

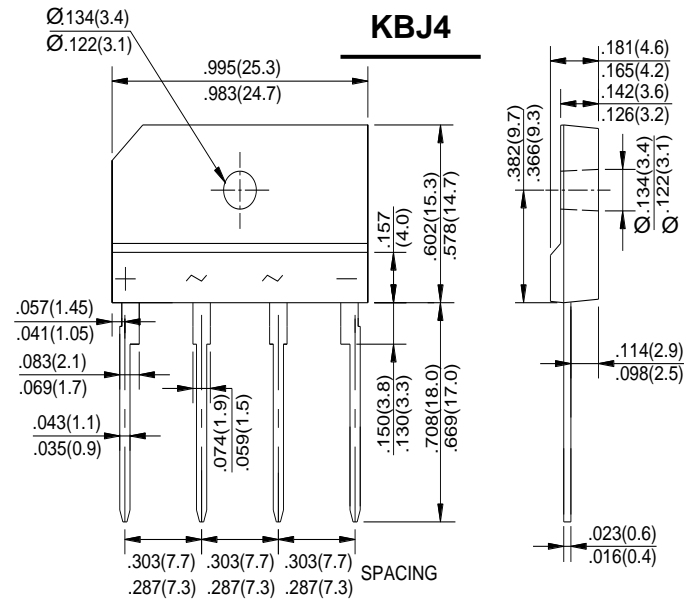


### FEATURES

- Rating to 1000V PRV
- Surge overload rating to 175 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208
- Glass passivated chip junctions

### MECHANICAL DATA

- Polarity: Symbols molded on body
- Weight: 0.23 ounces, 6.6 grams
- Mounting position: Any



Dimensions in inches and (millimeters)

### Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	KBJ8005	KBJ801	KBJ802	KBJ804	KBJ806	KBJ808	KBJ810	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS 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 @ $T_A=100^\circ\text{C}$	$I_{F(AV)}$	8.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	175							A
$I^2t$ Rating for fusing @ $T_j=25^\circ\text{C}$	$I^2t$	127							A <sup>2</sup> S

### Thermal Characteristics

Characteristic	Symbol	KBJ8005	KBJ801	KBJ802	KBJ804	KBJ806	KBJ808	KBJ810	UNITS
Typical junction capacitance per element	$C_J$	55							pF
Typical thermal resistance	$R_{\theta JA}$	25							$^\circ\text{C}/\text{W}$
	$R_{\theta JC}$	2.3							
Operating junction temperature range	$T_J$	- 55 --- + 150							$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55 --- + 150							$^\circ\text{C}$

### Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	KBJ8005	KBJ801	KBJ802	KBJ804	KBJ806	KBJ808	KBJ810	UNITS
Maximum instantaneous forward voltage @4.0A @8.0A	$V_F$	1.0							V
		1.1							
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	$I_R$	5.0							$\mu\text{A}$ mA
		0.5							

FIG1: Surge Forward Current Capability

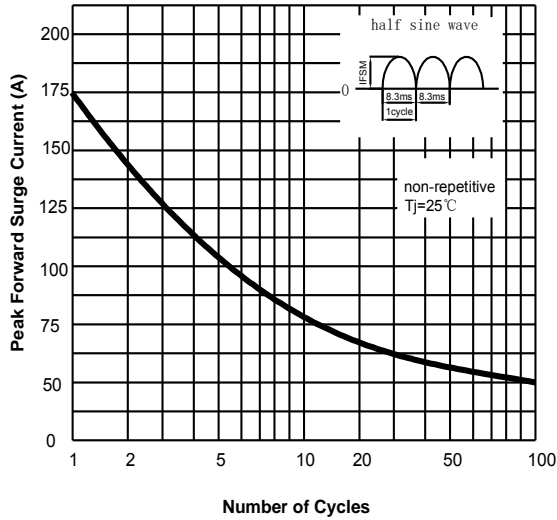


FIG.2 FORWARD DERATING CURVE

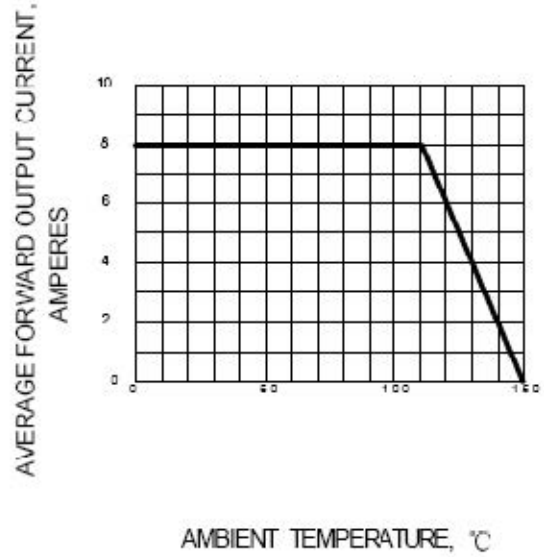


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

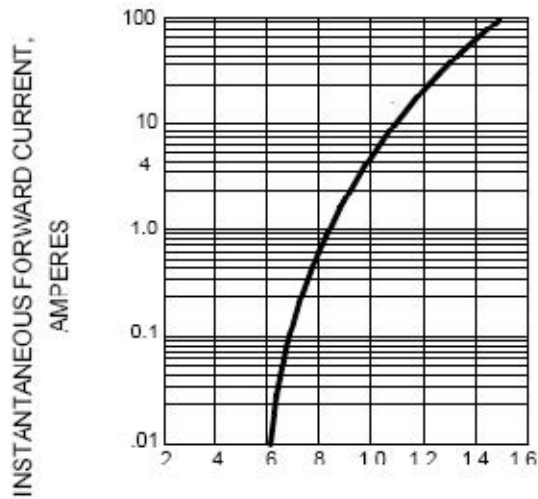
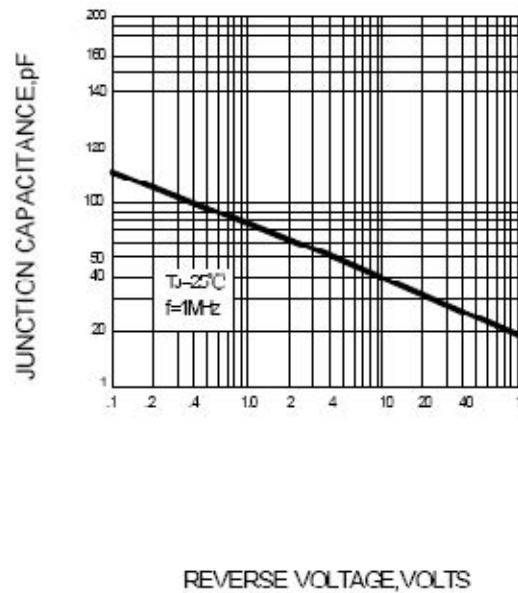


FIG.4 – TYPICAL JUNCTION CAPACITANCE



Device	Package	Shipping
KBJ8005--KBJ810	KBJ4	300 Units/Box