



PJUSB05-4

FEATURES

- SOT23-6L package allows five separate unidirectional configurations
- Low leakage < 1μA@5V
- Breakdown voltage : 6.37V-7.04V@1mA
- Low Capacitance (8.5pF typical)
- ESD Protection Meeting IEC1000-4-2
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Case : SOT23-6L, Plastic

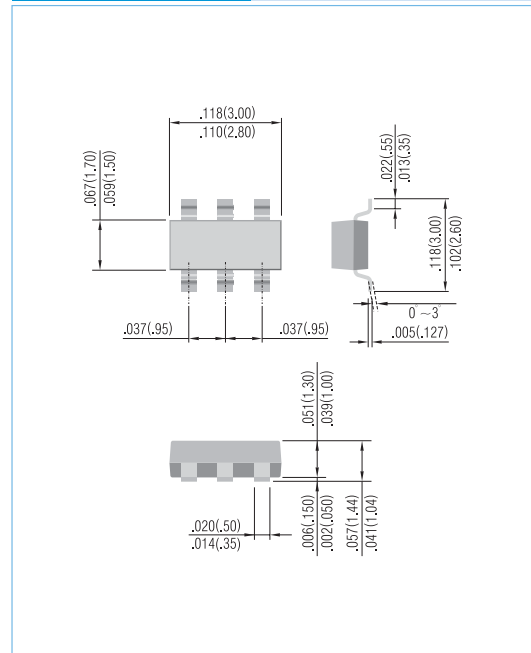
Terminals : Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.013 gram

Marking : BTW

SOT23-6L

Unit: inch (mm)



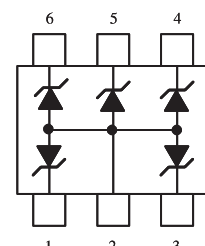
MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Peak Power Dissipation @20μs@TA≤25 °C (Note 1)	P _{TOT}	150	W
Steady State Power-1 Diode (Note 2)	P _D	385	mW
Thermal Resistance , Junction to Ambient Above 25°C, Derate	R _{θJA}	212 4.7	°C/W mW/°C
ESD Discharge MIL STD 883C-Method 3015-6 IEC1000-4-2, Air Discharge IEC1000-4-2, Contact Discharge	V _{PP}	16 15 8	kV
Lead Solder Temperature (10 s duration)	T _L	260	°C
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to 150	°C

Maximum ratings are those values beyond which device damage can occur. Maximum ratings applied to the device are individual stress limit values (not normal operating conditions) and are not valid simultaneously. If these limits are exceeded, device functional operation is not implied, damage may occur and reliability may be affected.

1. Non-repetitive current per Figure 1. Derate per Figure 2.

2. Only 1 diode under power. For all 5 diodes under power, P_D will be 20%. Mounted on FR-4 board with min pad.





PJUSB05-4

ELECTRICAL CHARACTERISTICS

Part Number	Breakdown Voltage V_{BR} @ 1mA(Volts)			Leakage Current I_r @ $V_{RWM} = 5V$	Capacitance@0V Bias	Max V_F @ $I_F=10mA$
	Min.	Nom.	Max.			
	V	V	V			
PJUSB05-4	6.37	6.7	7.04	1.0	8.5	0.95

