

3.0Amp Bridge Rectifiers

FEATURES :

- High current capability
- Glass passivated junction chip
- Low Reverse Leakage Current.
- RoHS compliant.

MECHANICAL DATA :

Case : Molded plastic body, KBP-L
 Epoxy : UL 94V-O rate flame retardant
 Terminals : Axial leads, solderable per MIL-STD-202,
 method 208 guaranteed
 Polarity : As Marked on Body
 Mounting Position : Any



MAXIMUM RATINGS (Ratings at 25 °C ambient temperature unless otherwise specified)
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	KBP 301	KBP 302	KBP 303	KBP 304	KBP 306	KBP 308	KBP 310	Unit
Maximum repetitive 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 Rectified Current at $T_A = 50^\circ C$	I_o	3.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80							A
Current Squared Time	I^2T	26.5							A^2S
Typical Thermal Resistance	$R_{\theta JC}$	22							$^\circ C/W$
Typical Thermal Resistance	$R_{\theta JA}$	28							$^\circ C/W$
Maximum forward voltage at 3A DC	V_F	1.10							V
Maximum DC reverse current at rated DC blocking voltage ($T_A = 25^\circ C / 150^\circ C$)	I_R	10 / 1000							μA
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150							$^\circ C$

RATINGS AND CHARACTERISTICS CURVES

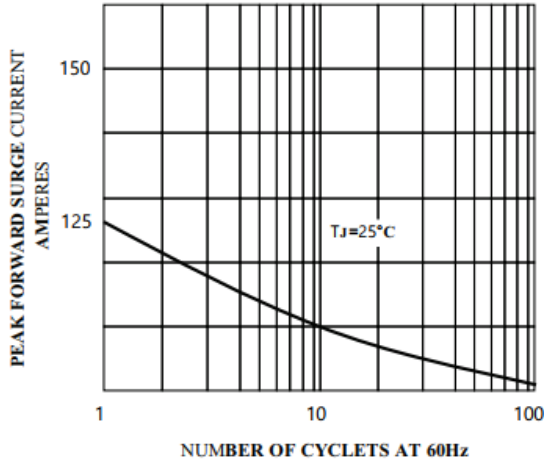


Figure 1. MAXIMUM FORWARD SURGE CURRENT

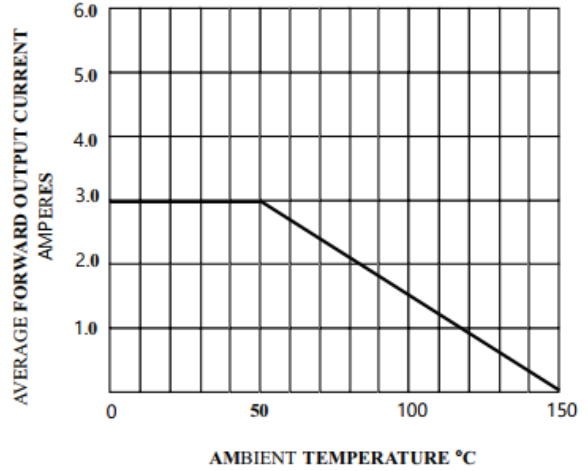


Figure 2. DERATING CURVE OUTPUT RECTIFIED CURRENT

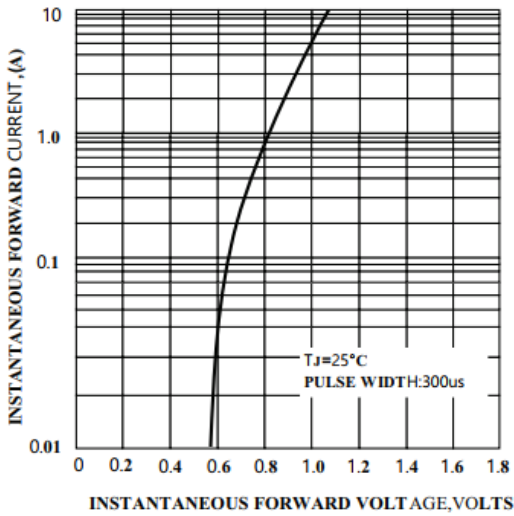


Figure 3. TYPICAL FORWARD CHARACTERISTICS

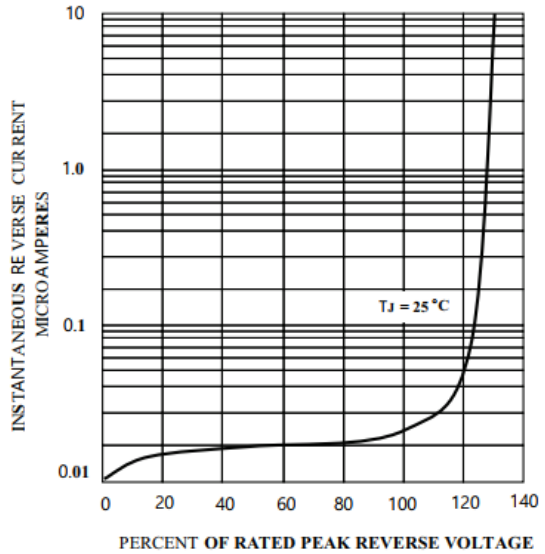
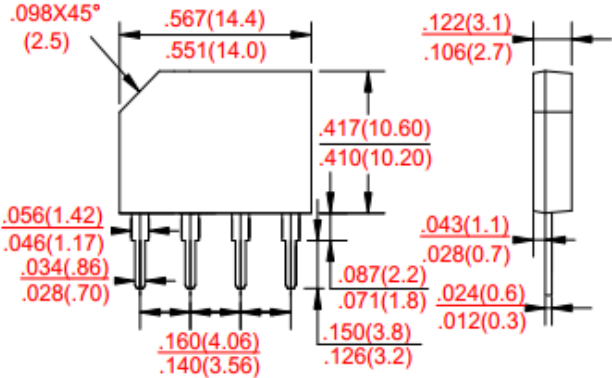
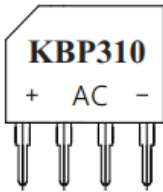


Figure 4. TYPICAL REVERSE CHARACTERISTICS

• Package outlines : Dimensions in inches and (millimeters)



• Marking :



Part No	Marking code
KBP301	KBP301
KBP302	KBP302
KBP303	KBP303
KBP304	KBP304
KBP306	KBP306
KBP308	KBP308
KBP310	KBP310

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