



PJE5V0U8TB6

Low Capacitance ESD Protection

V_{RWM}

5 V

Features

- IEC61000-4-2(ESD): ±17kV Air, ±12kV Contact Compliance
- IEC61000-4-4(EFT): 40A(5/50nS)
- IEC61000-4-5(Lightning): 5A(8/20μS)
- Low leakage current, maximum 1μA at rated voltage
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: SOT-563, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0026 grams

Applications

- USB2.0 Data Line and Power 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-563

Unit : inch(mm)

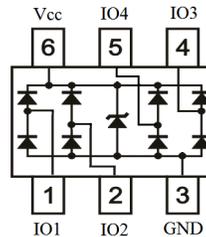
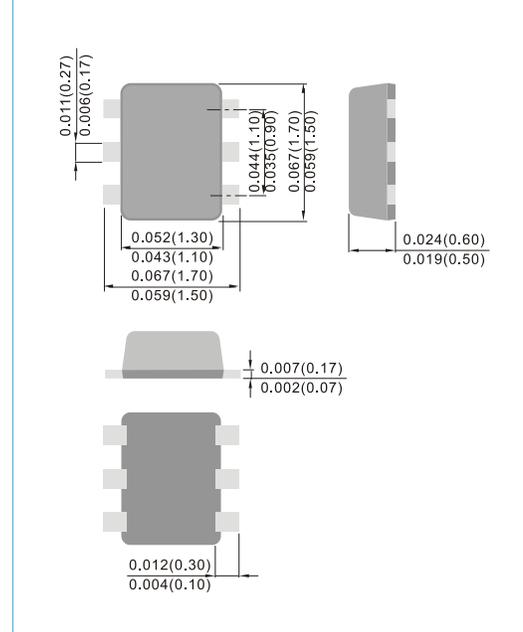


Fig.204(Top View)

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

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air)	V _{ESD}	±17	kV
ESD IEC61000-4-2(Contact)		±12	
Operating Junction Temperature	T _J	-55 to +150	°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, PIN 6 to GND	6	-	10	V
Reverse Leakage Current	I _R	V _R =5V, I/O to GND	-	-	1	μA
Clamping Voltage	V _{CL}	I _{PP} =1A, t _P =8/20μs, any I/O pin to GND	-	-	15	V
		I _{PP} =5A, t _P =8/20μs, any I/O pin to GND	-	-	35	
Off State Junction Capacitance	C _J	0Vdc Bias f=1MHz, Between any I/O pins to GND	-	-	0.8	pF
		0Vdc Bias f=1MHz, Between any I/O pins	-	-	0.4	

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.



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TYPICAL CHARACTERISTIC CURVES

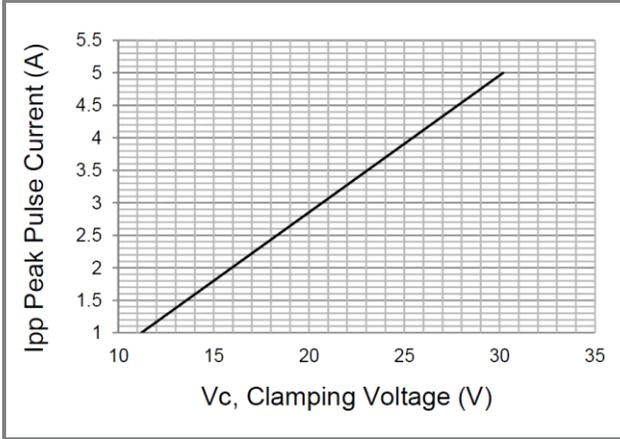


Fig.1 Typical Peak Clamping Voltage(8/20μs)

