

### Vishay General Semiconductor

<b>ELECTRICAL CHARACTERISTICS</b> ( $T_A = 25 \text{ °C}$ unless otherwise noted)									
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT			
Maximum instantaneous forward voltage per diode <sup>(1)</sup>	I <sub>F</sub> = 22.5 A	T <sub>A</sub> = 25 °C	V <sub>F</sub>	1.00	1.10	V			
		T <sub>A</sub> = 125 °C		0.90	1.00				
Reverse current per diode <sup>(2)</sup>	rated V <sub>R</sub>	T <sub>A</sub> = 25 °C	I <sub>R</sub>	-	10	μA			
		T <sub>A</sub> = 125 °C		170	500				
Typical junction capacitance per diode	4.0 V, 1 MHz		CJ	162	-	pF			

Notes

<sup>(1)</sup> Pulse test: 300 µs pulse width, 1 % duty cycle

<sup>(2)</sup> Pulse test: 10 ms pulse width

<b>THERMAL CHARACTERISTICS</b> ( $T_A = 25 \text{ °C}$ unless otherwise noted)							
PARAMETER	SYMBOL	PB5006	PB5008	PB5010	UNIT		
Typical thermal resistance	R <sub>0JC</sub> <sup>(1)</sup>	0.7			°C/W		
	R <sub>0JA</sub> <sup>(2)</sup>	18					

#### Notes

<sup>(1)</sup> With 60 W air cooled heatsink

<sup>(2)</sup> Without heatsink, free air

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
PB5006-E3/45	7.62	45	20	Tube			



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#### **RATINGS AND CHARACTERISTICS CURVES** ( $T_A = 25 \text{ °C}$ unless otherwise noted)

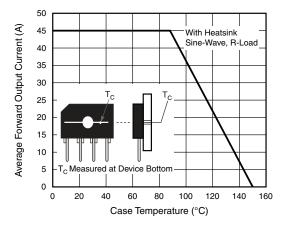


Fig. 1 - Derating Curve Output Rectified Current

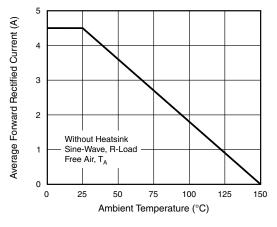


Fig. 2 - Forward Current Derating Curve

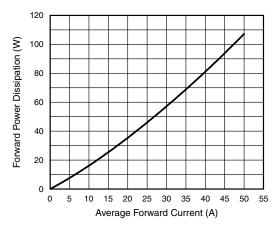


Fig. 3 - Forward Power Dissipation

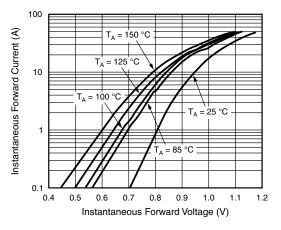


Fig. 4 - Typical Forward Characteristics Per Diode

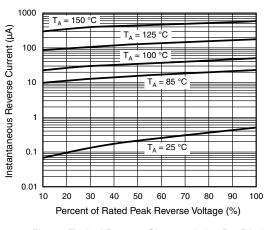


Fig. 5 - Typical Reverse Characteristics Per Diode

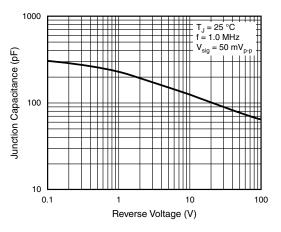


Fig. 6 - Typical Junction Capacitance Per Diode

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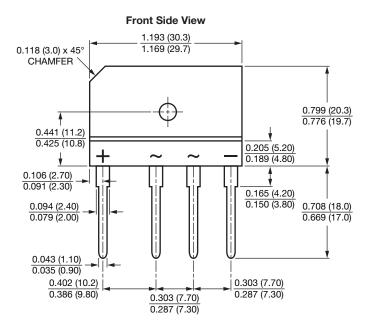
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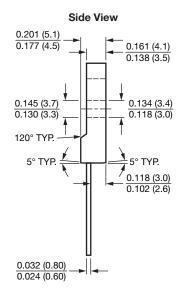
# PB5006, PB5008, PB5010

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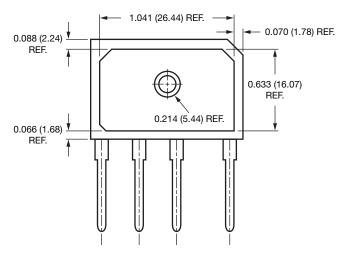
#### **PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)



Case Type PB



**Back Side View** 





Vishay

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