

KBPC3027 - KBPC3067

PRV : 200 - 600 Volts
Io : 30 Amperes

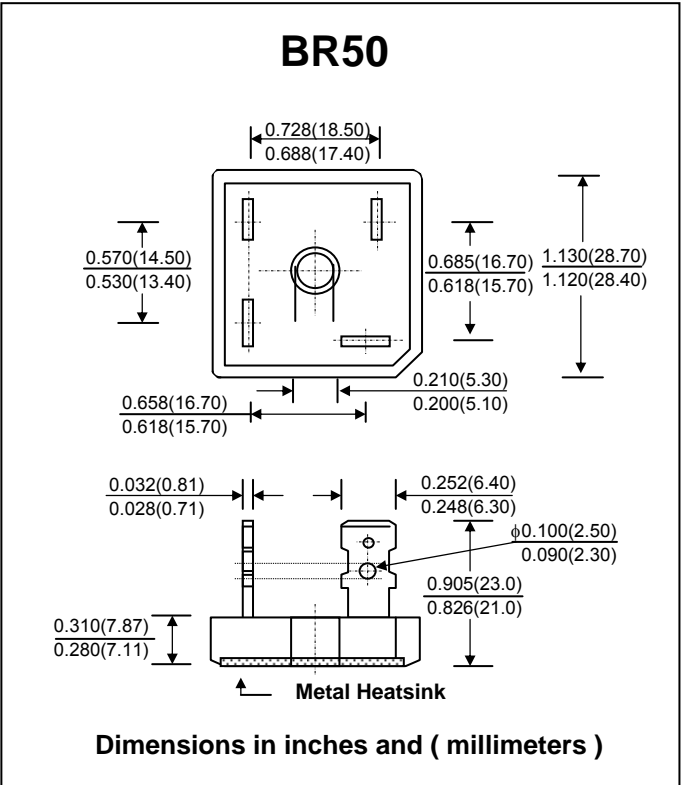
FEATURES :

- * Glass passivated junction chip
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : Molded plastic with heatsink integrally mounted in the bridge encapsulation
- * Epoxy : UL94V-O rate flame retardant
- * Terminals : plated .25" (6.35 mm). Faston
- * Polarity : Polarity symbols marked on case
- * Mounting position : Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency.
- * Weight : 17.1 grams

SILICON BRIDGE RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

RATING	SYMBOL	KBPC3027	KBPC3047	KBPC3067	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	V
Minimum Avalanche Voltage Range	$V_{BR(Min)}$	250	450	660	V
Maximum Avalanche Voltage Range	$V_{BR(Max)}$	700	900	1100	V
Maximum Average Forward Current $T_c = 80\text{ }^\circ\text{C}$	$I_{F(AV)}$	30			A
Maximum Surge Current per Diode 8.3 ms, half sine wave, $T_J = 175\text{ }^\circ\text{C}$	I_{FSM}	250			A
Maximum Peak Forward Voltage per Diode at $I_F = 30\text{ A}^{(1)}$	V_F	1.2			V
Maximum Peak Reverse Current per diode, at V_{RRM}	I_R	10			μA
Maximum Thermal Resistance, Junction to Case	$R_{\theta JC}$	1.0			$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	- 55 to + 150			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 175			$^\circ\text{C}$

Note :

(1) Pulse test: Pulse with 300 μs , Duty cycle 2%

RATING AND CHARACTERISTIC CURVES (KBPC3027 - KBPC3067)

FIG.1 - FORWARD CURRENT VS. CASE TEMPERATURE

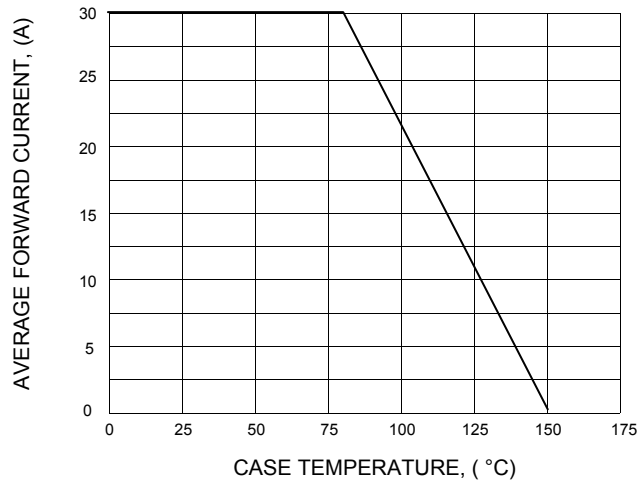


FIG.2 - TYPICAL FORWARD CHARACTERISTICS PER LEG

