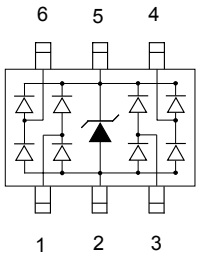
PESDALC363T5VU

Low Capacitance TVS Array

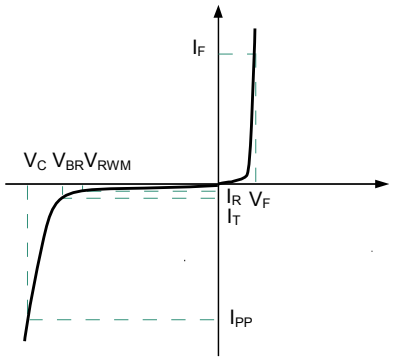
Description

The PESDALC363T5VU is low capacitance transient voltage suppressor array for high speed data interface that designed to protect sensitive electronics from damage or latch-up due to ESD lightning, and other voltage induced transient events. All pins are rated to withstand 25kv ESD pulses using the IEC 61000-4-2 contact discharge method, which can meet the requirement of level 4.



Feature

- 150W peak pulse power (t_P = 8/20μs)
- SOT-363 package
- Working voltage: 5.0V
- Low clamping voltage
- Low capacitance
- RoHS Compliant Transient Protection for High Speed Data Lines to
  IEC61000-4-2(ESD)±15kV(air),±8kV(Contact)
  IEC61000-4-5(lightning) 24A(8/20us)



Applications

- USB 2.0 Power & Data Line Protection
- DVI & HDMI Port Protection
- Serial ATA Port Protection
- Mobile Handsets
- Digital Cameras and camcorders
- PDA & MP3 Players
- Digital TV and Set-top Boxes
- Other Portable Electronic Components

Electrical characteristics per line@(unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	I_t = 1mA	6			V
Reverse Leakage Current	I_R	V_{RWM} =5.0V, T=25℃			1	μA
Clamping Voltage	V_C	I_{PP} = 1A, t_P = 8/20μs			12.5	V
Clamping Voltage	V_C	I_{PP}=5A, t_P = 8/20μs			28.0	V
Junction Capacitance	C_J	V_R=0V, f = 1MHz		2.5	5	pF

Absolute maximum rating@25℃

Rating	Symbol	Value	Units
Peak Pulse Power (t_p=8/20μs)	P_{pp}	150	W
Operating Temperature	T_J	-55 to +150	℃
Storage Temperature	T_{STG}	-55 to +150	℃