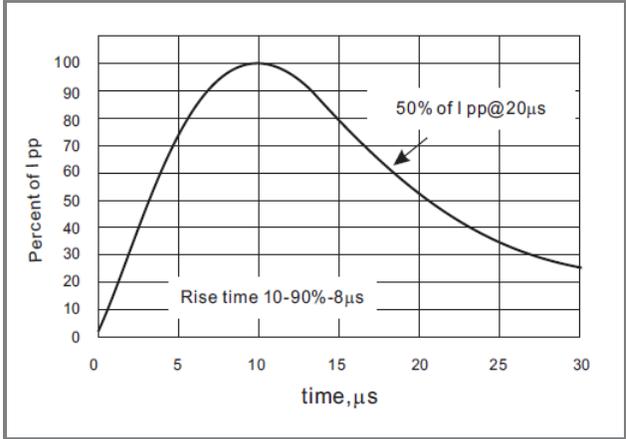


Fig.2 8/20μs Pulse Waveform



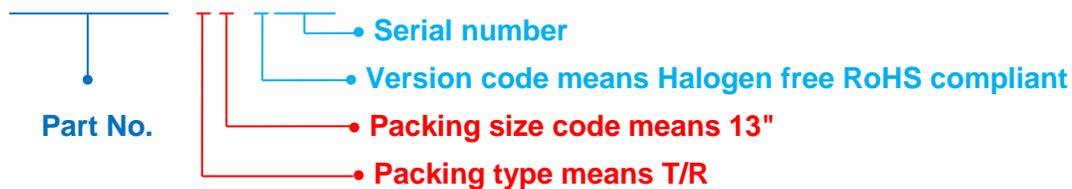
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PART NO. PACKING CODE VERSION

Part No. Packing Code	Package Type	Packing Type	Marking	Version
PJE5V0U8TB6_R1_00001	SOT-563	4K pcs / 7" reel	U8	Halogen free RoHS compliant
PJE5V0U8TB6_R2_00001	SOT-563	10K pcs / 13" reel	U8	Halogen free RoHS compliant
PJE5V0U8TB6_R1_00002	SOT-563	8K pcs / 7" reel	U8	Halogen free RoHS compliant
PJE5V0U8TB6_R2_00002	SOT-563	20K pcs / 13" reel	U8	Halogen free RoHS compliant

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code X		Serial number XXXX
Packing type	1 st Code	Packing size code	2 nd Code	HSF Level	1 st Code	2 nd _5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	Halogen free RoHS compliant	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS compliant	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			

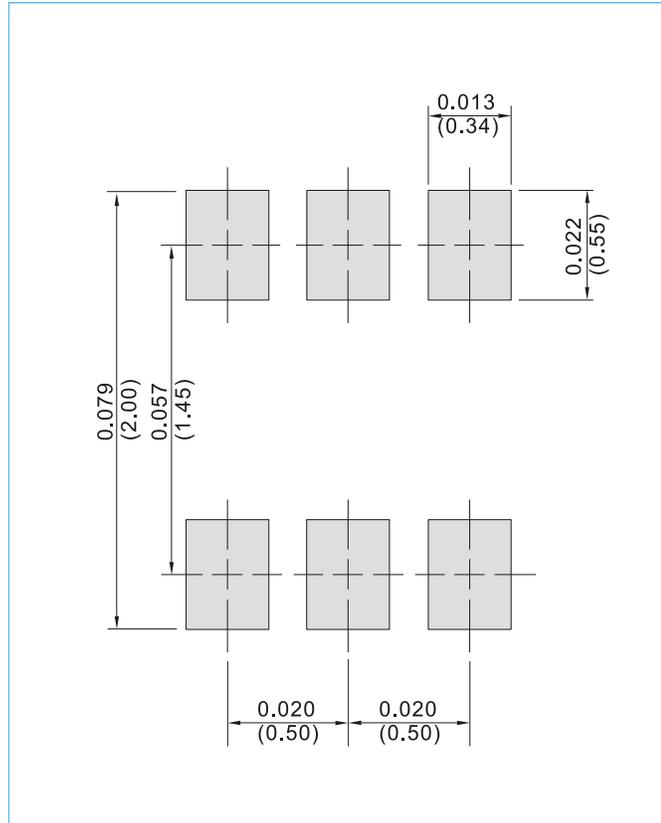


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MOUNTING PAD LAYOUT

SOT-563

Unit : inch(mm)





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