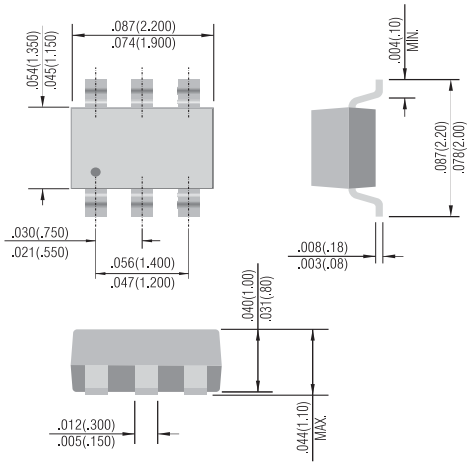
PJESD5V6LC-5W SERIES

LOW CAPACITANCE 5-FOLD ESD PROTECTION DIODE ARRAYS

FEATURES

- Low diode capacitance
- Maximum peak pulse power : P_{PP}=25W at tp=8/20μs
- Low clamping voltage : $V_{CL(R)}$=12V at I_{PP}=2.5A
- ESD Protection Meeting IEC61000-4-2-Level 4
- ESD Passed devices : Air mode 15KV ,human body mode 8KV
- In compliance with EU RoHS 2002/95/EC directives

SOT-363 Unit: inch (mm)



MECHANICAL DATA

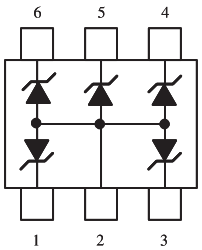
Case : SOT-363, Plastic

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

Approx. Weight : 0.006 gram

Marking :

PJESD5V6LC-5W=SAQ
PJESD6V2LC-5W=SAR
PJESD6V8LC-5W=SAS



MAXIMUM RATINGS

Parameter	Conditions	Symbol	Min.	Max.	Unit
Peak Pulse Power	8/20μs pulse;Notes 1 and 2	P_{PP}	-	25	W
Peak Pulse Current	8/20μs pulse;Notes 1 and 2	I_{PP}	-	2.5	A
Operating Junction and Storage Temperature Range		T_J,T_{STG}	-55	+150	°C

Notes

1.Non-repetitve current pulse 8/20μs exponentially decaying waveform;see Fig 1

2.Measured from any of pins 1,3,4,5, or 6 to pin 2

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ELECTRICAL CHARACTERISTICS (T_J=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse stand-off voltage PJESD5V6LC-5W PJESD6V2LC-5W PJESD6V8LC-5W	V_{RWM}		 - - -	 - - -	 3.3 4.3 5.0	V
Reverse leakagae current PJESD5V6LC-5W PJESD6V2LC-5W PJESD6V8LC-5W	I_{RM}	 V_{RWM}=3.0V V_{RWM}=4.3V V_{RWM}=5.0V	 - - -	 - - -	 0.5 0.5 0.5	µA
Breakdown leakagae current PJESD5V6LC-5W PJESD6V2LC-5W PJESD6V8LC-5W	V_{BR}	I_Z=1mA	5.32 5.89 6.37	5.60 6.20 6.70	5.88 6.51 7.04	V
Diode capacitance PJESD5V6LC-5W PJESD6V2LC-5W PJESD6V8LC-5W	Cd	f=1MHz; V_R=0V	 - - -	 22 19 16	 28 24 19	pF
Clamping voltage PJESD5V6LC-5W PJESD6V2LC-5W PJESD6V8LC-5W	$V_{CL(R)}$	notes 1 and 2 I_{PP}=1.0A I_{PP}=2.5A I_{PP}=1.0A I_{PP}=2.5A I_{PP}=1.0A I_{PP}=2.5A	 - - - - - -	 - - - - - -	 10 12 10 12 10 12	V
Differential resistance PJESD5V6LC-5W PJESD6V2LC-5W PJESD6V8LC-5W	rdiff	I_R=1mA	 - - -	 - - -	 200 150 100	Ω

