TECH PUBLIC
台舟电子

PESD3V3S4UD

Uni-directional 4-Line ESD Protection

www.sot23.com.tw

Features

- 350W peak pulse power(8/20μs)
- Protects one bi-directional or two uni-directional lines
- Ultra low leakage：nA level
- Operating voltage：3.3V
- Low clamping voltage
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    Air discharge: ±30kV
    Contact discharge: ±30kV
  - IEC61000-4-4 (EFT) 40A (5/50ns)
  - IEC61000-4-5 (Lightning) 20A (8/20μs)
- RoHS Compliant

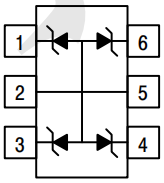
Mechanical Characteristics

- Package: SOT23-6
- Lead Finish: Matte Tin
- Case Material: “Green” Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Shipping Qty :3000 /7Inch Tape & Reel

Applications

- Mobile phone handsets
- Personal Digital Assistants (PDA)
- Portable handheld equipment (Laptop, Palmtop computers)
- Computer port, keyboard (USB1.1)

Dimensions and Pin Configuration



Marking:



Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	350	W
Peak Pulse Current (8/20μs)	I_{PP}	20	A
ESD per IEC 61000−4−2 (Air) ESD per IEC 61000−4−2 (Contact)	V_{ESD}	± 30 ± 30	kV
Operating Temperature Range	T_J	−55 to +125	°C
Storage Temperature Range	Tstg	−55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V_{RWM}			3.3	V	
Breakdown Voltage	V_{BR}	5	5.6	7	V	I_T = 1mA
Reverse Leakage Current	I_R			0.1	μA	V_{RWM} = 3.3V
Forward Voltage	V_F		0.8	1.2	V	I_F = 10mA
Clamping Voltage	V_C		7		V	I_{PP} = 1A (8 x 20μs pulse)
Clamping Voltage	V_C			15	V	I_{PP} = 20A (8 x 20μs pulse)
Junction Capacitance	C_J			200	pF	VR=0, f=1MHz，IO to GND