Typical Characteristics

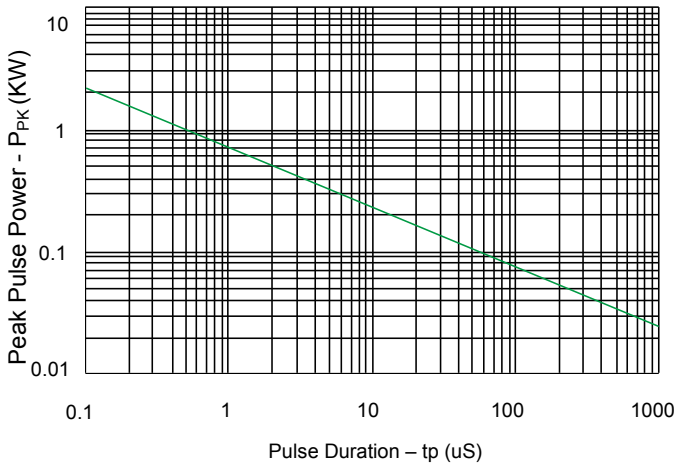


Fig1.Non-Repetitive Peak Pulse Power vs. Pulse time

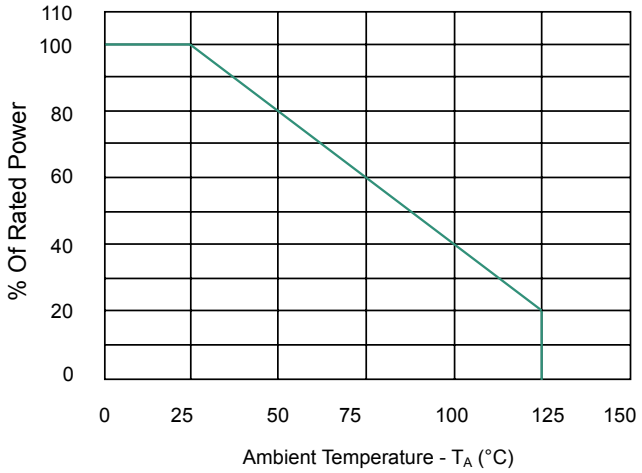


Fig2. Power Derating Curve

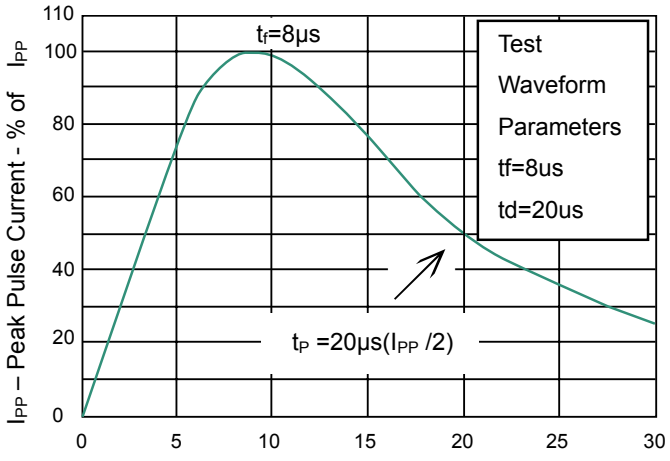


Fig 3.Pulse Waveform

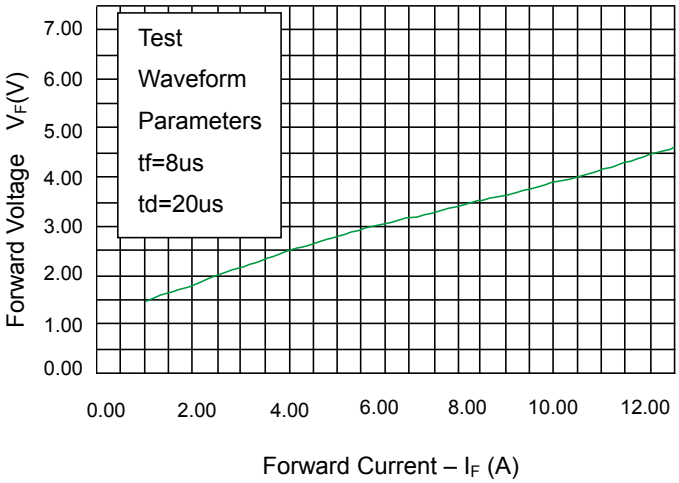
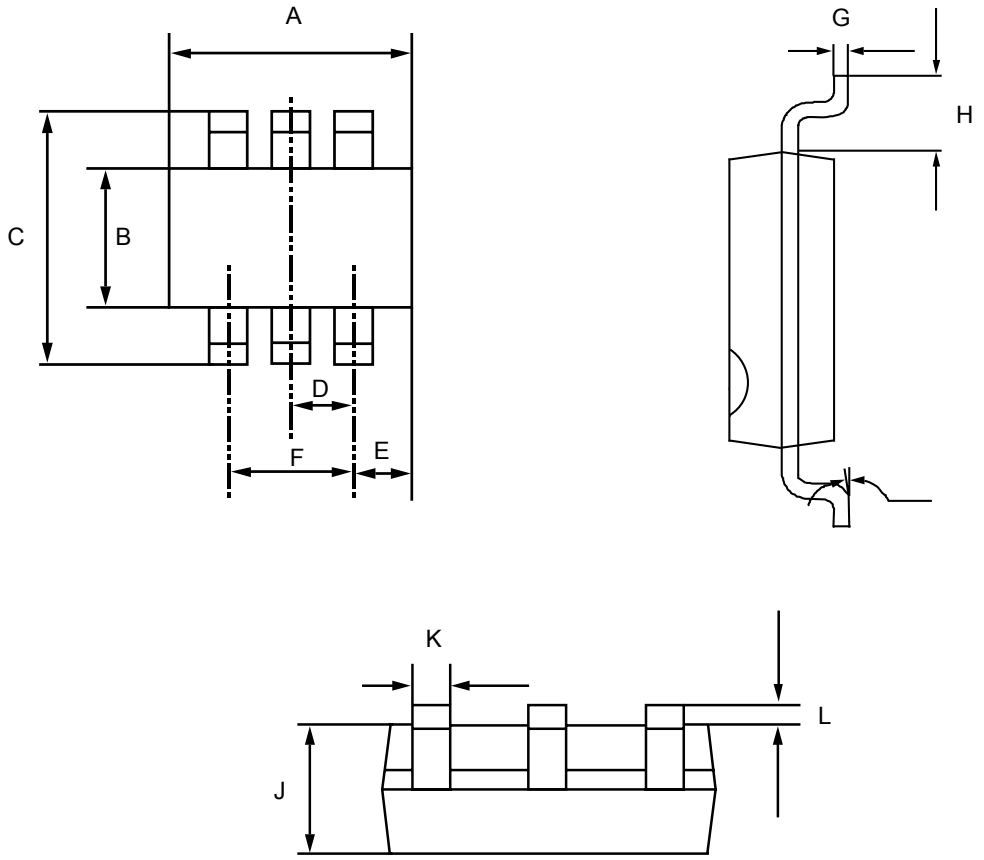


Fig.4 Forward Voltage vs. Forward Current

Product dimension



Dim	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	1.90	2.15	0.075	0.085
B	1.15	1.35	0.045	0.053
C	1.90	2.15	0.075	0.085
D	0.65	BSC	0.0216	BSC
E	0.45	0.60	0.0177	0.0236
F	1.30(BSC)		0.051(BSC)	
G	0.08	0.25	0.003	0.010
H	0.26	0.46	0.010	0.018
J	0.80	1.00	0.031	0.039
K	0.15	0.30	0.006	0.012
L	0.013	0.100	0.0005	0.0040
θ	0°	10°	0°	10°

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