WEJ®

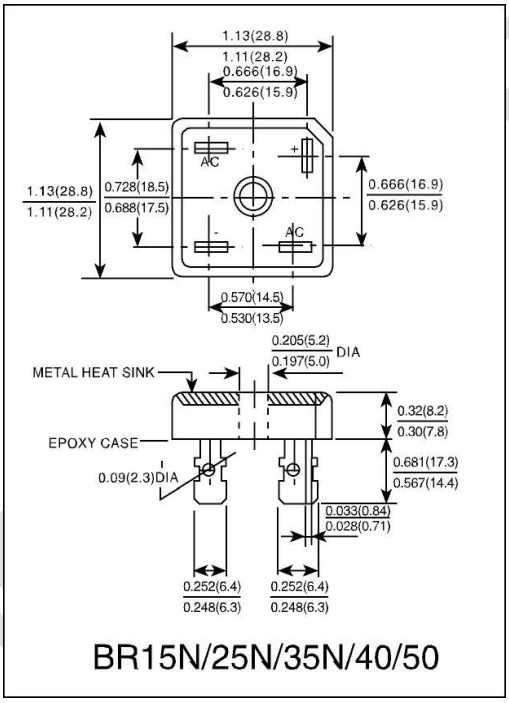
RoHS

BR4005-4010

SINGLE-PHASE BRIDGE RECTIFIER

FEATURES

- Low cost
- High forward surge current capability.
- Intergrally molded heatsink provide very low thermal resistan
- High temperature soldering guaranteed:
  260℃/10 second, at 5 lbs. (2.3kg) tension.



BR15N/25N/35N/40/50

MECHANICAL DATA

- Case: Molded plastic body, suffix "N" for thinner type.
- Terminal: Plated 0.25" (6.35mm) lug.
- Polarity: Polarity symbols marked on case.
- Mounting: Thru hole for #10 screw, 20 in - lbs. Torque max
- Weight: 0.66ounce, 18.7gram(BR40)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25℃ ambient temperature unless otherwise specified
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load derate current by 20%

	SYMBOLS	BR4005	BR401	BR402	BR404	BR406	BR408	BR4010	UNIT
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 Output Current, at T_C = 50℃ (Note1)	$I_{(AV)}$	40							Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	400							Amps
Rating for Fusing (t<8.3ms)	I^2t	664							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 20A	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element, T_A = 25℃	I_R	10							μ Amp
Maximum DC Reverse Current at rated DC blocking voltage per element, T_A = 100℃	I_R	1.0							mAmp
Isolation Voltage from case to lugs	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1, 2)	R_{JC}	2.0							℃/W
Operating Temperature Range	T_J	(-65 to +150)							℃
Storage Temperature Range	T_{STG}	(-65 to +150)							℃

1. Unit Mounted on 9" X 3.5" X 4.6" (23 X 9 X 11.8cm) Al. finned plate.
2. Bolt down on heatsink with silicon thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

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FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

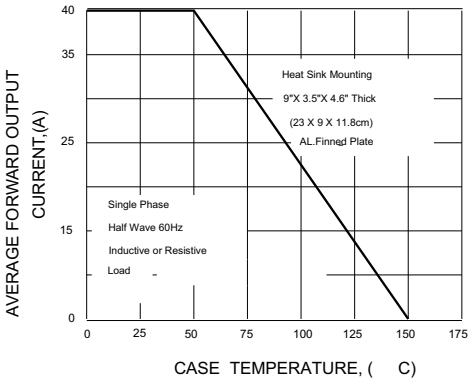


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

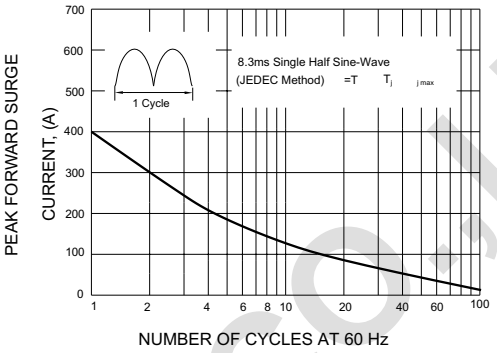


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE LEMENT

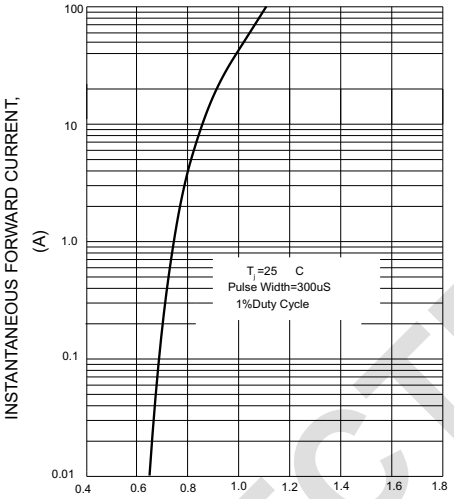


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

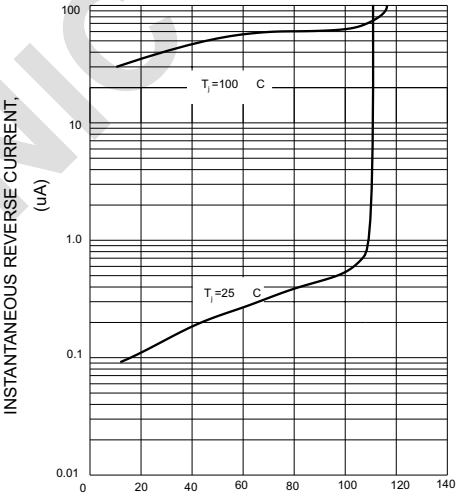
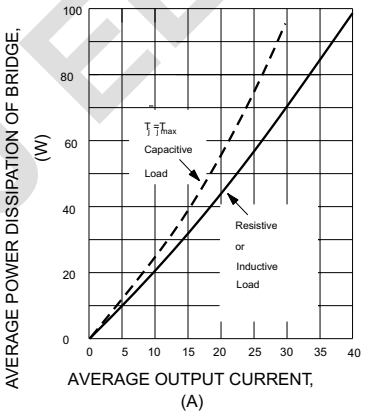


FIG.5-MAXIMUM POWER DISSIPATION



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