



DATA SHEET

SEMICONDUCTOR

KBPC15005N THRU KBPC1510N

VOLTAGE RANGE 50 to 1000 Volts



CURRENT 15 Ampere

FEATURES

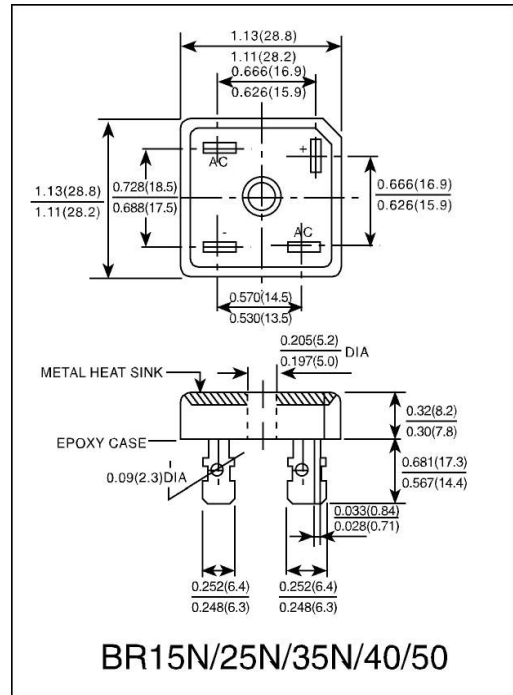
- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Integrally molded heatsink provide very low thermal resistance.
- High isolation voltage from case to lugs.
- High temperature soldering guaranteed: 260 /10 second, at 5 lbs. (2.3kg) tension.
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

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: 0.55 ounce, 15.6 gram(KBPC15N)

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	KBPC 15005N	KBPC 1501N	KBPC 1502N	KBPC 1504N	KBPC 1506N	KBPC 1508N	KBPC 1510N	
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at TC = 55 (Note 1, 2)	I(AV)	15							Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	IFSM	300							Amps
Rating for Fusing (t<8.3ms)	I2t	373							A2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 7.5A	VF	1.1							Volts
Maximum DC Reverse Current at rate DC blocking voltage per element	IR	10							μ A
		1.0							mA
Isolation Voltage from case to lugs	VISO	2500							VAC
Typical Thermal Resistance (Note 1,2)	R JC	2.0							/W
Operating Temperature Range	TJ	(-65 to +150)							
Storage Temperature Range	TSTG	(-65 to +150)							

- Unit mounted on 5" X 4" X 3" (12.8cm X 10.2cm X 7.3cm)Al. finned Plate.
- Bolt down on heat-sink with silicon thermal compound between bridge and mounting surface for maximum heat transfer efficiency with # 10 screw.

DEVICE CHARACTERISTICS

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FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

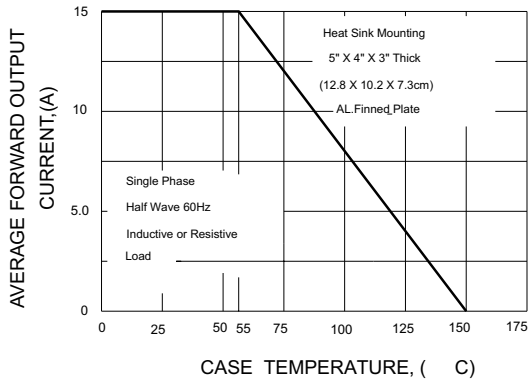


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

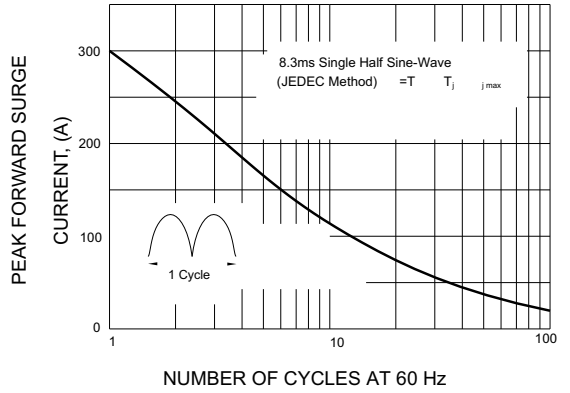


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

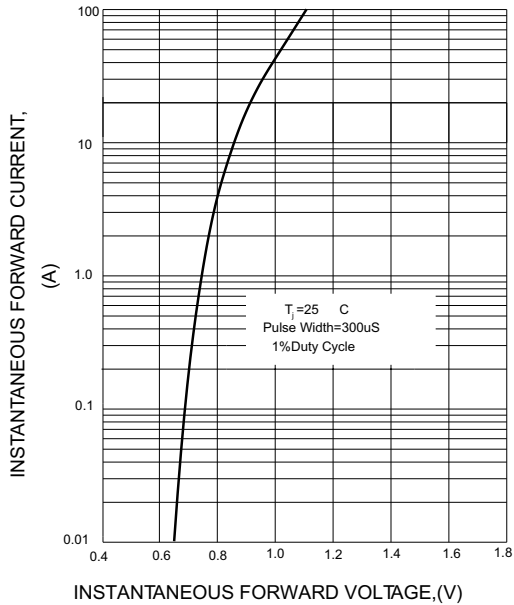


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

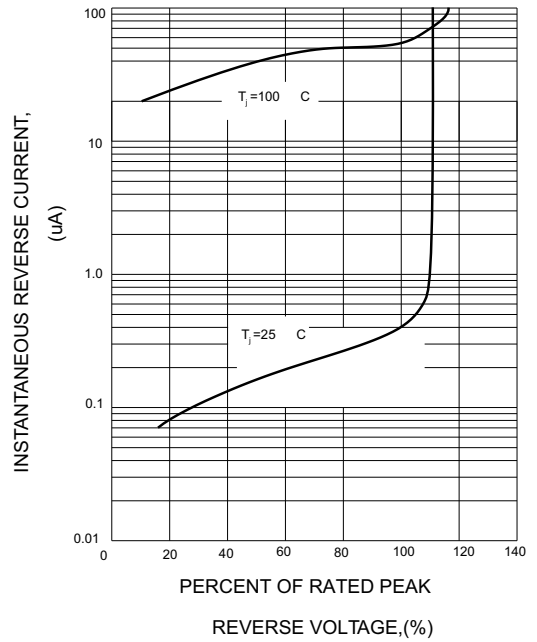


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT

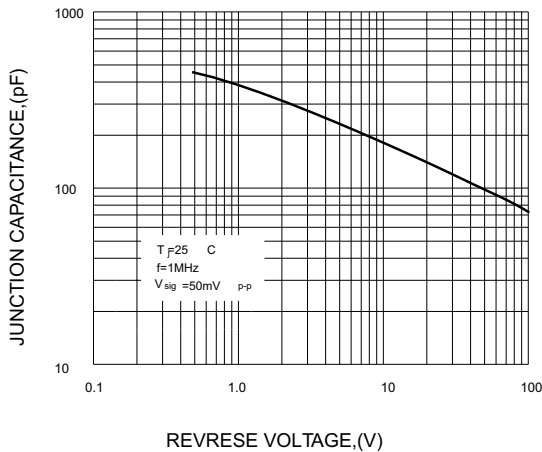


FIG.6-MAXIMUM POWER DISSIPATION

