

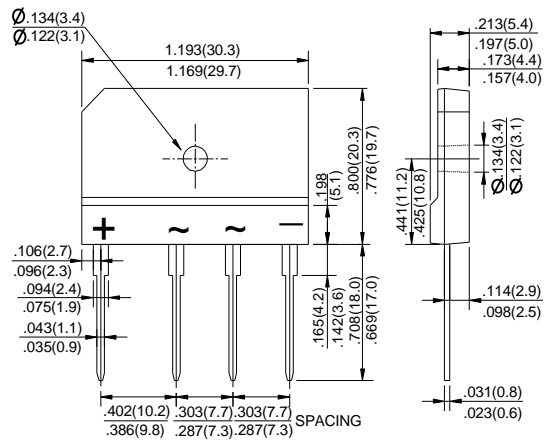
VOLTAGE RANGE: 50 - 1000V
CURRENT: 6.0 A

Features

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has U/L flammability classification 94V-0

Mechanical Data

- **Case:** Molded Plastic



Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	KBJ6005	KBJ601	KBJ602	KBJ604	KBJ606	KBJ608	KBJ610	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	30	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_C=100^\circ\text{C}$ (with heatsink Note 2) @ $T_C=100^\circ\text{C}$ (without heatsink)	$I_{(AV)}$	6.0				2.8			A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}					175			A
Maximum Forward Voltage at 3.0A DC	V_F					1.0			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J=25^\circ\text{C}$ @ $T_J=125^\circ\text{C}$	I_R					10 500			μA
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t					120			A^2s
Typical Junction Capacitance Per Element (Note1)	C_J					55			pF
Typical Thermal Resistance (Note2)	$R_{\theta JC}$					1.8			$^\circ\text{W}$
Operating Temperature Range	T_J					-55 to +125			$^\circ\text{C}$
Storage Temperature Range	T_{STG}					-55 to +150			$^\circ\text{C}$

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 75mm*75mm*1.6mm cu plate heatsink.



FIG.1-FORWARD CURRENT DERATING CURVE

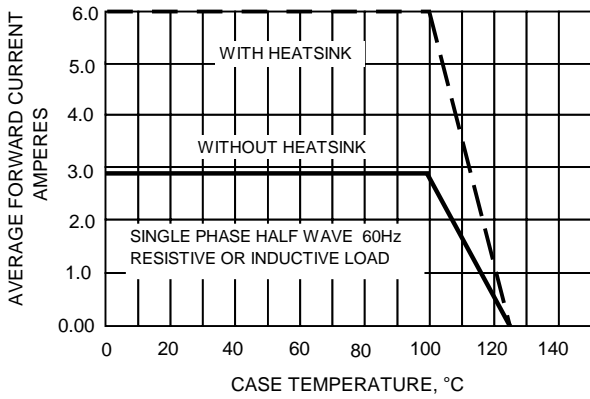


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

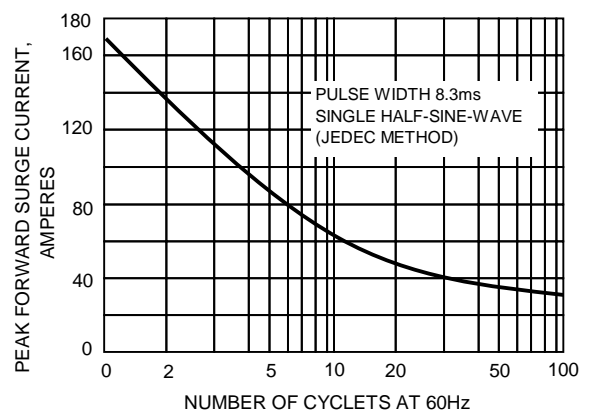


FIG.3-TYPICAL JUNCTION CAPACITANCE

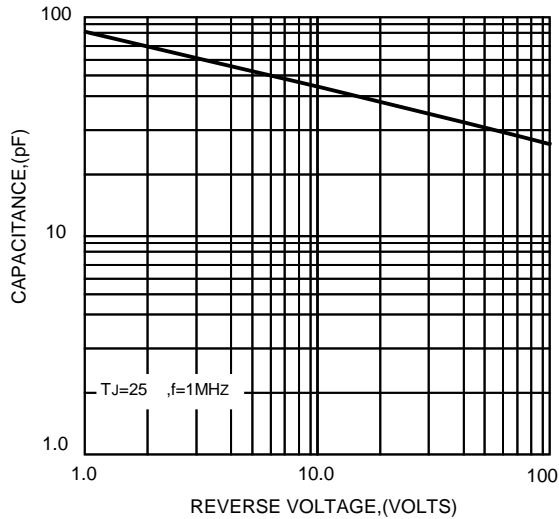


FIG.4-TYPICAL FORWARD CHARACTERISTICS

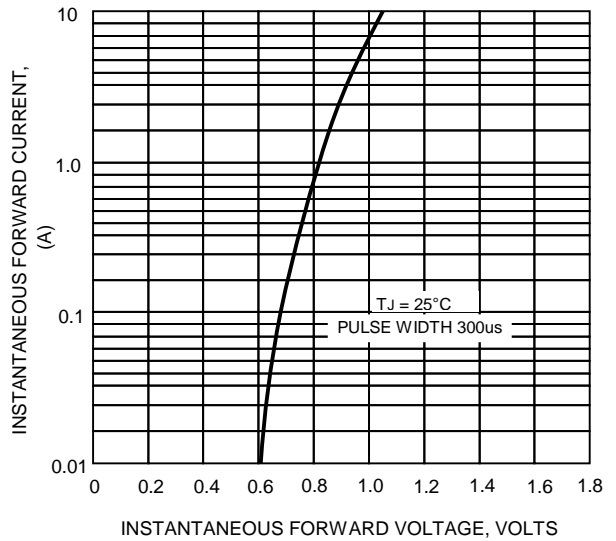


FIG.5-TYPICAL REVERSE CHARACTERISTICS

