



# PJ4L40W6

## QUAD SCHOTTKY DATA LINE BUS TERMINATOR

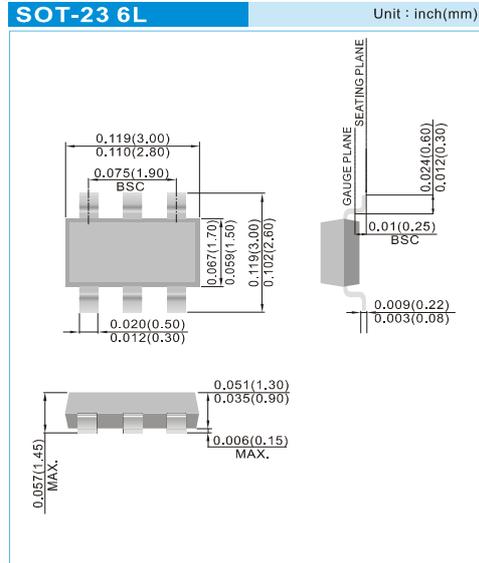
This highly integrated device is designed as rail to rail overvoltage protection clamp for up to four high frequency data lines. It is ideal in portable applications where small form factors are required.

### FEATURES

- Low Forward Voltage Drop for Improved Voltage Protection
- Very Fast Switching
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOT-23 6L, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See circuit schematic below
- Approx. Weight: 0.0005 ounces, 0.014 grams
- Marking : 441



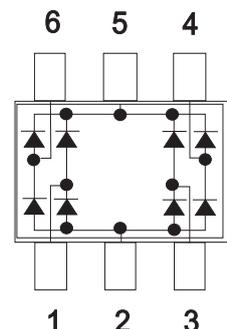
### MAXIMUM RATINGS (T<sub>A</sub>=25°C, unless otherwise noted)

Rating	Symbol	Value	Units
Reverse Voltage	V <sub>R</sub>	30	V
Continuous Forward Current	I <sub>F</sub>	200	mA
Non-Repetitive Surge Current, t=1s	I <sub>FSM</sub>	600	mA
Power Dissipation (Note 1)	P <sub>D</sub>	200	mW
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +125	°C

Note 1 : Device mounted on FR-4 board 1.0 inch x 0.85 inch x 0.062 inch, with minimum pad layout.

### THERMAL CHARACTERISTICS

Characteristic	Symbol	Value	Units
Thermal Resistance, Junction to Ambient	R <sub>θJA</sub>	625	°C/W



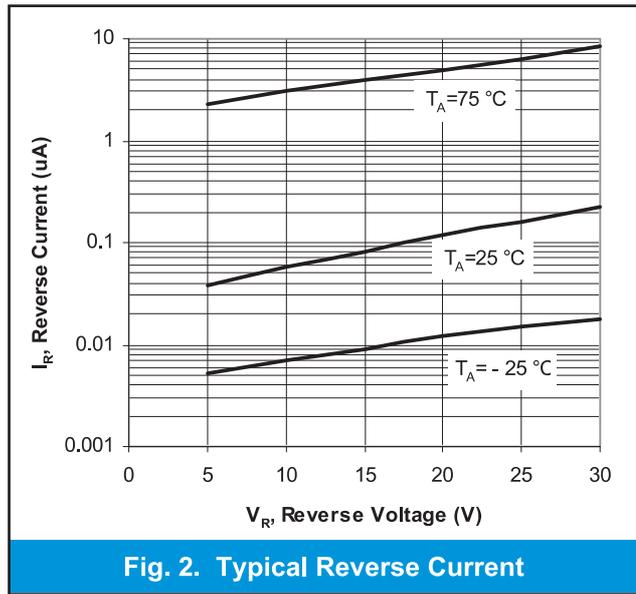
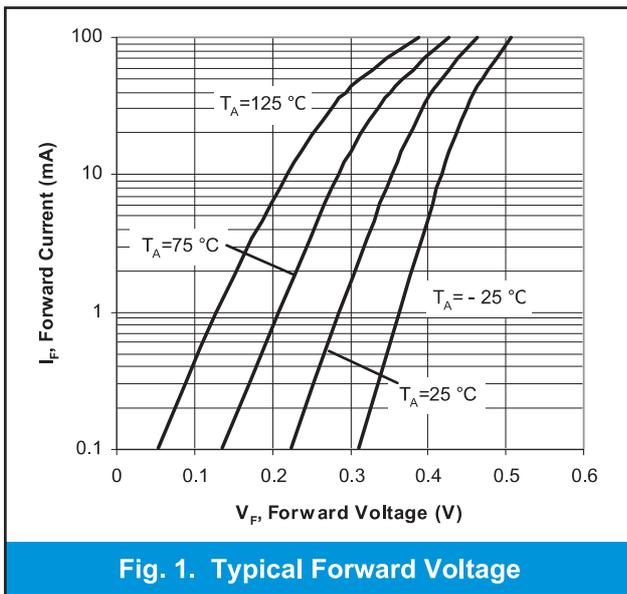


