PJSDA5V2W5 SERIES

QUAD TVS/ESD ARRAYS FOR ESD AND LATCH-UP PROTECTION

The Quad TVS/ESD arrays are designed to protect sensitive electronics from damage or latch-up due to ESD. They are available with operating voltage of 5.6V,6.2V,6.8V.

The series devices feature transient overvoltage protection.

Its integrated design provides very effective and reliable protection for four separate lines using only one package.

The series use to meet the immunity requirement of IEC61000. Level 4.

FEATURES

- IEC61000-4-2 ESD 15kV Air,8kV Contact compliance
- Low clamping voltage
- Peak power dissipation of 150W under 8/20μs waveform
- Quad directional configuration
- Flammability rating UL94V-0
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Case : SOT-353, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

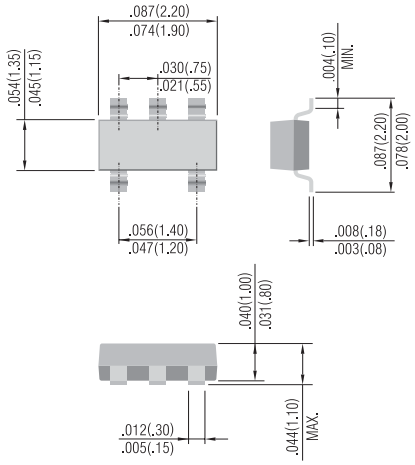
Appox Weight : 0.0057 grams

Marking : PJSDA5V2W5 : 2W5

PJSDA5V8W5 : 8W5

PJSDA6V1W5 : 1W5

SOT-353 Unit: inch (mm)



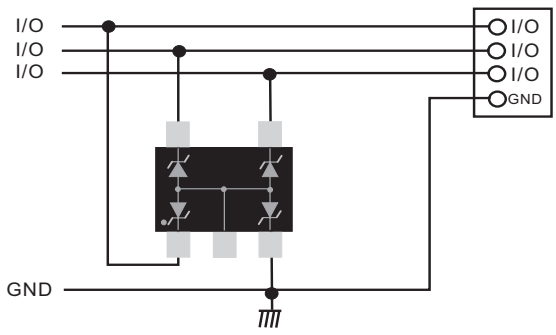
MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power (8/20 μs waveform)	P_{PP}	150	W
Peak Pulse Current (8/20 μs waveform)	I_{PPM}	10	A
ESD Voltage (HBM Contact)	V_{ESD}	>25	kV
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to + 150	°C

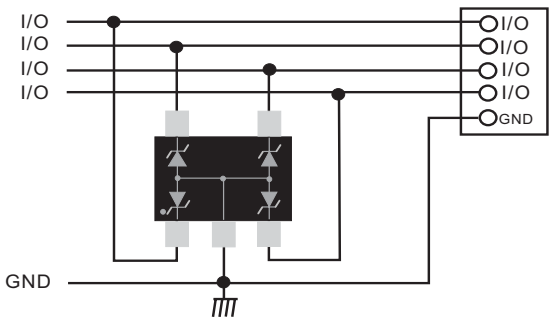
PJSDA5V2W5 SERIES

ELECTRICAL CHARACTERISTICS (T_J=25°C)

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
PJSDA5V2W5						
Reverse Stand-Off Voltage	V_{WRM}		-	-	3.3	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1mA	5.3	5.6	5.88	V
Reverse Leakage Current	I_R	V_R=3.3V	-	-	1	µA
Clamping Voltage (8/20µs)	V_C	I_{PP}=10A	-	-	10	V
Off State Junction Capacitance	C_J	0Vdc,f=1MHZ between I/O lines and GND	-	240	-	pF
PJSDA5V8W5						
Reverse Stand-Off Voltage	V_{WRM}		-	-	4.3	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1mA	5.9	6.2	6.51	V
Reverse Leakage Current	I_R	V_R=4.3V	-	-	1	µA
Clamping Voltage (8/20µs)	V_C	I_{PP}=10A	-	-	11	V
Off State Junction Capacitance	C_J	0Vdc,f=1MHZ between I/O lines and GND	-	220	-	pF
PJSDA6V1W5						
Reverse Stand-Off Voltage	V_{WRM}		-	-	5	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1mA	6.2	6.8	7.04	V
Reverse Leakage Current	I_R	V_R=5.0V	-	-	5	µA
Clamping Voltage (8/20µs)	V_C	I_{PP}=10A	-	-	12	V
Off State Junction Capacitance	C_J	0Vdc,f=1MHZ between I/O lines and GND	-	180	-	pF



