

Single Phase Silicon Bridge Rectifier

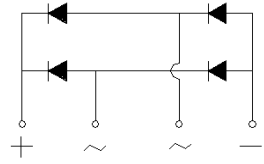
$V_{RRM} = 600\text{ V} - 1000\text{ V}$
 $I_O = 25\text{ A}$

Features

- High efficiency
- Silicon junction
- Metal case
- Types from 600 V to 1000 V V_{RRM}
- Not ESD Sensitive

Mechanical Data

Case: Mounted in the bridge encapsulation
 Mounting: Hole for #10 screw
 Polarity: Marked on case



KBPC-T/W Package



Maximum ratings at $T_c = 25\text{ }^\circ\text{C}$, unless otherwise specified (KBPCXXXXT uses KBPC-T package while KBPCXXXXW uses KBPC-W package)

Parameter	Symbol	Conditions	KBPC2506T/W	KBPC2508T/W	KBPC2510T/W	Unit
Repetitive peak reverse voltage	V_{RRM}		600	800	1000	V
RMS reverse voltage	V_{RMS}		420	560	700	V
DC blocking voltage	V_{DC}		600	800	1000	V
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

Electrical characteristics at $T_c = 25\text{ }^\circ\text{C}$, unless otherwise specified

Single phase, half sine wave, 60 Hz, resistive or inductive load
 For capacitive load derate current by 20%

Parameter	Symbol	Conditions	KBPC2506T/W	KBPC2508T/W	KBPC2510T/W	Unit
Maximum average forward rectified current	I_O	$T_c = 55\text{ }^\circ\text{C}$	25	25	25	A
Peak forward surge current	I_{FSM}	8.3 ms half sine-wave	350	350	350	A
Maximum instantaneous forward voltage per leg	V_F	$I_F = 12.5\text{ A}$	1.1	1.1	1.1	V
Maximum DC reverse current at rated DC blocking voltage per leg	I_R	$T_c = 25\text{ }^\circ\text{C}$ $T_c = 100\text{ }^\circ\text{C}$	5 500	5 500	5 500	μA
Typical junction capacitance ¹	C_j		300	300	300	pF
Typical thermal resistance ²	$R_{\theta JC}$		1.9	1.9	1.9	$^\circ\text{C/W}$

¹ - Measured at 1 MHz and applied reverse voltage of 4.0 V D.C.

