



PJSRV05W-4GW6

Low Capacitance TVS/ESD Protection

V_{RWM}

5 V

Features

- IEC61000-4-2(ESD): ±30kV Air, ±30kV Contact Compliance
- IEC61000-4-4(EFT): 40A(5/50nS)
- IEC61000-4-5(Lightning): 10A(8/20μS)
- Low leakage current, maximum 1μA at rated voltage
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std.
(Halogen Free)

Mechanical Data

- Case: SOT23-6L, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0005 ounces, 0.014 grams
- Marking: K6G

Applications

- USB2.0 Data Line Protection
- Video Graphics Cards
- Monitors and Flat Panel Displays Notebook computers
- Digital Video Interface(DVI)
- 10/100/1000 Ethernet
- ATM Interfaces
- Control Signal Lines Protection

SOT-23 6L

Unit : inch(mm)

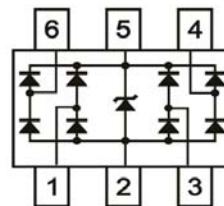
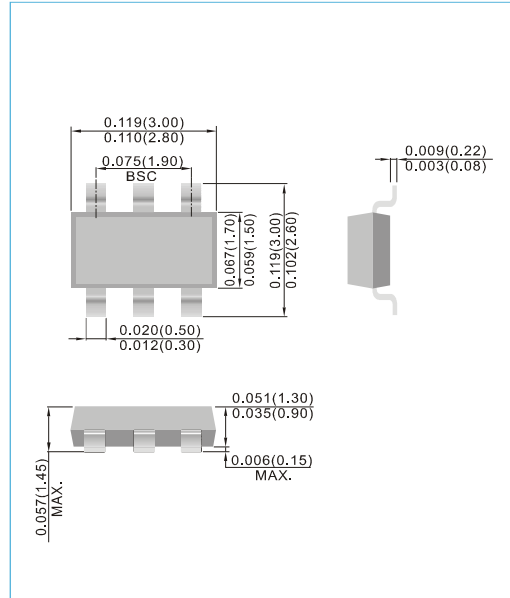


Fig.70(Top View)

Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air)	V_{ESD}	±30	kV
ESD IEC61000-4-2(Contact)		±30	
Operating Junction Temperature	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C



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Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage ^(Note 1)	V_{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR}=1\text{mA}$, PIN 5 to GND	6	-	8.5	V
Reverse leakage current	I_R	$V_R=5\text{V}$, PIN 5 to GND	-	-	1	μA
Clamping Voltage	V_{CL}	$I_{PP}=1\text{A}$, $t_P=8/20\mu\text{s}$, any I/O pin to GND	-	-	8	V
		$I_{PP}=10\text{A}$, $t_P=8/20\mu\text{s}$, any I/O pin to GND	-	-	12	
Clamping Voltage TLP ^(Note 2)	V_{CL}	$I_{PP}=4\text{A}$, $t_P=100\text{ns}$, any I/O pin to GND	-	12	-	V
		$I_{PP}=8\text{A}$, $t_P=100\text{ns}$, any I/O pin to GND	-	17	-	
Dynamic Resistance ^(Note 2)	R_{DYN}	$t_P=100\text{ns}$	-	0.8	-	Ω
Off State Junction Capacitance	C_J	0Vdc Bias $f=1\text{MHz}$, Between any I/O pins to GND	-	1.6	2	pF
		0Vdc Bias $f=1\text{MHz}$, Between any I/O pins	-	0.8	1	

NOTES :

1. A transient suppressor is selected according to the working peak reverse voltage(V_{RWM}), Which should be equal to or greater than the DC or continuous peak operation voltage level.
2. Testing using Transmission Line Pulse (TLP) conditions: $Z_0 = 50\Omega$, $t_P = 100\text{ ns}$.



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TYPICAL CHARACTERISTIC CURVES