Bi-directional Protecton



Uni-directional Protection

PJSDA5V2W5 SERIES

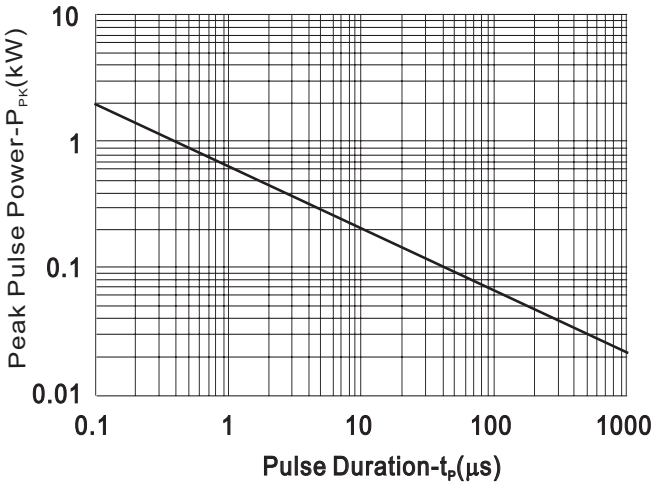


FIG.1 Non-Repetitive Peak Pulse Power vs. Pulse Time

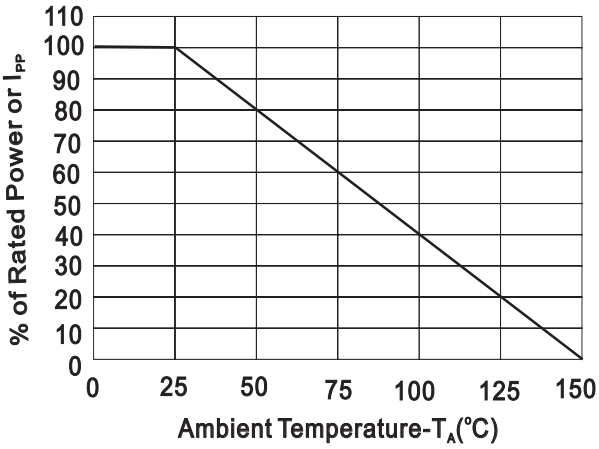


FIG.2 Power Derating Curve

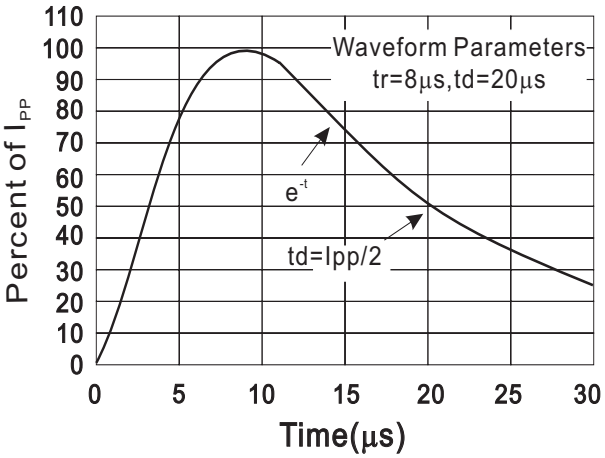
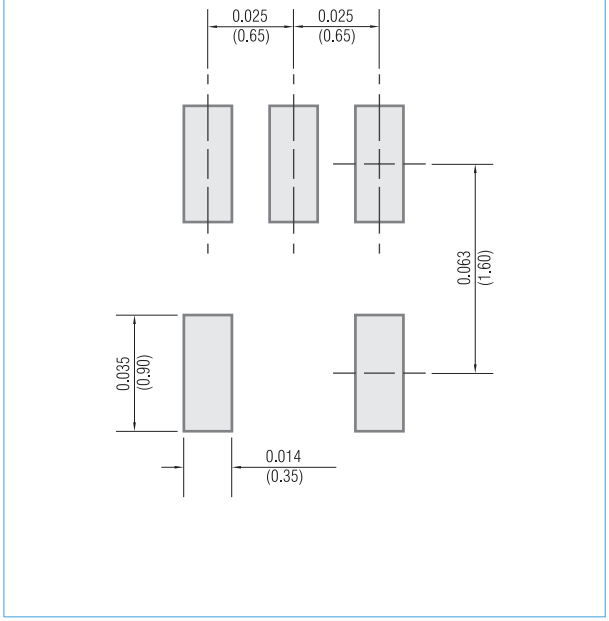


FIG.3 Pulse Waveform

PJSDA5V2W5 SERIES

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

LEGAL STATEMENT

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