² - Device mounted on 300 mm x 300 mm x 1.6 mm Cu plate heatsink

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

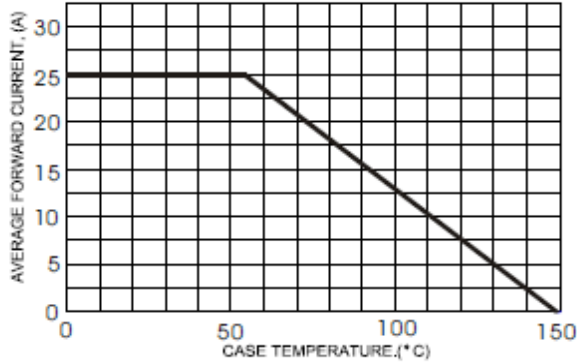


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

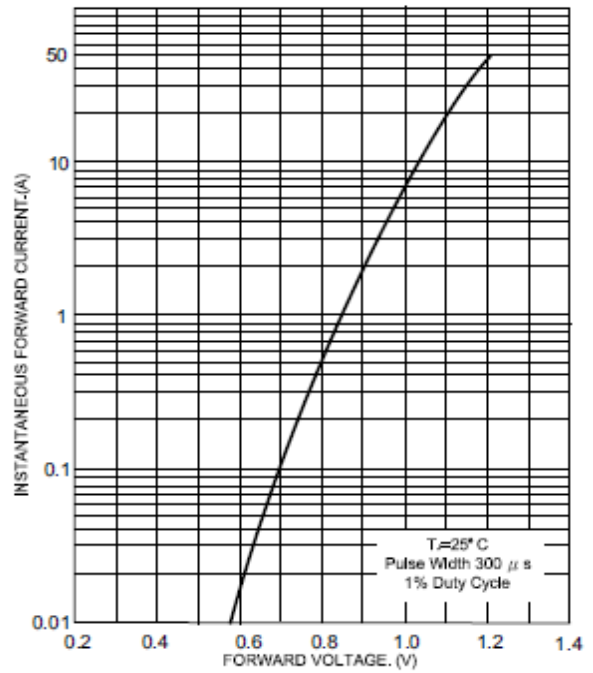


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

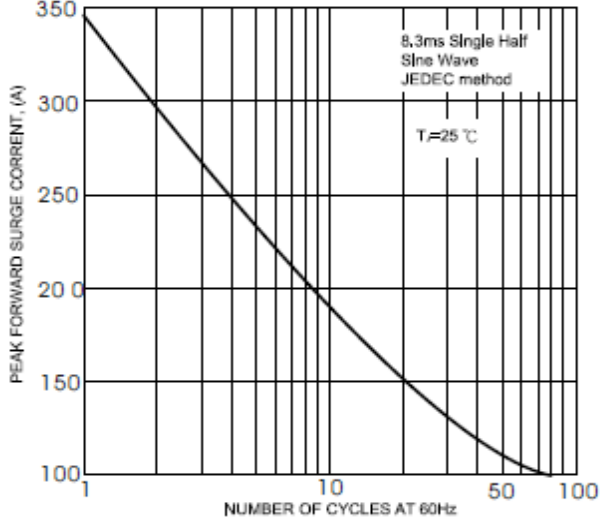


FIG.4 - TYPICAL JUNCTION CAPACITANCE

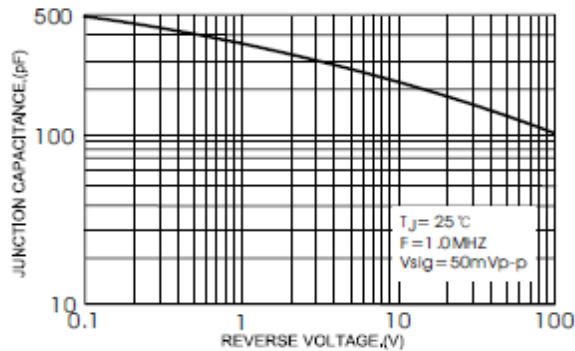
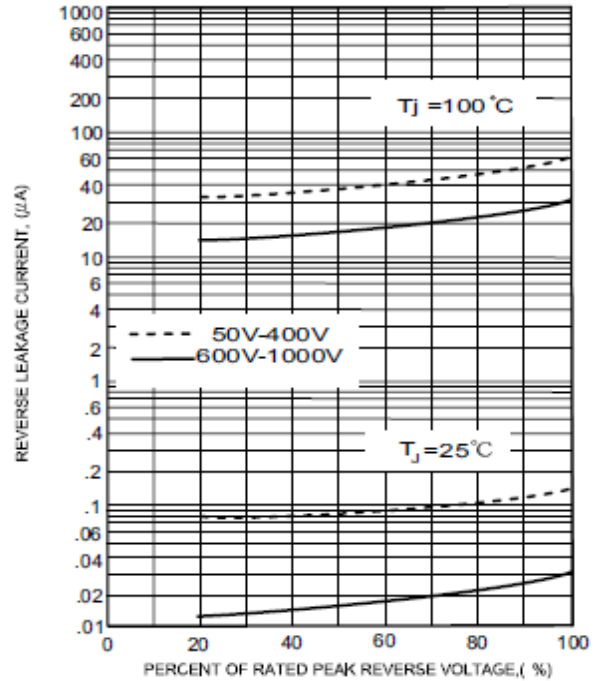
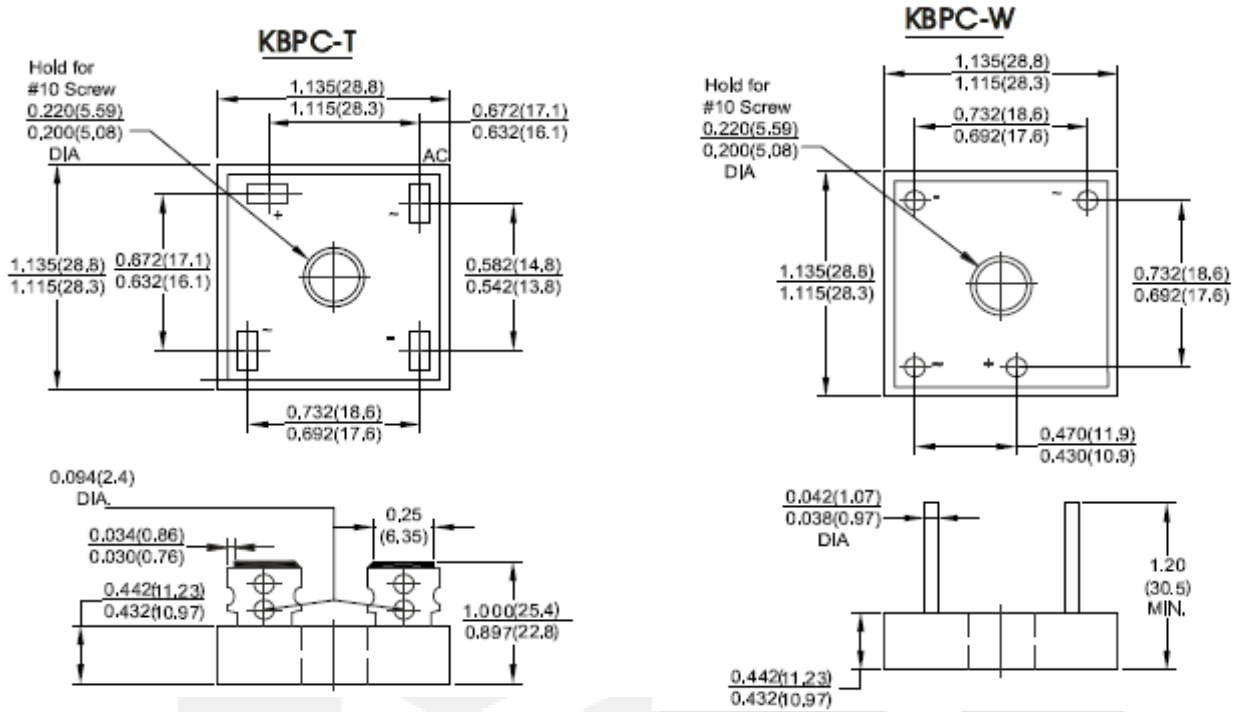


