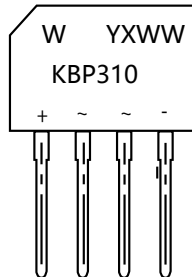


Glass Passivated Bridge Rectifiers



PINNING

PIN	DESCRIPTION
1	Input Pin (~)
2	Input Pin (~)
3	Output Anode (+)
4	Output Cathode (-)

Features

- Compliant with RoHS Provisions
- Low forward voltage, high forward current
- High forward surge current capability
- High heat-conducting performance
- Thermal welding performance:
260 °C/10sec

Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

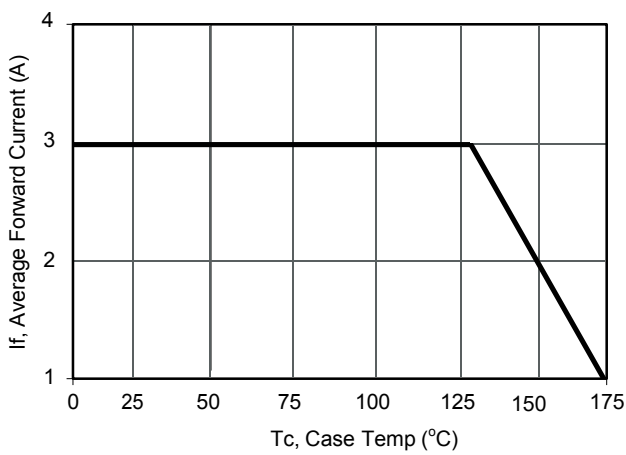
Parameter	Symbols	KBP310	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC Blocking Voltage	VDC	1000	V
Average Rectified Output Current	I_o	3.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	80	A
$I^2 t$ rating for fusing (1ms < t < 8.3ms)	$I^2 t$	26.5	A ² S
Maximum Forward Voltage at 1.5 A	VF	1.1	V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	IR	5 500	μA
Typical Junction Capacitance (Note1)	Cj	25	pF
Operating and Storage Temperature Range	Tj, Tstg	-55 ~ +175	°C
Typical thermal resistance (Note 2)	RthJA RthJL	30 11	°C/W

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

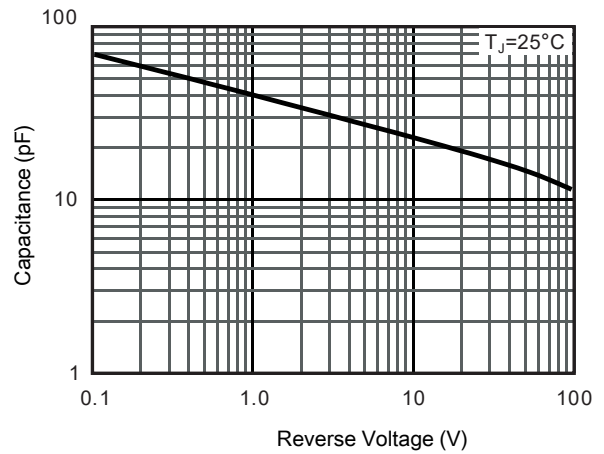
2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft² 20x20 mm copper pad per pin with heatsink

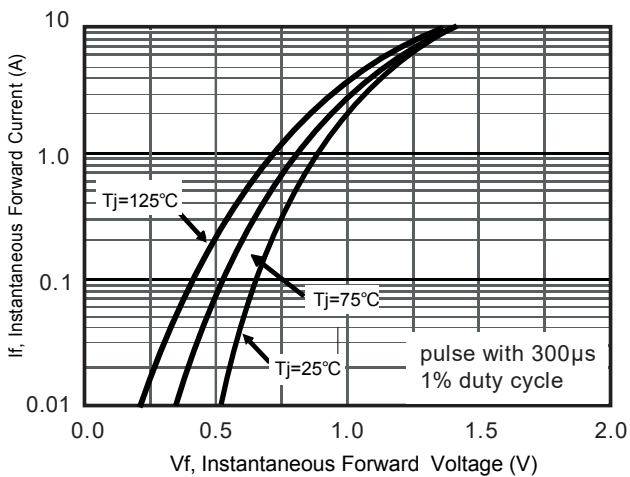
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



