



B1S THRU B10S

Surface Mount Bridge Rectifier

Features

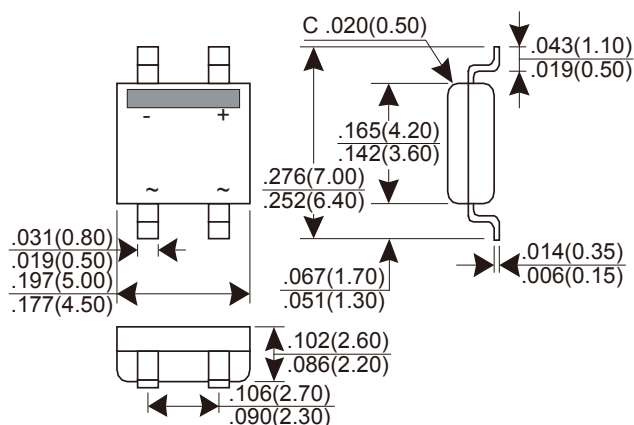
- ★ Glass passivated chip junction
- ★ High surge current capability
- ★ Designed for surface mount application

Mechanical Data

- ★ Case: Molded plastic MINI-DIP
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-750 method 2026
- ★ Polarity: As marked on Body
- ★ Mounting position: Any

Voltage Range 100 to 1000 V
Current 0.8 Ampere

MINI-DIP



Dimensions in inches and (millimeters)

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%.

PARAMETER	SYMBOL	B1S	B2S	B4S	B6S	B8S	B10S	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_C=125^\circ\text{C}$	$I_{F(AV)}$	0.8						A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30						A
Maximum Instantaneous Forward Voltage @ $I_F=0.4\text{A}$ @ $I_F=0.8\text{A}$	V_F	1.0 1.1						V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	5 40						μA
Typical junction Capacitance (Note 1)	C_J	13						pF
Typical Thermal Resistance Junction to Ambient (Note 2)	$R_{\theta JA}$	90						$^\circ\text{C/W}$
Typical Thermal Resistance Junction to Case (Note 2)	$R_{\theta JC}$	32						$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150						$^\circ\text{C}$

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

(2) Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

RATINGS AND CHARACTERISTIC CURVES B1S THRU B10S

FIG.1 - FORWARD CURRENT DERATING CURVE

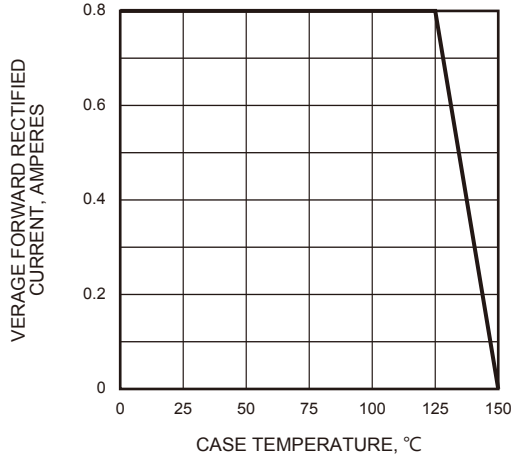


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

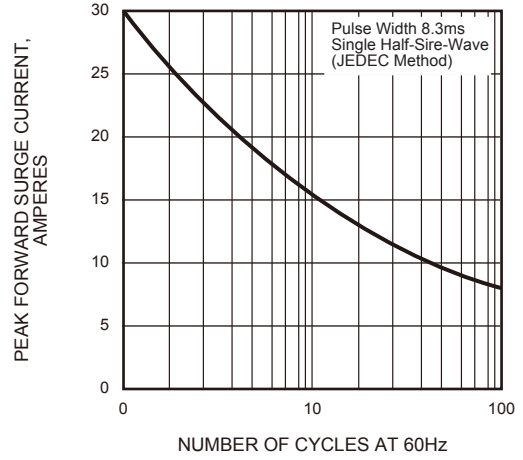


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

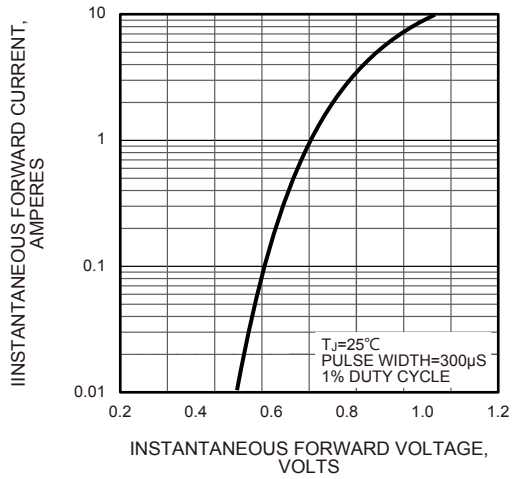


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

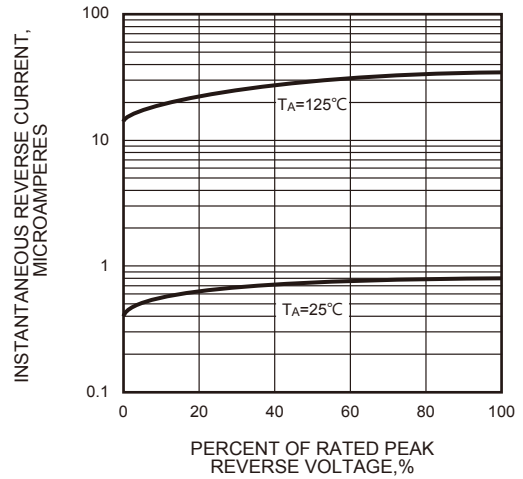


FIG.5 - TYPICAL JUNCTION CAPACITANCE

