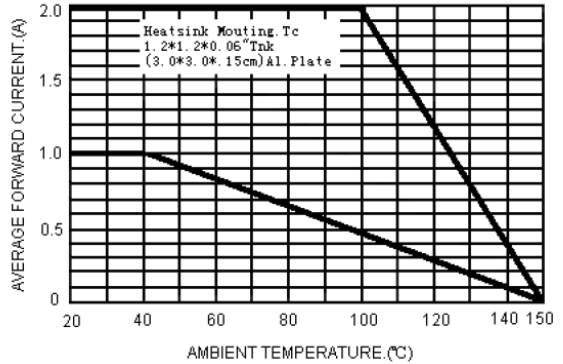


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

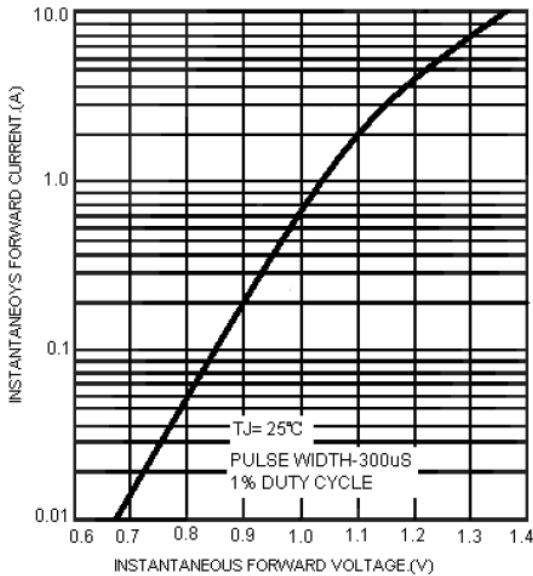


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

