

# KBPC15005N thru KBPC1510N BR1505 thru BR1510



## SINGLE PHASE SILICON BRIDGE

**FORWARD CURRENT: 15.0 Ampere**  
**REVERSE VOLTAGE: 50 to 1000 Volts**

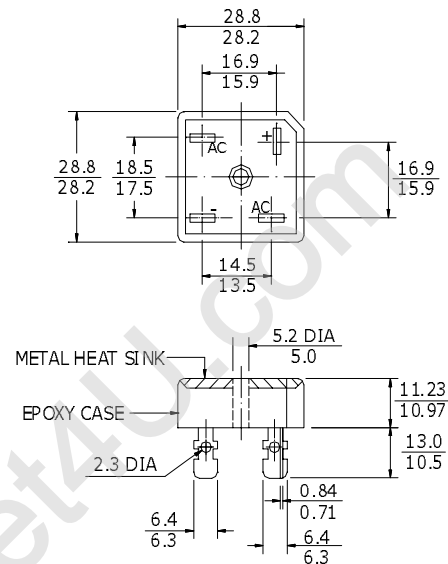
### FEATURES

- 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	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	Units
		15005N	1501N	1502N	1504N	1506N	1508N	1510N	
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							uA mA
$I^2t$ Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2t$	373							$\text{A}^2\text{S}$
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.5							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

## RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

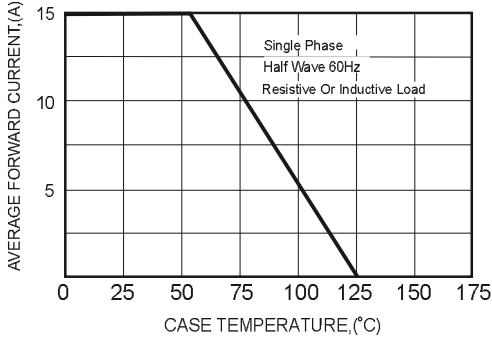


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

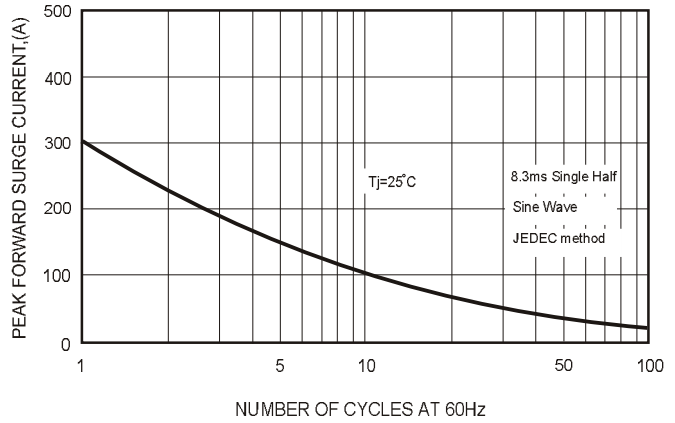


FIG.3-TYPICAL FORWARD CHARACTERISTICS

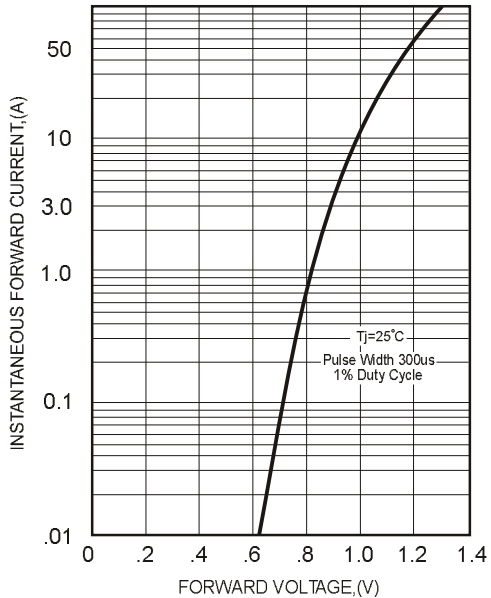


FIG.4-TYPICAL REVERSE CHARACTERISTICS

