

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 0.1μA 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: SOT-563, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0001 ounces, 0.0026 grams
- Marking: U8

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)

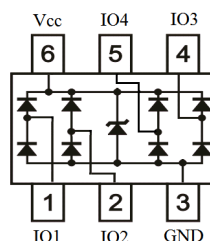
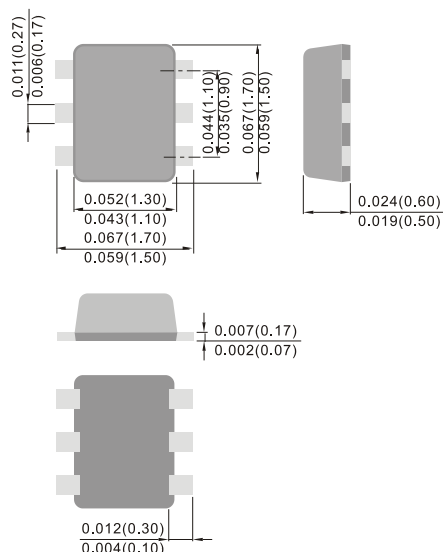


Fig.204(Top View)

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 ($T_A=25^{\circ}\text{C}$ 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 6 to GND	6	-	10	V
Reverse leakage current	I_R	$V_R=5\text{V}$, I/O 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	-	-	15	V
		$I_{PP}=5\text{A}$, $t_P=8/20\mu\text{s}$, any I/O pin to GND	-	-	35	
Off State Junction Capacitance	C_J	0Vdc Bias $f=1\text{MHz}$, Between any I/O pins to GND	-	-	0.8	pF
		0Vdc Bias $f=1\text{MHz}$, 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

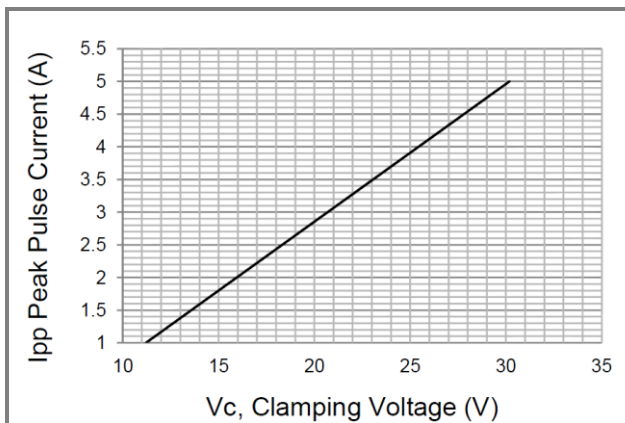


Fig.1 Typical Peak Clamping Voltage(8/20 μ s)

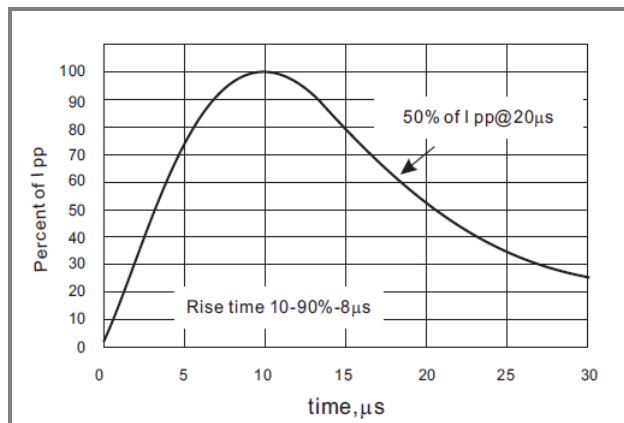


Fig.2 8/20 μ s Pulse Waveform

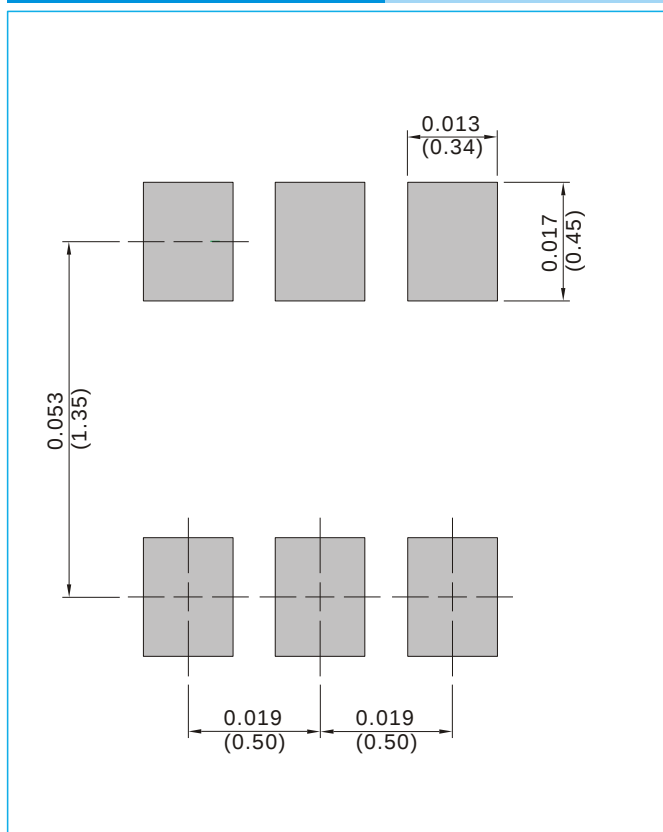


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MOUNTING PAD LAYOUT

SOT-563

Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R – 4K per 7" plastic Reel
 - T/R – 10K per 13" plastic Reel



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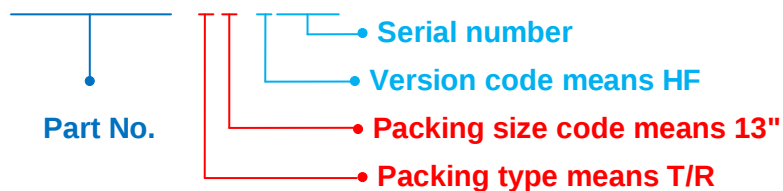
Part No_packing code_Version

PJE5V0U8TB6_R1_00001

PJE5V0U8TB6_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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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