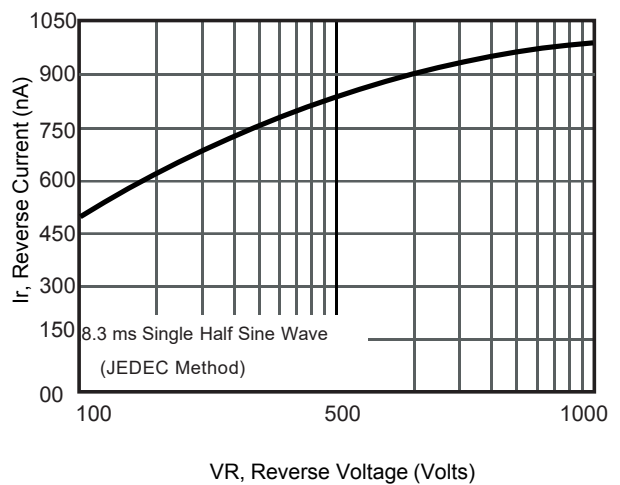
Current Derating, Case



Typical Junction Capacitance



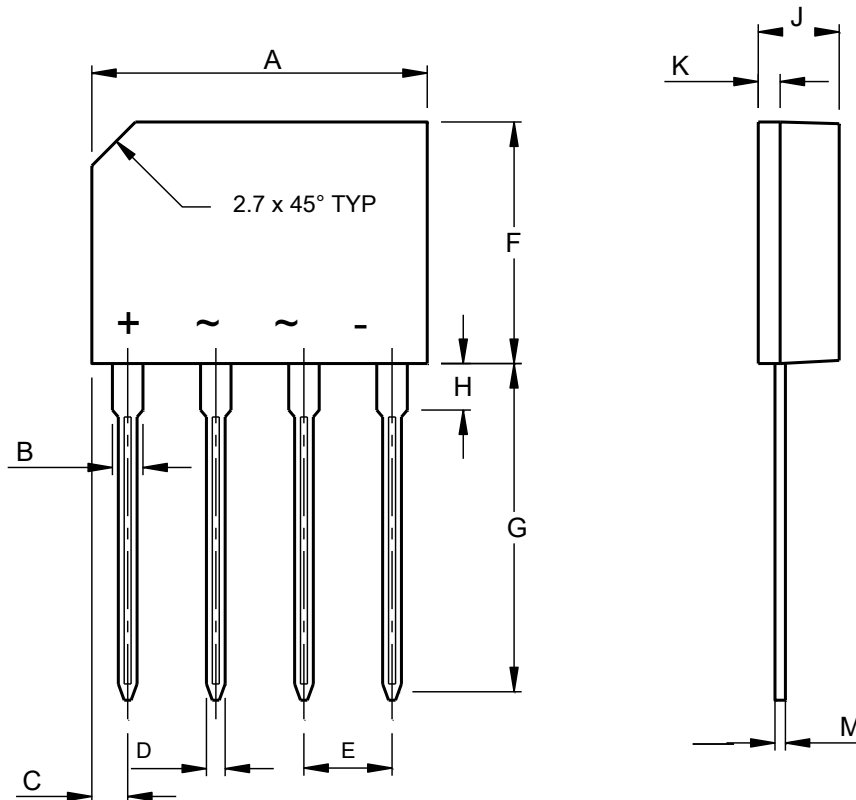
Typical Forward Voltage



Typical Reverse Current

PACKAGE OUTLINE DIMENSIONS

Outline Dimensions



KBP mechanical data

UNIT		A	B	C	D	E	F	G	H	J	K	M
mm	max	13.8	1.2	1.3	0.7	3.5	10.2	13.8	1.8	2.8	0.8	0.3
	min	14.5	1.5	1.8	0.9	4.1	10.6	14.5	2.2	3.3	1.1	0.6
mil	max	543.3	47.2	51.2	27.5	137.8	401.5	543.3	70.8	110.2	31.5	11.8
	min	570.8	59.1	70.9	35.4	161.4	417.3	570.8	86.6	129.9	43.3	23.6