GOOD-ARK
SEMICONDUCTOR

KBPC15 Series

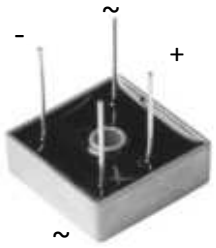
Glass Passivated Single-Phase Bridge Rectifiers
Voltage Range 50 to1000V Forward Current 15A

Features

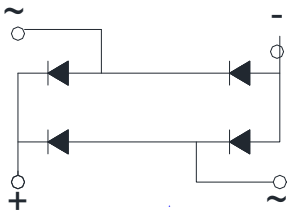
- Surge overload rating - 200~400A peak
- High surge current capability
- Low thermal resistance
- Low forward voltage drop
- Mounting position: Any
- Electrically isolaged base - 1800V
- Solderable 0.25” FASTON terminals
- Solder dip 275 °C max. 7 s, per JESD 22-B106
- Terminals: Tin plated leads,
  Solderable perJ-STD-002 and JESD22-B102,
  Suffix letter “W” added to indicate wire leads(e.g. KBPC1510W)



KBPC



KBPC-W



Schematic Diagram

Maximum Ratings and Electrical Characteristics

T_A=25°C Unless otherwise specified

Parameter	Symbol	KBPC 15005 / KBPC 15005W	KBPC 1501 / KBPC 1501W	KBPC 1502 / KBPC 1502W	KBPC 1504 / KBPC 1504W	KBPC 1506 / KBPC 1506W	KBPC 1508 / KBPC 1508W	KBPC 1510 / KBPC 1510W	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum Instantaneous Forward Voltage Drop per Diode (I_{FM}=7.5A)	V_{FM}	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode (V_{RM}=V_{RRM})	I_{RRM}	10							μA
Average Rectified Output Current @60Hz Sine Wave, R-load, With Heatsink, Tc=55°C	I_O	15							A
Surge(Non-repetitive) Forward Current @60Hz Half- sine Wave, 1 cycle, T_A=25°C	I_{FSM}	300							A
Current Squared Time @1ms≤t≤8.3ms T_J=25°C, Rating of Per Diode	I^2t	375							A^2S
Storage Temperature	T_{STG}	-55 to +150							°C
Junction Temperature	T_J	-55 to +150							°C
Dielectric Strength, Terminals to Case, AC 1 minute	V_{dis}	2.5							KV
Thermal Resistance, Between Junction and Case, With Heatsink	$R_{\theta J-C}$	3.4							°C/W

GOOD-ARK SEMICONDUCTOR

KBPC15 Series

Glass Passivated Single-Phase Bridge Rectifiers
Voltage Range 50 to1000V Forward Current 15A

Ratings and Characteristics Curves

(T_A = 25°C unless otherwise noted)

