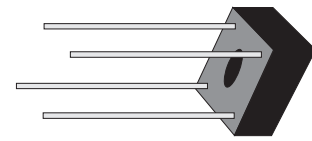
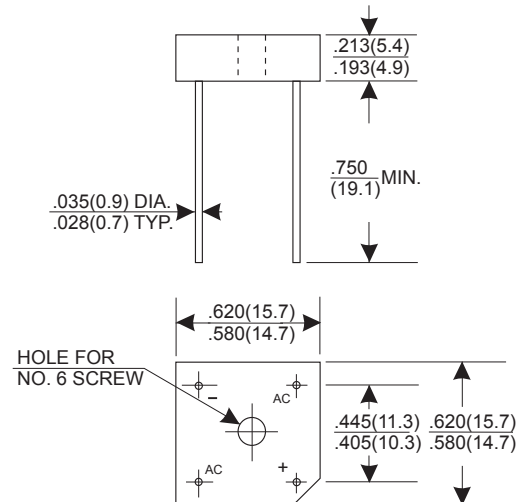


BRIDGE RECTIFIER
FEATURES

- This series is UL listed under the Recognized Component Index, file number E142814
- High temperature metallurgically bonded internal rectifiers
- Typical I_R less than $.1 \mu A$
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs (2.3kg) tension

MECHANICAL DATA

- Case: Voil-free plastic package
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Mounting: Thru hole for #6 screw
Mounting position: Any
- Weight: 3.8 grams (approx)


BR-3


Dimensions in inches and (millimeters)

MAXIMUM RATINGS ($T_A=25^\circ C$ unless otherwise noted)

Parameter	Symbol	BR305	BR31	BR32	BR34	BR36	BR38	BR310	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
DC Reverse Voltage	V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectifying Output Current @ $T_C=75^\circ C$ (Note 1)	I_F	3.0							A
Non-Repetitive Peak Forward Surge Current @ $t=8.3$ ms Single Half Sine-wave Superimposed on Rated Load (Note 2)	I_{FSM}	125							A
I^2t Rating for Fusing($1ms < t < 8.3ms$)	I^2t	10							A ² S
Thermal Resistance From Junction To Ambient Per Element	$R_{\theta JA}$	9.4							°C/W
Operating Temperature	T_J	-55~+150							°C
Storage Temperature	T_{STG}	-55~+150							°C

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Typ	Max	Unit	Conditions
Forward Voltage	V_F		1.1	V	$I_F=3A$
Reverse Current @ $T_a=25^\circ C$	I_R		10	μA	VR: 50V for BR305 100V for BR31 200V for BR32 400V for BR34 600V for BR36 800V for BR38 1000V for BR310
Reverse Current @ $T_a=100^\circ C$	I_R		1000	μA	
Total Capacitance Per Element(Note 3)	C_J	55		pF	$V=4VDC, f=1MHz$

- Note: (1) Mounted on metal chassis.
 (2) Non-repetitive, for $t > 1ms$ and $< 8.3ms$.
 (3) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

BRIDGE RECTIFIER

Typical Characteristics

Fig. 1 Derating Curve for Output Rectified Current

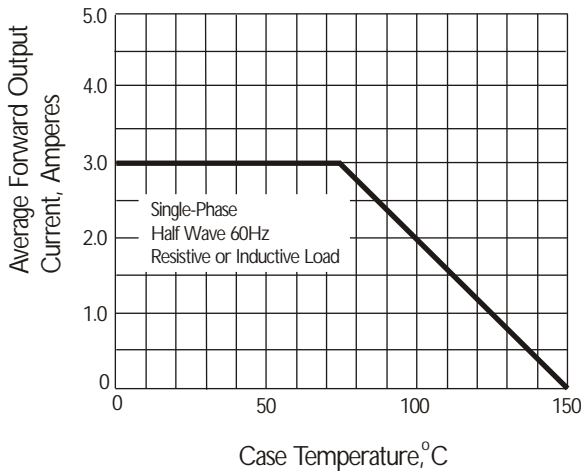


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

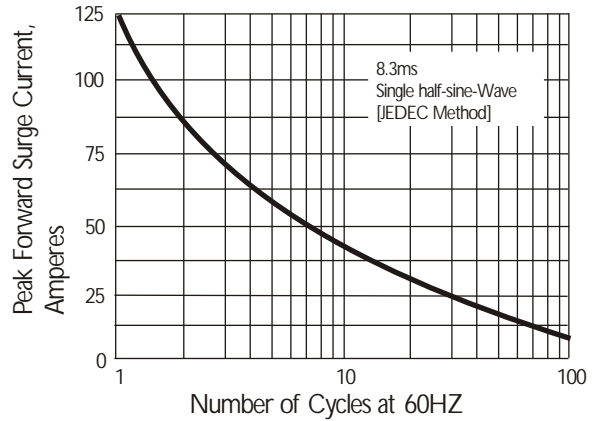


Fig. 3 Typical Instantaneous Forward Characteristics

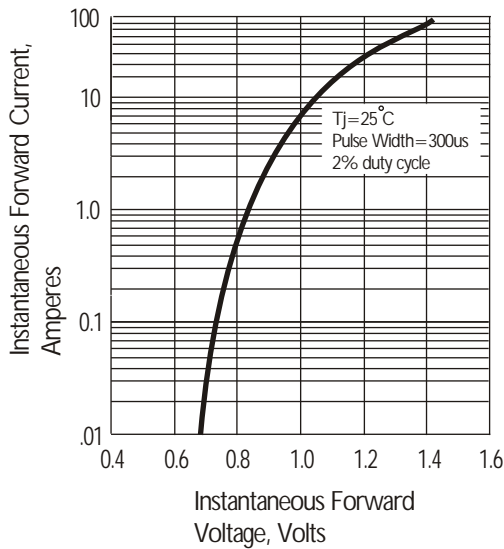


Fig. 4 Typical Reverse Characteristics