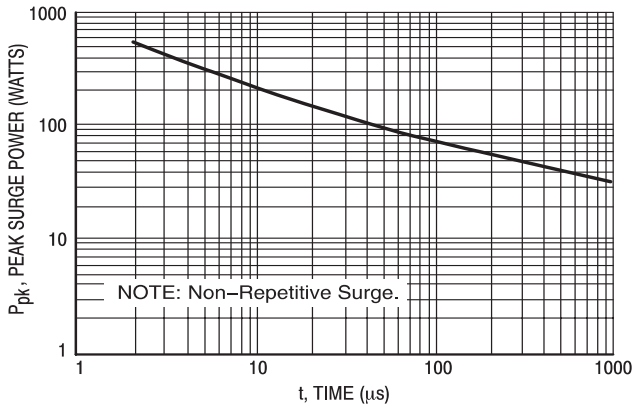


Figure 1. Pulse Width

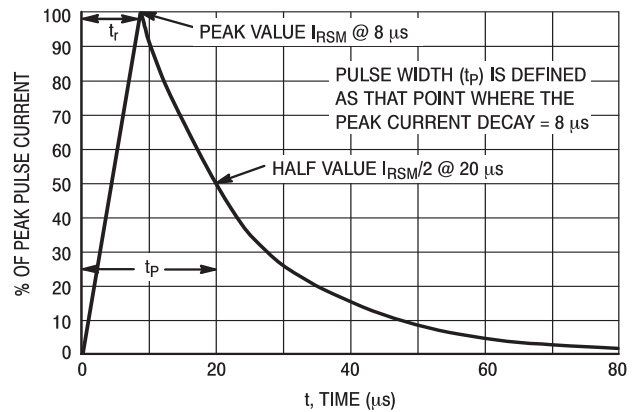


Figure 2. 8 x 20 μs Pulse Waveform

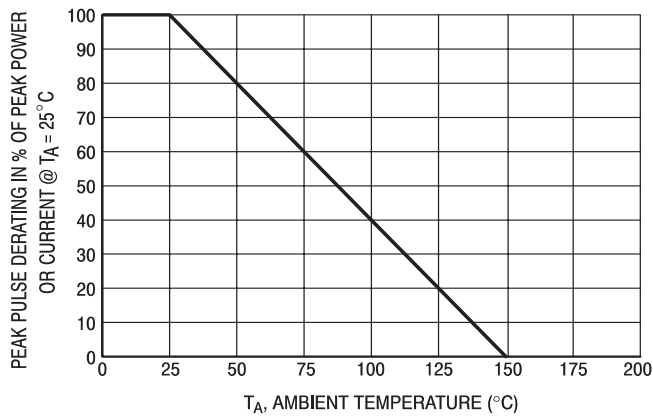


Figure 3. Pulse Derating Curve

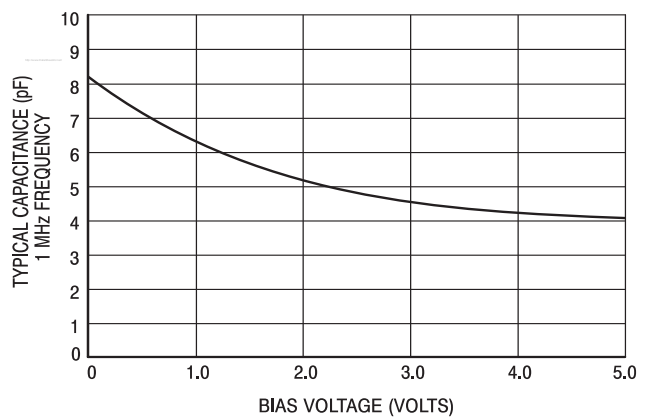


Figure 4. Capacitance

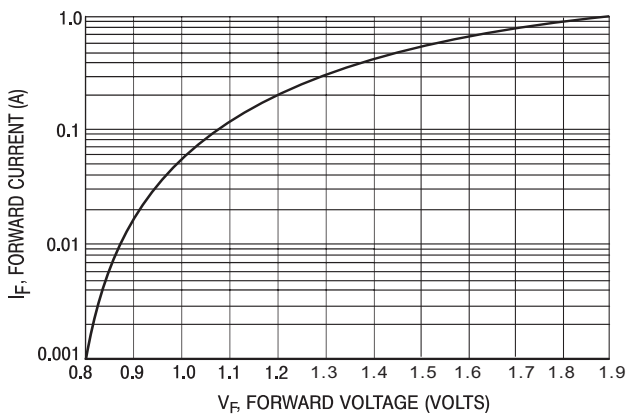


Figure 5. Forward Voltage

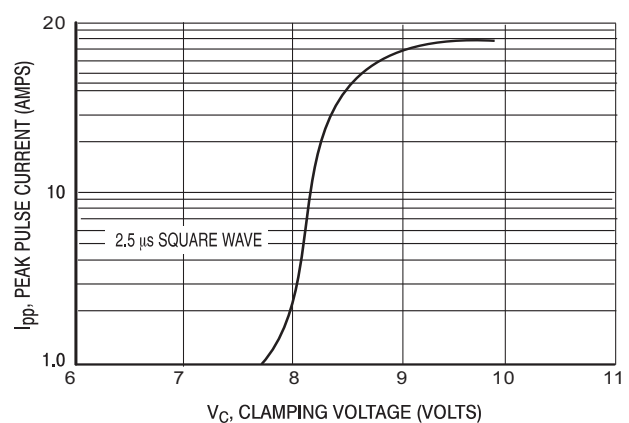
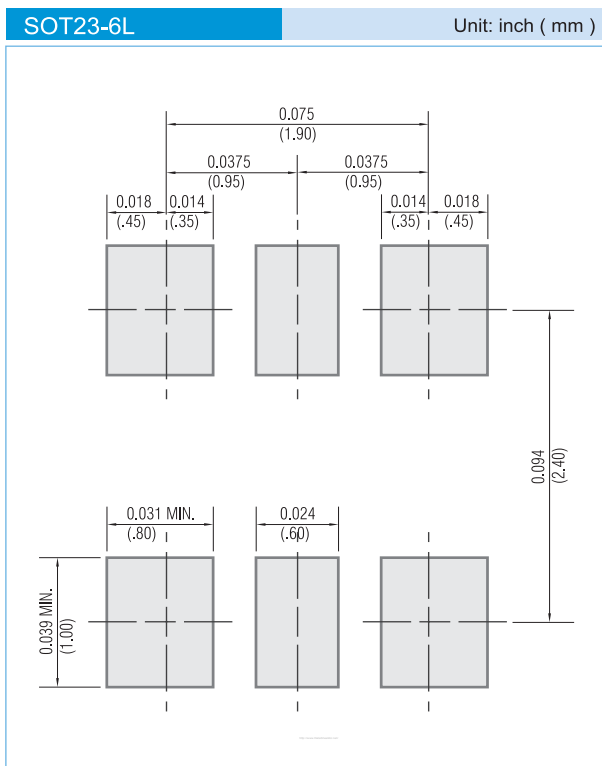


Figure 6. Clamping Voltage versus Peak Pulse Current (Reverse Direction)



PJUSB05-4

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

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