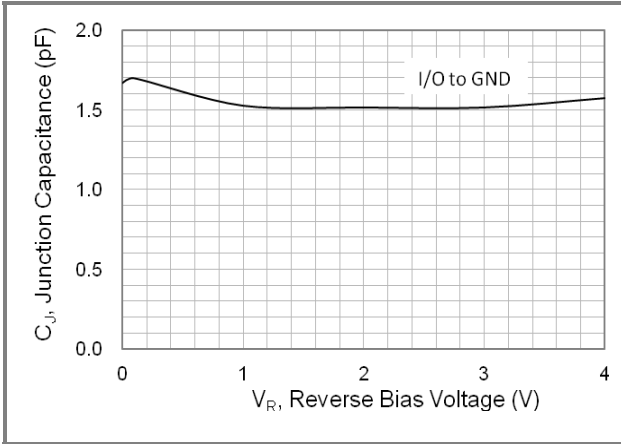


Fig.1 Typical Junction Capacitance

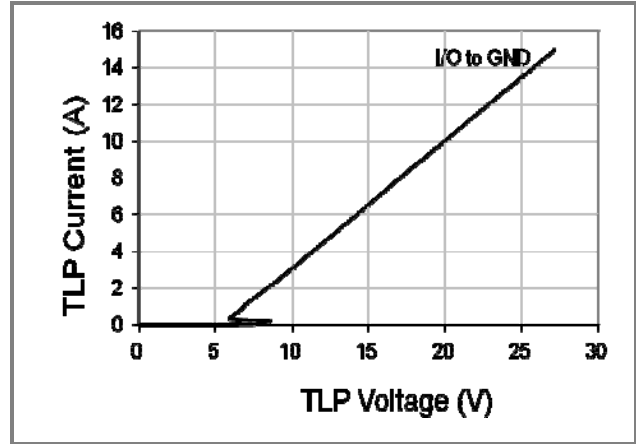


Fig2 Transmission Line Pulsing (TLP) Measurement

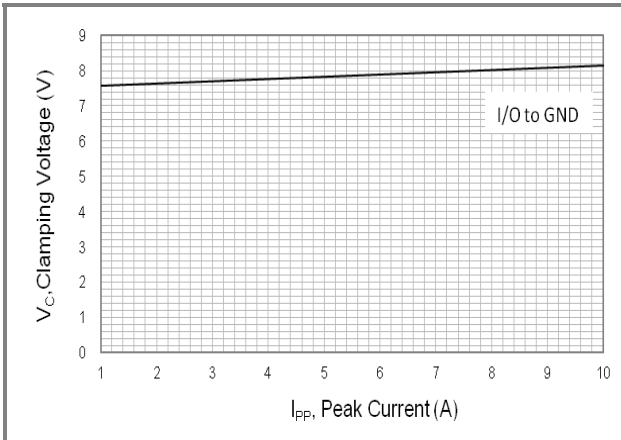


Fig.3 Typical Peak Clamping Voltage(8/20 μ s)

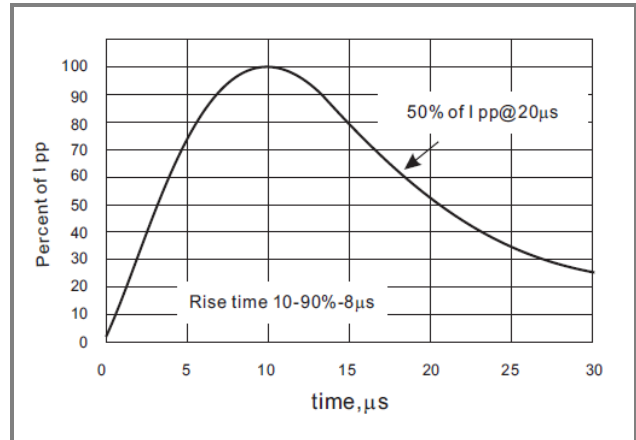


Fig.4 8/20 μ s Pulse Waveform

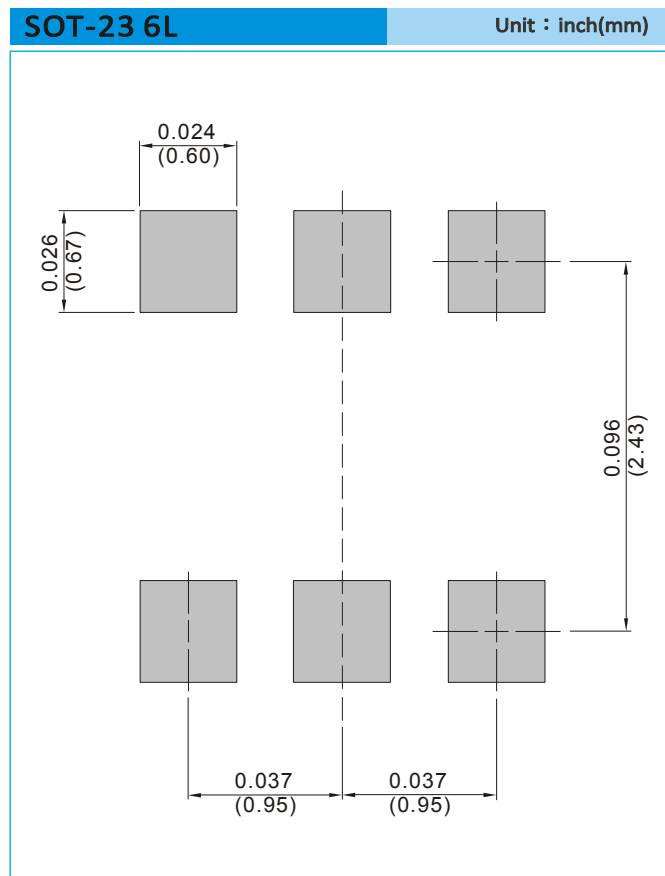


PJSRV05W-4GW6

PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing type	Marking	Version
PJSRV05W-4GW6_R1_00001	SOT-23 6L	3K pcs / 7" reel	K6G	Halogen free
PJSRV05W-4GW6_R2_00001	SOT-23 6L	10K pcs / 13" reel	K6G	Halogen free

MOUNTING PAD LAYOUT





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