

DB301S THRU DB307S

Reverse Voltage - 50 to 1000 Volts

Forward Current - 3 .0 Amperes

FEATURES

- Glass passivated chip
- High surge forward current capability
- Reliable low cost construction utilizing molded plastic technique
- Lead tin plated copper
- Meet UL flammability classification 94V-0

Mechanical Data

- Polarity: Symbol marked on body
- Mounting position: Any

Applications

- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

Maximum Ratings and Electrical Characteristics

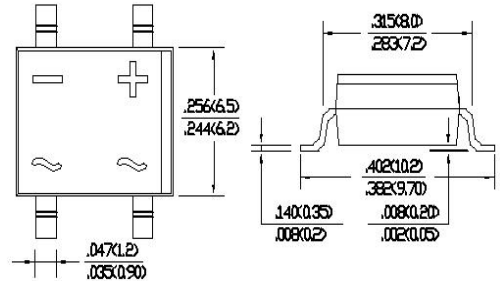
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

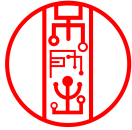
MDD Catalog Number	SYMBOLS	DB301S	DB302S	DB303S	DB304S	DB305S	DB306S	DB307S	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_A=40^{\circ}$	$I_{F(AV)}$	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	70							Amps
I^2t Rating for Fusing ($t<8.3ms$)	I^2t	20.3							A^2s
Maximum instantaneous forward voltage drop per bridge element at 1.0A	V_F	1.1							Volts
Maximum DC reverse current $T_A=25^{\circ}$ at rated DC blocking voltage $T_A=125^{\circ}$	I_R	10 500							μA μA
Typical Junction Capacitance (Note1)	C_J	25							pF
Typical Thermal Resistance Junction to Ambient (Note2)	$R_{\theta JA}$	40							$^{\circ}C/W$
Operating temperature range	T_J	-55 to +150							$^{\circ}C$
storage temperature range	T_{STG}	-55 to +150							$^{\circ}C$

NOTES:DBS for surface mount package.

DBS



Dimensions in inches and (millimeters)



DB301S THRU DB307S

RATINGS AND CHARACTERISTIC CURVES DB301S THRU DB307S

Fig. 1 - Forward Current Derating Curve

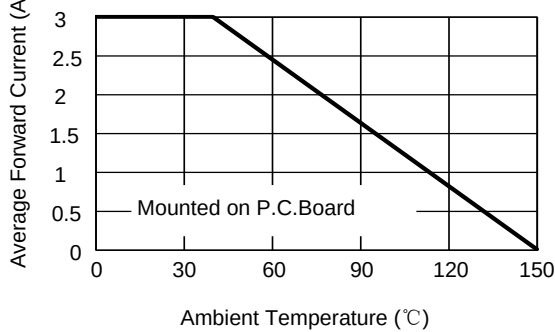


Fig. 2 - Maximum Non-Repetitive Surge Current

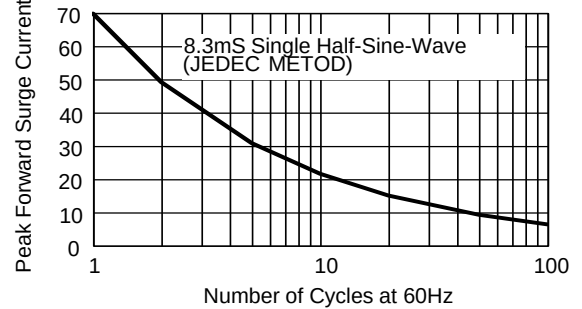


Fig. 3 - Typical Reverse Characteristics

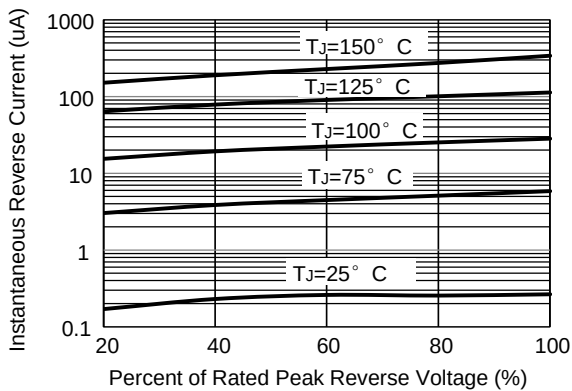


Fig. 4 - Typical Forward Characteristics

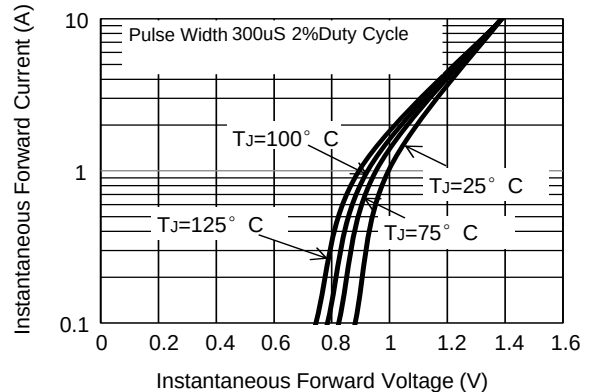


Fig. 5 - Typical Junction Capacitance

