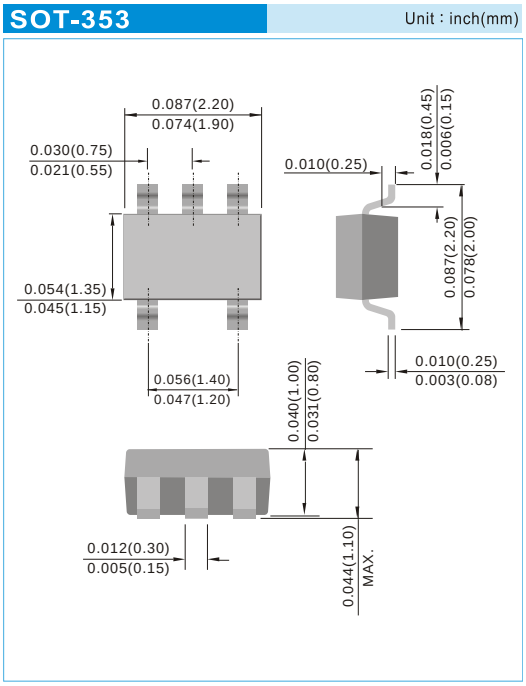
PJSRV05W-4GW5

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 3μA 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: SOT-353, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0002 ounces, 0.006 grams
- Marking: GW5

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

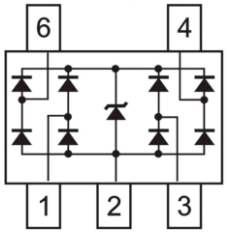


Fig.201(Top View)

Maximum Ratings (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air) ESD IEC61000-4-2(Contact)	V_{ESD}	±30 ±30	kV
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°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}=1mA, any I/O pin to GND	6	-	9	V
Reverse leakage current	I_R	V_R=5V, any I/O pin to GND	-	-	3	μA
Clamping Voltage	V_{CL}	I_{PP}=1A, t_P=8/20μs, any I/O pin to GND	-	-	8	V
		I_{PP}=10A, t_P=8/20μs, any I/O pin to GND	-	-	12	
Clamping Voltage TLP(Note 2)	V_{CL}	I_{PP}=4A, t_P=100ns, any I/O pin to GND	-	12	-	V
		I_{PP}=8A, t_P=100ns, any I/O pin to GND	-	17	-	
Dynamic Resistance(Note 2)	R_{DYN}	t_P=100ns	-	0.8	-	Ω
Off State Junction Capacitance	C_J	0Vdc Bias f=1MHz, Between any I/O pins to GND	-	1.6	2	pF
		0Vdc Bias f=1MHz, 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 = 50Ω , t_P = 100 ns.

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TYPICAL CHARACTERISTIC CURVES

