

KBPC15005N thru KBPC1510N BR1505 thru BR1510



SINGLE PHASE SILICON BRIDGE

FORWARD CURRENT: 15.0 Ampere

REVERSE VOLTAGE: 50 to 1000 Volts

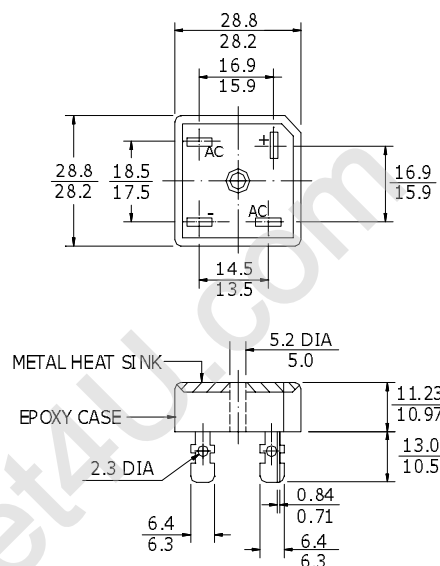
FEATURES

- Material used carries UL recognized
- Surge overload rating 300 ampere peak
- Low forward voltage drop
- Electrically isolated base 2000 volts

MECHANICAL DATA

- Solderable .25"(6.35mm) FASTON terminals
- Polarity: Polarity symbols marked on case
- Mounting: Through hole for #10 screw, 20in.-1bs. torque max.
- Weight: 0.66 ounce, 18.7 grams (BR35)
0.55 ounce, 15.6 grams (KBPC35N)

BR-15



Dimensions in Millimeters

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise noted.

Resistive or inductive load 60Hz.

For capacitive load, derate current by 20%.

CHARACTERISTICS	Symbol	KBPC 15005N	KBPC 1501N	KBPC 1502N	KBPC 1504N	KBPC 1506N	KBPC 1508N	KBPC 1510N	Units
		BR1505	BR151	BR152	BR154	BR156	BR158	BR1510	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Current @ $T_c=55^\circ\text{C}$	$I_{(AV)}$	15							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDED Method)	I_{FSM}	300							A
Maximum DC Forward Voltage per bridge element at 7.5A DC	V_F	1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$ per bridge element	I_R	10 1							μA mA
I^2t Rating for fusing ($t < 8.3\text{ms}$)	I^2t	373							A^2S
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.5							$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

KBPC15005N thru KBPC3510N BR1505 thru BR1510



RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

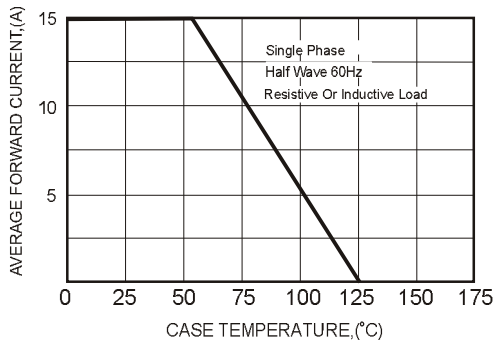


FIG.2-MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

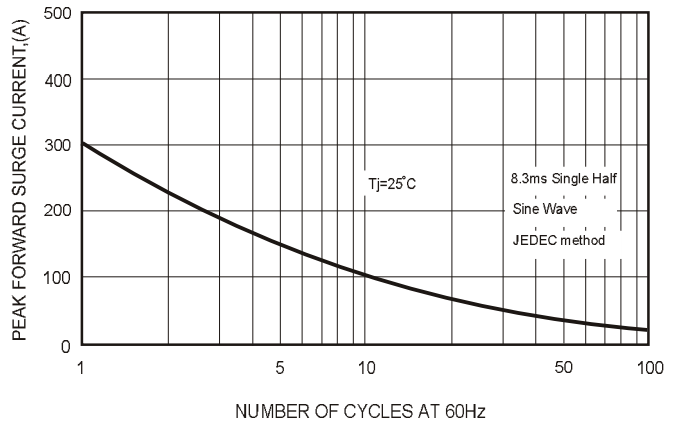


FIG.3-TYPICAL FORWARD
CHARACTERISTICS

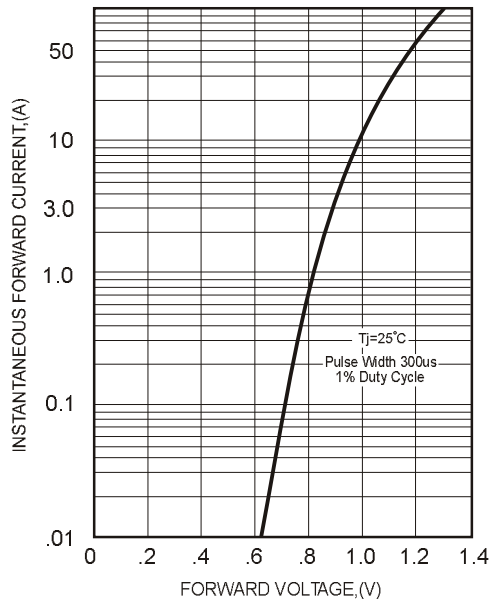


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