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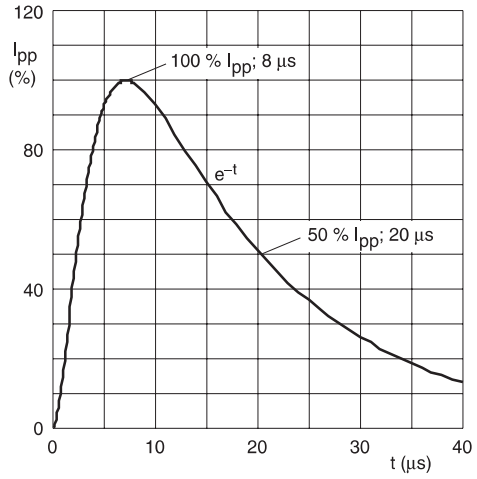
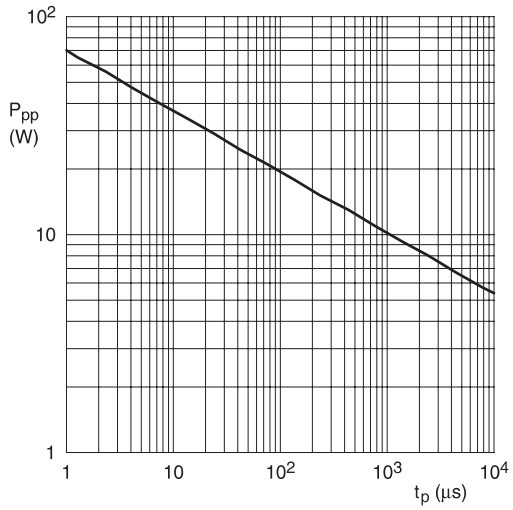


Fig.1 8/20 µs pulse waveform according to IEC 61000-4-5.



T_{amb} = 25 °C.
I_{pp} = 8/20 µs exponentially decaying waveform; see Fig.1.

Fig.2 Peak pulse power dissipation as a function of pulse time; typical values.

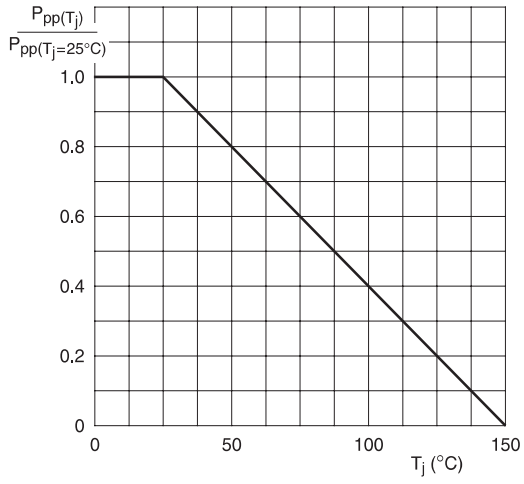


Fig.3 Relative variation of peak pulse power as a function of junction temperature; typical values.

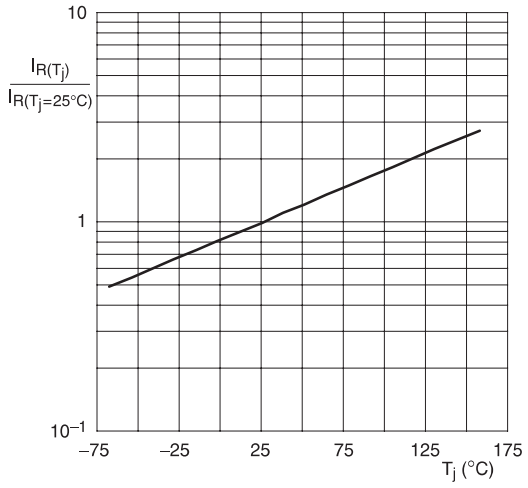


Fig.4 Relative variation of reverse leakage current as a function of junction temperature; typical values.

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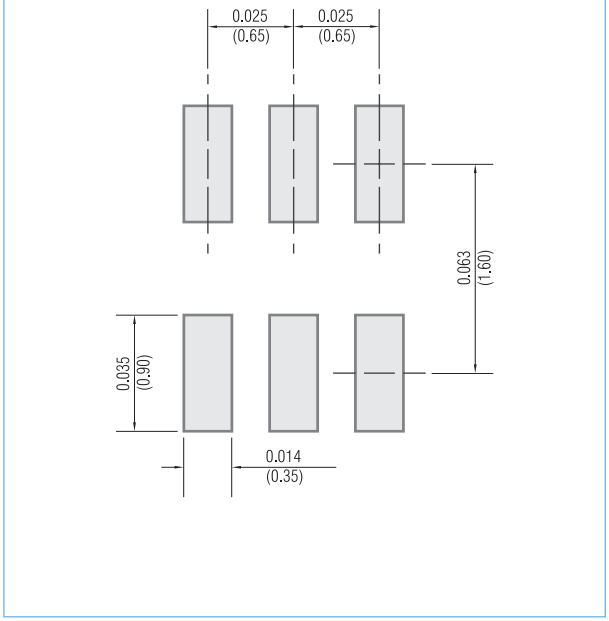
MOUNTING PAD LAYOUT

SOT-363 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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