

Silicon Bridge Rectifiers

KBPC15005--KBPC1510

FEATURES

- Rating to 1000V PRV
- 300 amperes surge capability
- High efficiency
- Electrically isolated metal case for maximum heat dissipation
- Mounting: thru hole for # 8 screw mounting



Lead-free

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

Characteristic	Symbol	KBPC 15005	KBPC 1501	KBPC 1502	KBPC 1504	KBPC 1506	KBPC 1508	KBPC 1510	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 @TA=25°C	$I_{F(AV)}$	15.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	300							A

Thermal Characteristics

Characteristic	Symbol	KBPC 15005	KBPC 1501	KBPC 1502	KBPC 1504	KBPC 1506	KBPC 1508	KBPC 1510	UNITS
Operating junction temperature range	T_J	- 55 ---- + 125							°C
Storage temperature range	T_{STG}	- 55 ---- + 150							°C

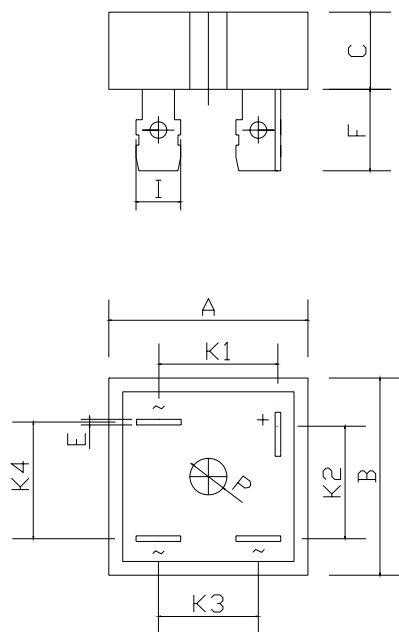
Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	KBPC 15005	KBPC 1501	KBPC 1502	KBPC 1504	KBPC 1506	KBPC 1508	KBPC 1510	UNITS
Maximum instantaneous forward voltage @7.5A	V_F	1.1							V
Maximum reverse current @TA=25°C at rated DC blocking voltage @TA=100°C	I_R	10 1.0							μA mA

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PACKAGE OUTLINE DIMENSIONS



KBPC		
Dim	Min	Max
A	28.20	28.60
B	28.20	28.60
C	10.80	11.10
E	0.8 Typical	
F	11.00min	
I	6.25	6.55
K1	16.05	16.65
K2	15.80	16.50
K3	13.70	14.30
K4	17.70	18.30
P	Ø5.1Typical	
All Dimensions in mm		

PACKAGE INFORMATION

Device	Package	Shipping
KBPC15005--KBPC1510	KBPC	50Units/Box

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FIG.1 – PEAK FORWARD SURGE CURRENT

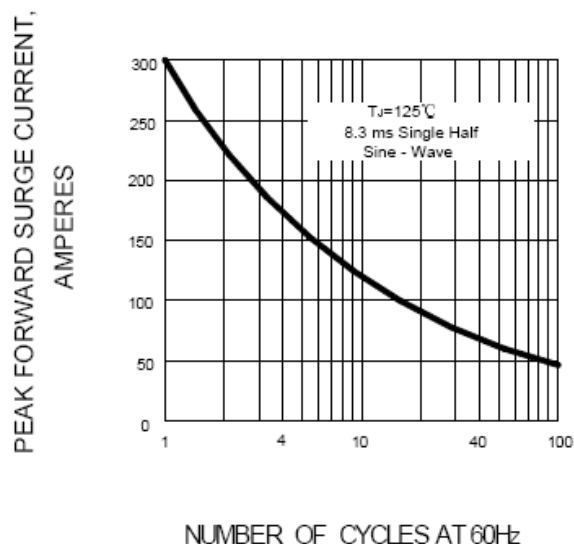


FIG.2 -- FORWARD DERATING CURVE

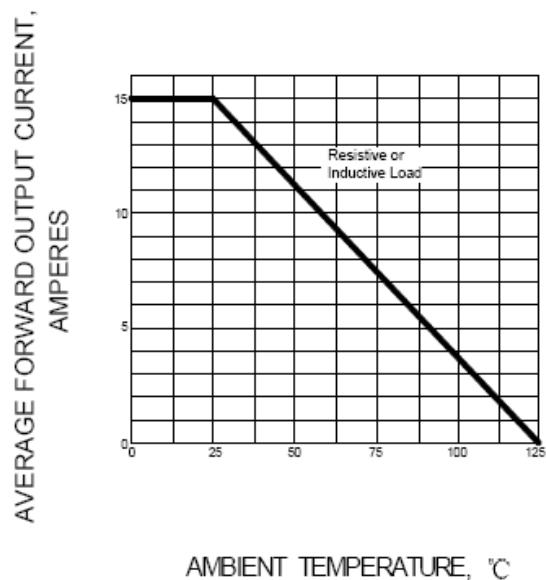


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

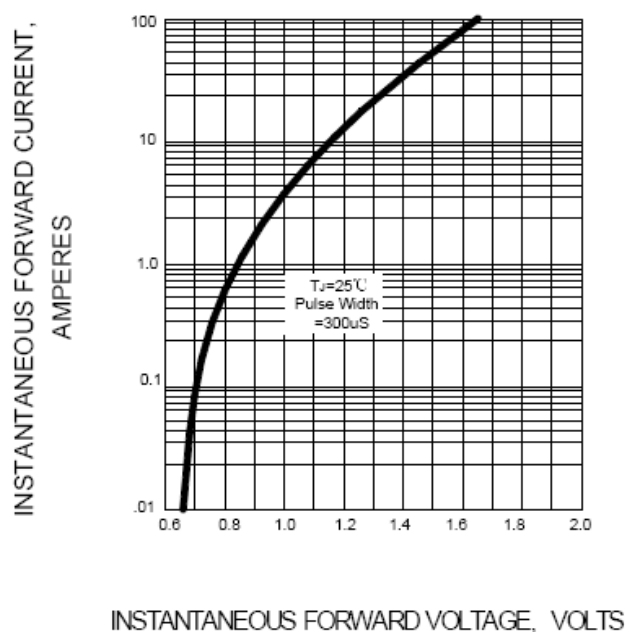


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

