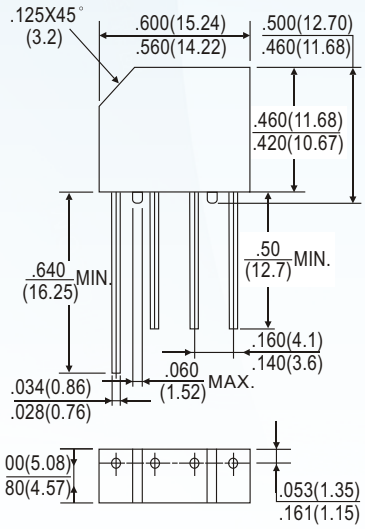
EVVOSEMI®
THINK CHANGE DO

Product Specification

Domestic Part Number	KBP2005-KBP210
Overseas Part Number	KBP2005-KBP210
Equivalent Part Number	KBP2005-KBP210

KBP2005 - KBP210
Bridge Rectifiers



Dimensions in inches and (millimeters)

Features

- ☐ Surge overload rating-80 amperes peak
- ☐ Ideal for printed circuit board
- ☐ Plastic material has Underwriters Labooratory
- ☐ Flammability Classification 94V-O
- ☐ Mounting position: Any
- ☐ Lead: Silver Plated Cooper Lead.

Absolute Maximum Ratings * T_A = 25°C unless otherwise noted

Symbol	Parameter	Value							Units
		KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	
V_{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V_{RMS}	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
V_R	DC Reverse Voltage (Rated V_R)	50	100	200	400	600	800	1000	V
$I_{F(AV)}$	Average Recitified Forward Current @ T_A = 40°C	2							A
I_{FSM}	Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave	60							A
T_{STG}	Storage Temperature Range	-55 to +150							°C
T_J	Operating Junction Temperature	-55 to +150							°C

* These ratings are limiting values above which the serviceability of any semiconductor device may by impaired.

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation	2.9	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient, * per leg	30	°C/W

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_F	Forward Voltage, per element @ 2.0A	1.1	V
I_R	Reverse Current, per element @ rated V_R T_A = 25°C T_A = 125°C	 5.0 500	 μA μA
	I^2t Rating for Fusing t < 8.35ms	10	A^2s
C_T	Total Capacitance, per leg V_R = 4.0V, f = 1.0MHz	25	pF

Typical Characteristics

Fig. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

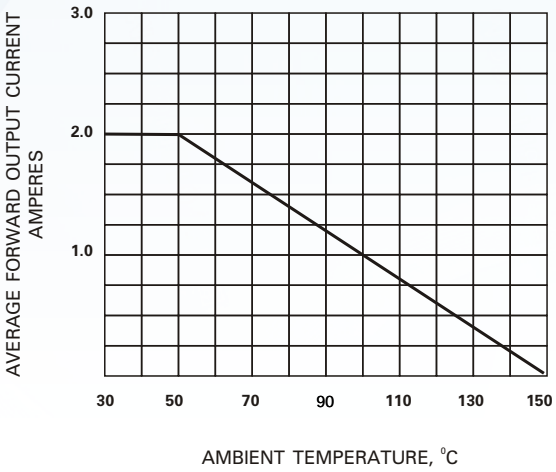


Fig. 2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

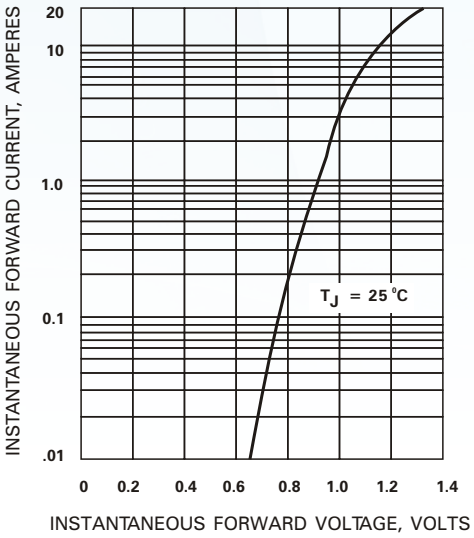


Fig. 3 - TYPICAL FORWARD CHARACTERISTICS

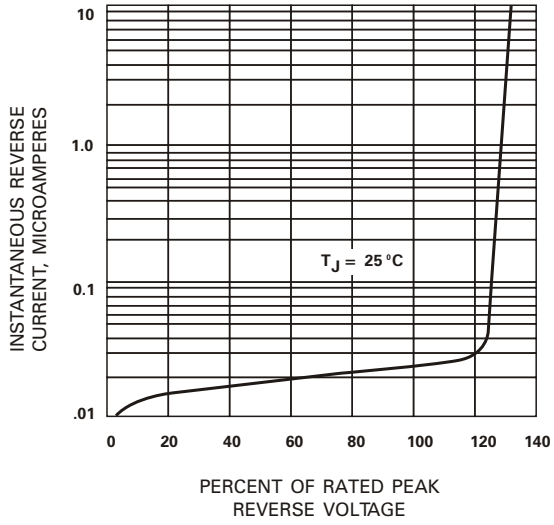
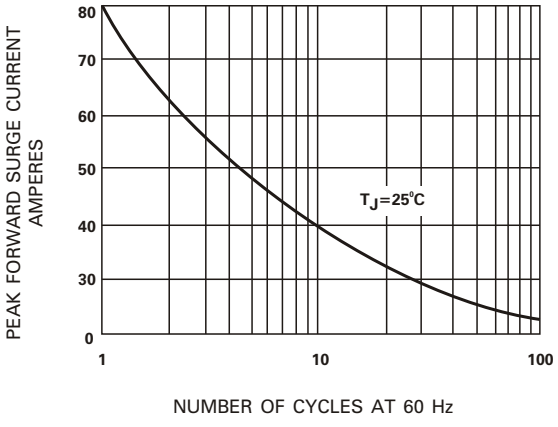


Fig. 4 - MAXIMUM FORWARD SURGE CURRENT



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