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

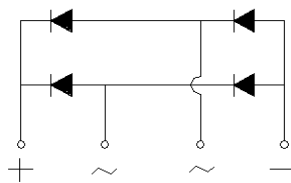


Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



Dimensions in inches and (millimeters)



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bridge Rectifiers](#) category:

Click to view products by [GeneSiC Semiconductor](#) manufacturer:

Other Similar products are found below :

[MB2510](#) [MB252](#) [MB356G](#) [MB358G](#) [GBJ1504-BP](#) [GBU15J-BP](#) [GBU15K-BP](#) [GBU4A-BP](#) [GBU6B-E3/45](#) [GSIB680-E3/45](#) [DB101-BP](#)
[DF01](#) [DF10SA-E345](#) [BU1508-E3/45](#) [KBPC50-10S](#) [RS405GL-BP](#) [G5SBA60-E3/51](#) [GBU10J-BP](#) [GBU6M](#) [GBU8D-BP](#) [GBU8J-BP](#)
[2KBB10](#) [36MB140A](#) [TB102M](#) [MB1510](#) [MB258](#) [MB6M-G](#) [MB86](#) [TL401G](#) [MDA920A2](#) [TU602](#) [TU810](#) [MP501W-BP](#) [MP502-BP](#)
[BR101-BP](#) [BR84DTP204](#) [BU2008-E3/51](#) [KBPC10/15/2501WP](#) [KBPC25-02](#) [DF06SA-E345](#) [DF1510S](#) [VS-40MT160PAPBF](#) [GBL02-E3/45](#)
[GBU4G-BP](#) [GBJ2506-BP](#) [GBU6B-E3/51](#) [GSIB15A80-E3/45](#) [DB104-BP](#) [TB354](#) [70MT160KPBF](#)