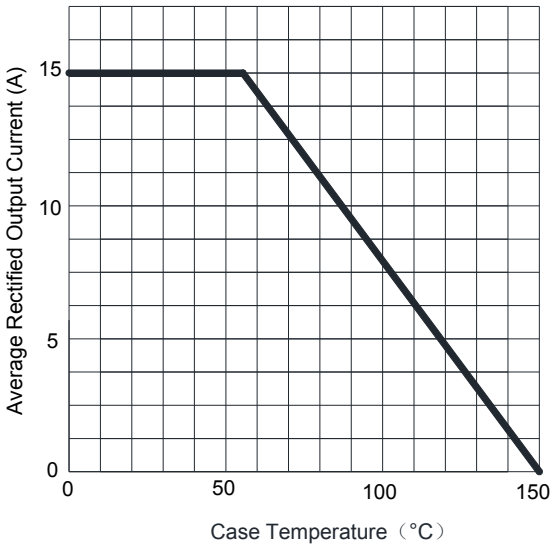


Figure 1. Io-Tc Curve

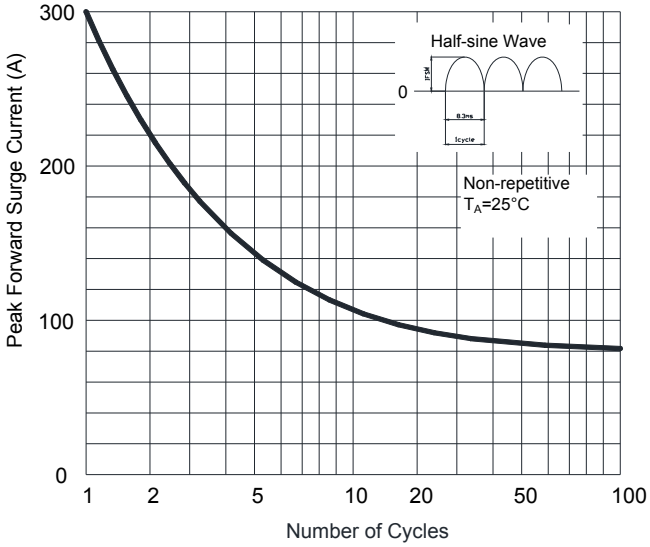


Figure 2. Surge Forward Current Capability

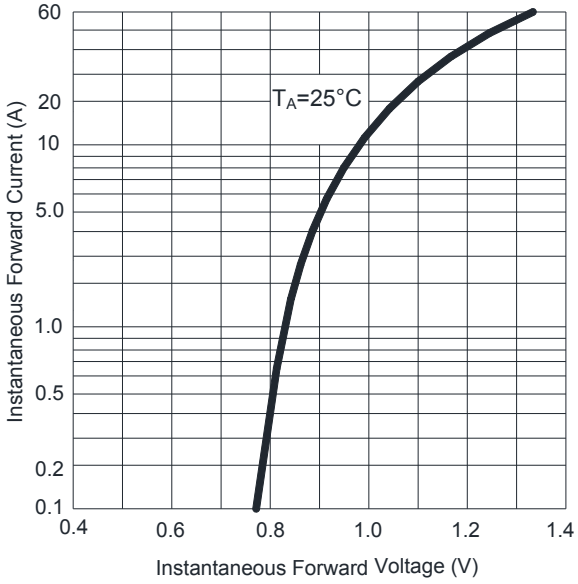


Figure 3. Instantaneous Forward Voltage

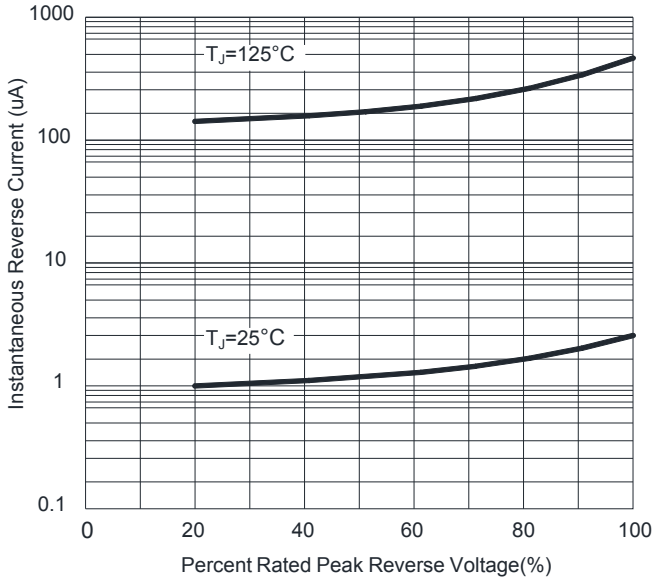
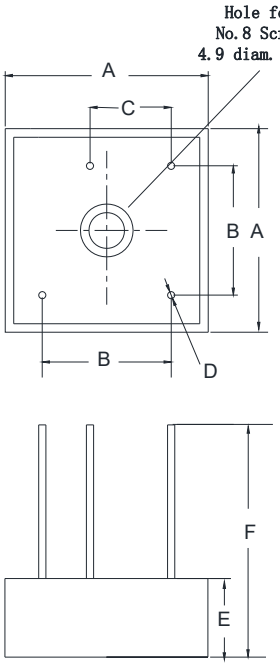


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions

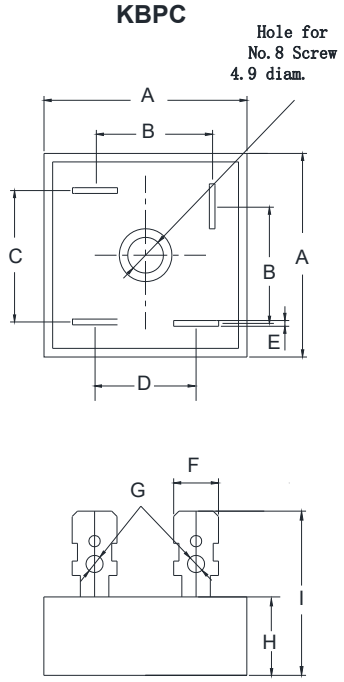
KBPC-W



KBPC-W		
Dim	Min	Max
A	28.2	28.8
B	17.1	19.1
C	10.4	12.4
D	0.95	1.05
E	10.8	11.2
F	30	

Dimensions in millimeters

KBPC



KBPC		
Dim	Min	Max
A	28.2	28.8
B	15.3	17.3
C	17.1	19.1
D	13.2	15.2
E	0.75	0.85
F	6.2	6.4
G	2.3	2.6
H	10.8	11.2
I	19	

Dimensions in millimeters