



PJESD5V6LC-5W SERIES

LOW CAPACITANCE 5-FOLD ESD PROTECTION DIODE ARRAYS

FEATURES

- Low diode capacitance
- Maximum peak pulse power : $P_{PP}=25W$ at $t_p=8/20\mu s$
- 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

MECHANICAL DATA

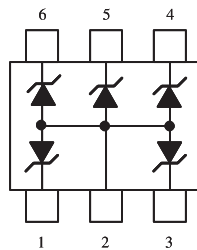
Case : SOT-363, Plastic

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

Approx. Weight : 0.006 gram

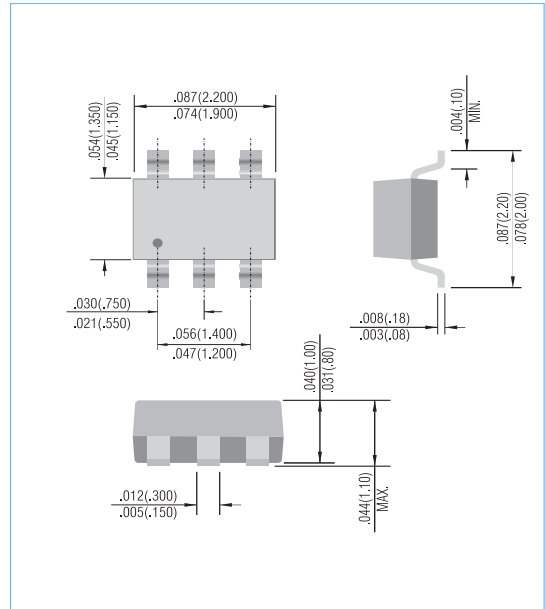
Marking :

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



SOT-363

Unit: inch (mm)



MAXIMUM RATINGS

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

Notes

- 1.Non-repetitive current pulse 8/20 μs 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 leakage 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 leakage 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	C _d	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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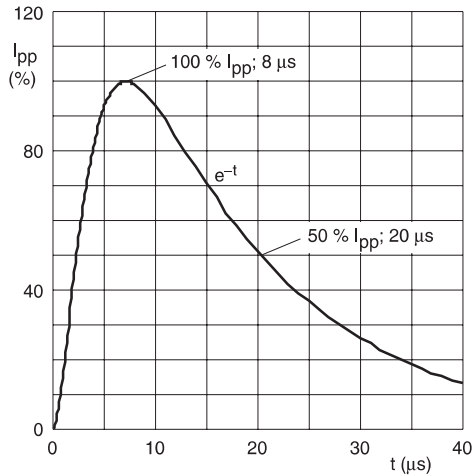
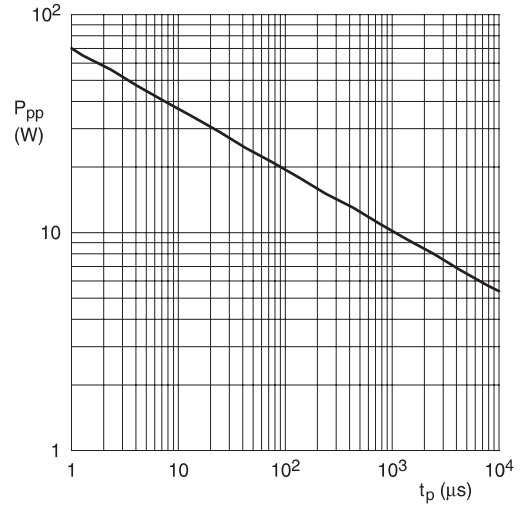


Fig.1 8/20 μs pulse waveform according to IEC 61000-4-5.



$T_{amb} = 25\text{ }^{\circ}\text{C}$.
 $I_{pp} = 8/20\text{ }\mu\text{s}$ exponentially decaying waveform; see Fig.1.

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

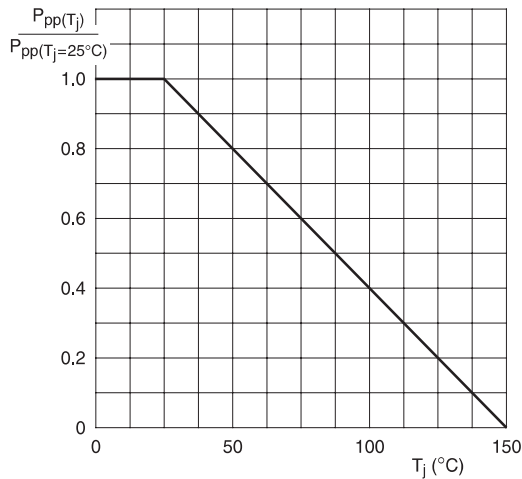


Fig.3 Relative variation of peak pulse power as a function of junction temperature; typical values.

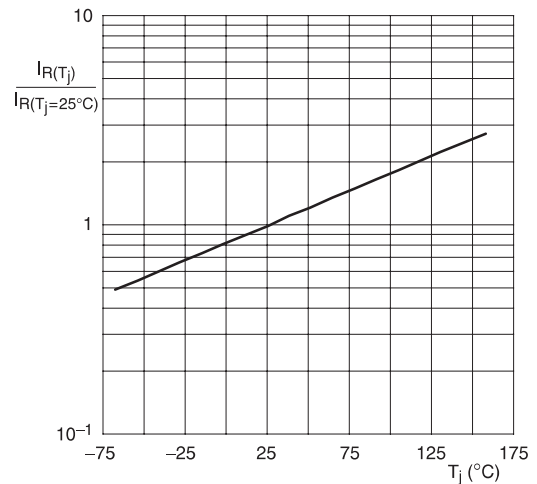
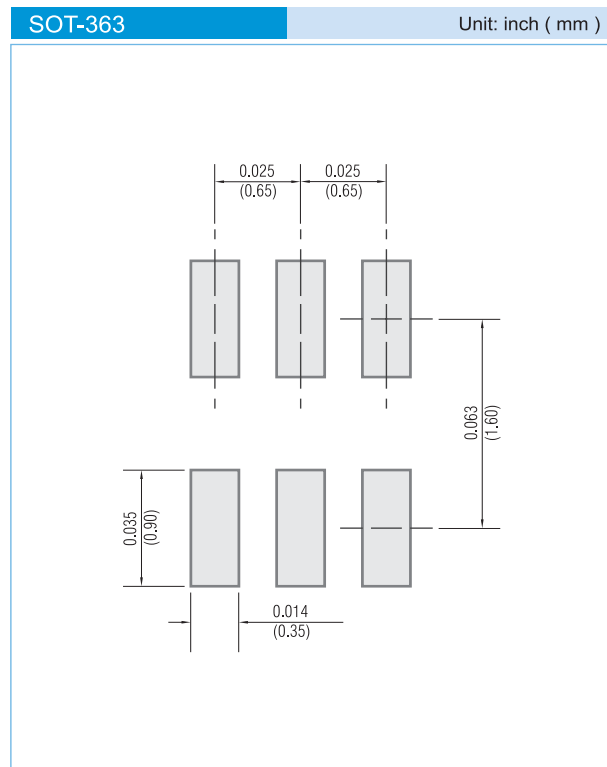


Fig.4 Relative variation of reverse leakage current as a function of junction temperature; typical values.



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MOUNTING PAD LAYOUT



ORDER INFORMATION

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

LEGAL STATEMENT

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