

DIGITRON SEMICONDUCTORS

KBPC15005 SERIES

SINGLE PHASE BRIDGE RECTIFIER

Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).

Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.

MAXIMUM RATINGS (@ 25°C ambient temperature unless otherwise noted)

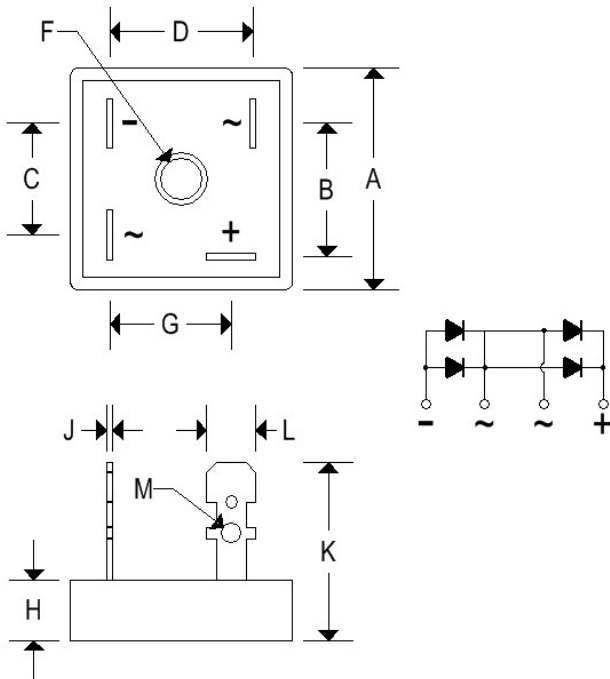
Rating	Symbol	KBPC 15005	KBPC 1501	KBPC 1502	KBPC 1504	KBPC 1506	KBPC 1508	KBPC 1510	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum average forward output rectified current at $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	15							Amps
Peak forward surge current single half-sine wave superimposed on rated load	I_{FSM}	300							Amps
Operating temperature range	T_C	-55 to +125							$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to +150							$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (@ 25°C ambient temperature unless otherwise noted)

Characteristic	Symbol	KBPC 15005	KBPC 1501	KBPC 1502	KBPC 1504	KBPC 1506	KBPC 1508	KBPC 1510	Units
Maximum forward voltage drop per element @ 7.5 peak	V_F	1.2							Volts
Maximum reverse current at rated DC blocking voltage per element $T_A = 25^\circ\text{C}$	I_R	1.0							μA

MECHANICAL CHARACTERISTICS

Case	Digi R
Marking	Body painted, alpha-numeric
Pin out	See below



	Digi R			
	Inches		Millimeters	
	Min	Max	Min	Max
A	1.120	1.130	28.400	28.700
B	0.618	0.685	15.700	16.700
C	0.530	0.570	13.400	14.500
D	0.688	0.728	17.400	18.500
F	0.200	0.210	5.100	5.300
G	0.618	0.658	15.700	16.700
H	0.280	0.310	7.110	7.870
J	0.028	0.032	0.710	0.810
K	0.826	0.905	21.000	23.000
L	0.248	0.252	6.300	6.400
M	0.090	0.100	2.300	2.500

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FIG. 1-MAXIMUM FORWARD SURGE CURRENT

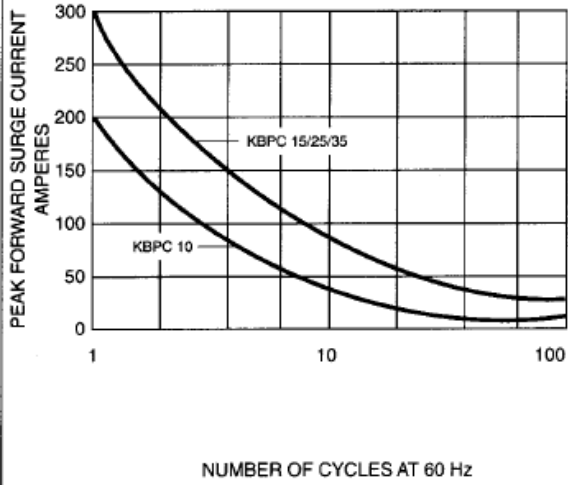


FIG. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

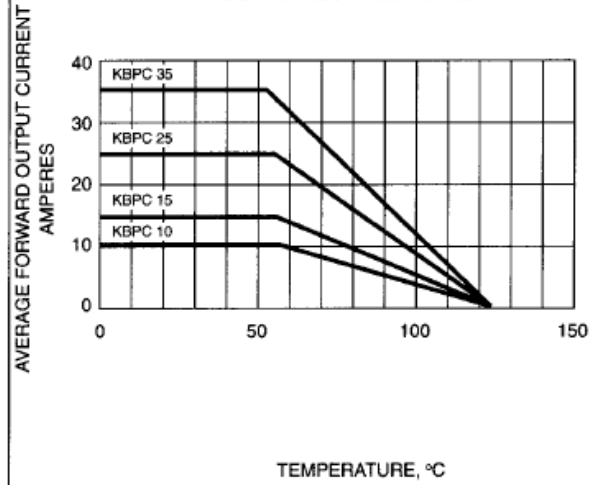


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

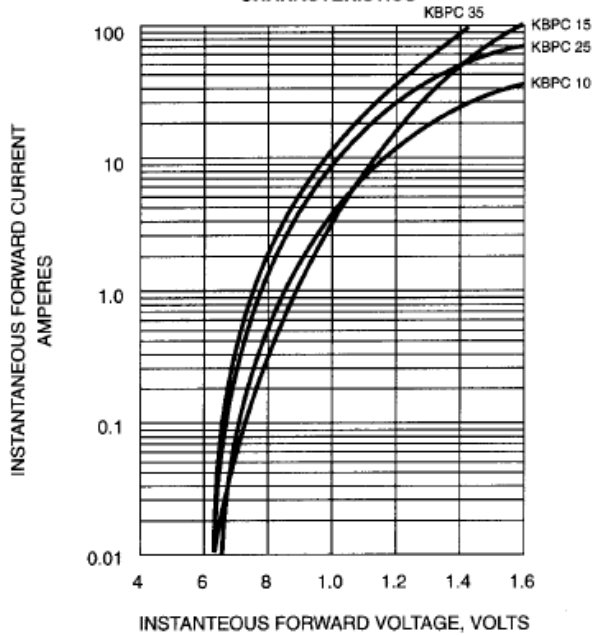


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