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## ELECTRICAL CHARACTERISTICS (Each Diode) $T_J=25^\circ\text{C}$ , unless otherwise noted

Characteristic	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage (Note 2)	$I_R=100\mu\text{A}$ $V_{BR}$	30	-	-	V
Forward Voltage (Note 2)	$I_F=0.1\text{mA}$ $I_F=1.0\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$ $V_F$	-	0.225 0.280 0.350 0.390 0.460	0.280 0.350 0.450 0.550 1.0	V
Reverse Leakage Current (Note 2)	$V_R=25\text{V}$ $I_R$	-	-	2.0	$\mu\text{A}$
Total Capacitance $V_R=0\text{V}, f=1.0\text{MHz}$	Data Line to Ground Between Data Lines $C_T$	-	19 12	-	pF
Reverse Recovery Time	$I_F=I_R=10\text{mA}$ $I_{RR}=1.0\text{mA}, R_L=100\text{Ohm}$ $T_{RR}$	-	-	5.0	ns

## ELECTRICAL CHARACTERISTIC CURVES (Each Diode)



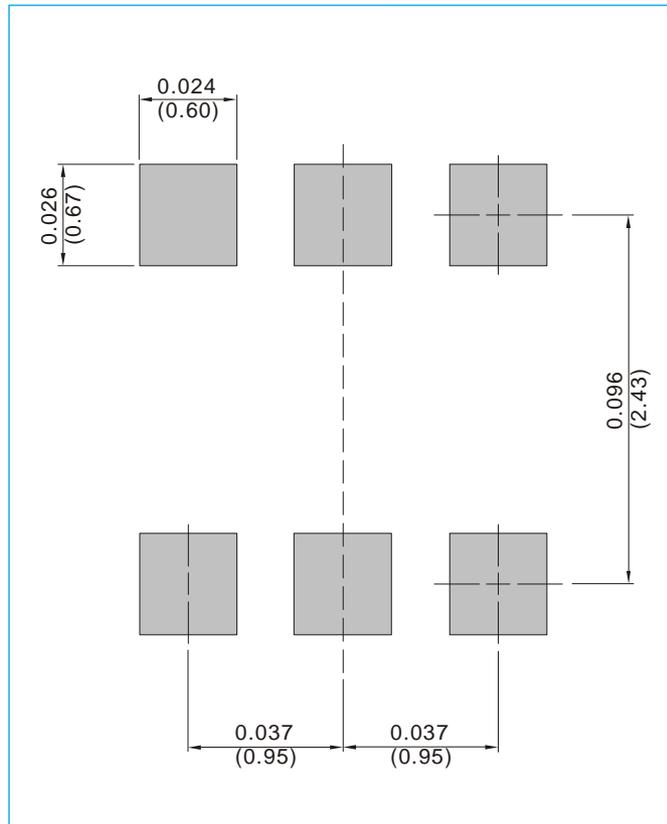


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### MOUNTING PAD LAYOUT

SOT-23 6L

Unit : inch(mm)



### ORDER INFORMATION

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



## PJ4L40W6

### Part No\_packing code\_Version

PJ4L40W6\_R1\_00001  
PJ4L40W6\_R2\_00001  
PJ4L40W6\_S1\_00001  
PJ4L40W6\_S2\_00001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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