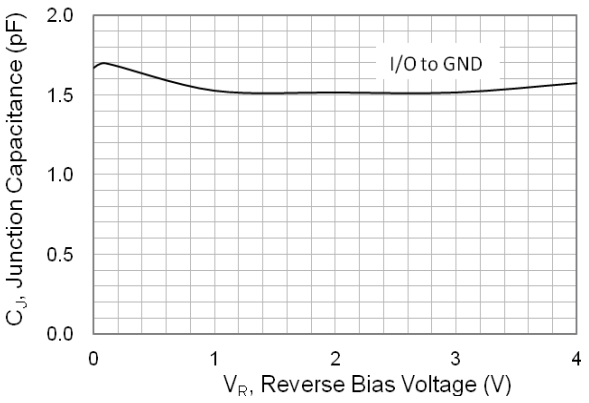

Fig.1 Typical Junction Capacitance

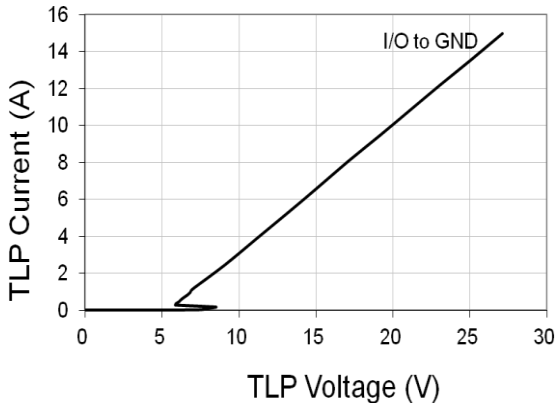

Fig2 Transmission Line Pulsing (TLP) Measurement

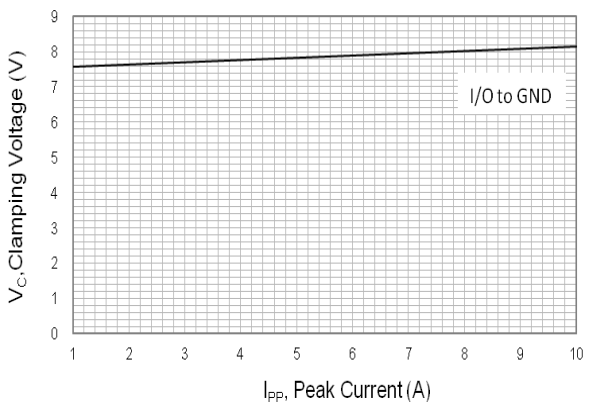

Fig.3 Typical Peak Clamping Voltage(8/20μs)

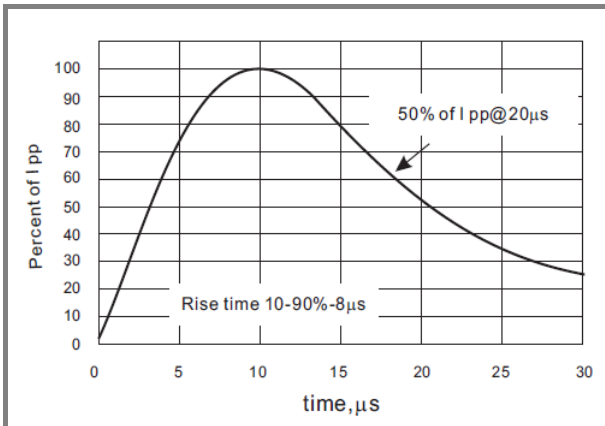

Fig.4 8/20μs Pulse Waveform

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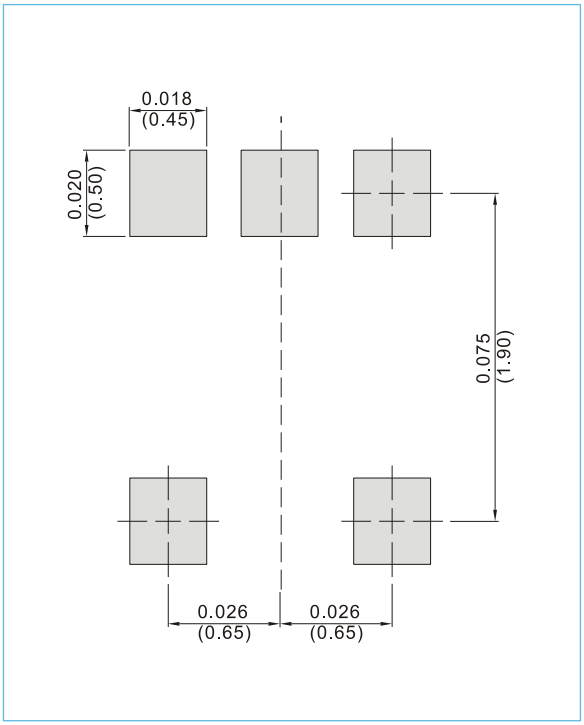
MOUNTING PAD LAYOUT

SOT-353 Unit : inch(mm)



ORDER INFORMATION

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

PJSRV05W-4GW5

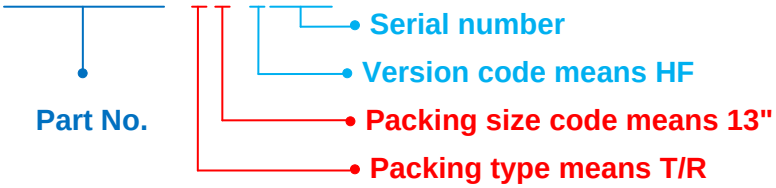
Part No_packing code_Version

PJSRV05W-4GW5_R1_00001

PJSRV05W-4GW5_R2_00001

For example :

RB500V-40_R2_00001



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

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