Fig1. 8/20μs Pulse Waveform

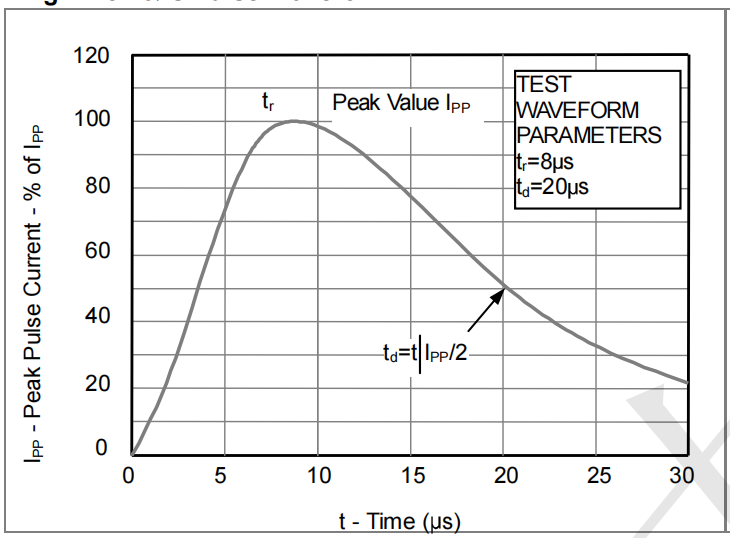


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

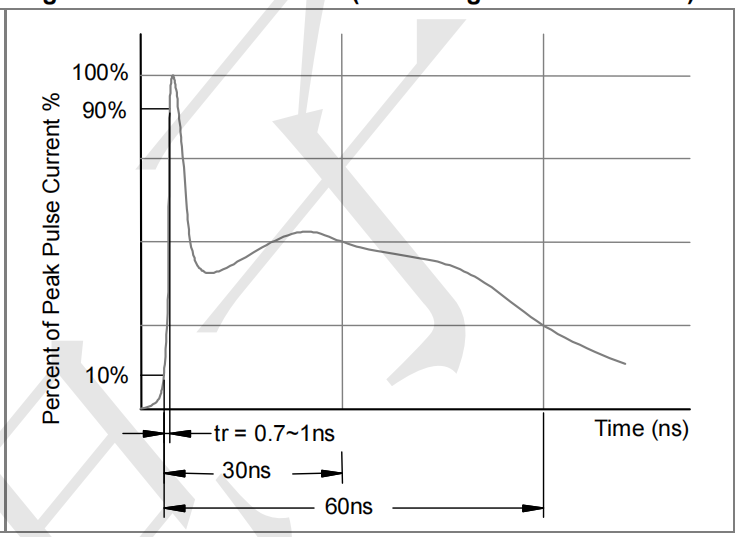
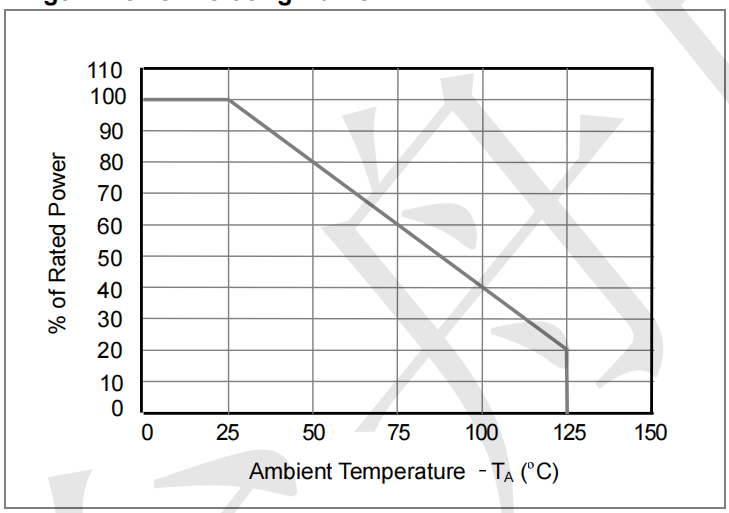
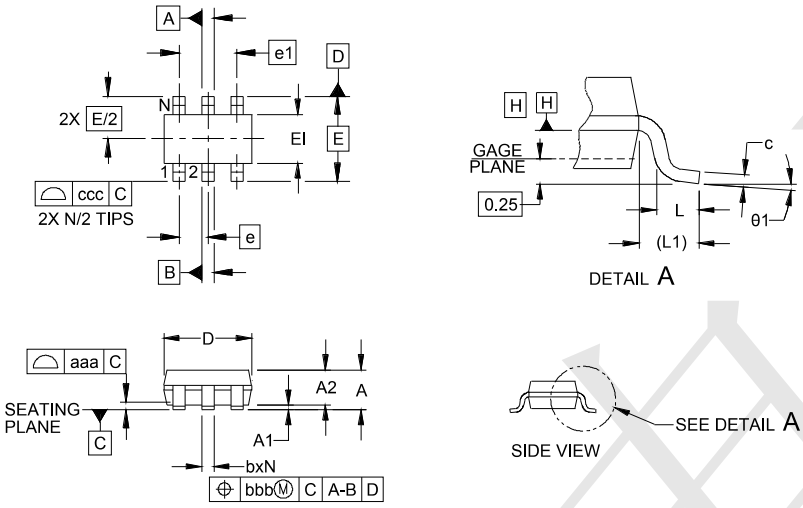


Fig3. Power Derating Curve

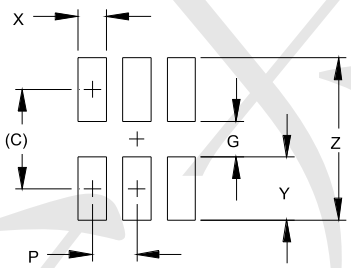


Outline Drawing - SOT23-6



DIM	DIMENSIONS					
	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.035	-	.057	0.90	-	1.45
A1	.000	-	.006	0.00	-	0.15
A2	.035	.045	.051	.90	1.15	1.30
b	.010	-	.020	0.25	-	0.50
c	.003	-	.009	0.08	-	0.22
D	.110	.114	.118	2.80	2.90	3.00
E1	.060	.063	.069	1.50	1.60	1.75
E	.110 BSC			2.80 BSC		
e	.037 BSC			0.95 BSC		
e1	.075 BSC			1.90 BSC		
L	.012	.018	.024	0.30	0.45	0.60
L1	(.024)			(0.60)		
N	6			6		
θ1	0°	-	10°	0°	-	10°
aaa	.004			0.10		
bbb	.008			0.20		
ccc	.008			0.20		

Land Pattern - SOT23-6



DIMENSIONS		
DIM	INCHES	MILLIMETERS
C	(.098)	(2.50)
G	.055	1.40
P	.037	0.95
X	.024	0.60
Y	.043	1.10
Z	.141	3.60

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

TECH PUBLIC:

TPD1213A-02SM TPS7B6950DBVR-TP DDTA143ZCA LTH7 SI3932DV TPB1A30-123 BSN20W FDMS7670AS-TP TPZXMP3A13FTA ESD5B5.0ST1G-P TPESD0504S6-A IRFR2405TRPBF-TP TPADM809SAKSZ TPB05A40-323 TPFMMT493 TPGC12C-1 TPZVN3320FTA BV15C TPESD5311N TPSPX3819M5-L-3-3 DMP6350S QM3003J-TP TPADM809LAKSZ TPAPX809S-31SA TPDMG6602SVT TPESD0402G08V TPWSB5557Z SN7002W TPS3809L30DBVR-TP FDC6301N-TP