

Features

- Ultra low capacitance: 1 pF Max I/O to GND
- Ultra low leakage: nA level
- Low operating voltage: 70V
- Uni-directional TVS Diode Array
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: ±15kV
Contact discharge: ±8 kV
 - IEC61000-4-4 (EFT) 40A (5/50ns)
- ROHS Compliant

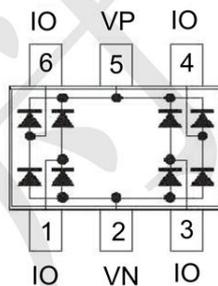
Mechanical Characteristics

- 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

Applications

- USB 2.0 and Firewire Port Protection
- LAN / WLAN Access Point terminals
- Video Signal Line Protection

Dimensions and Pin Configuration



SOT23-6

Marking: 64.*

Absolute Maximum Ratings ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	VALUE	UNITS
Rectifier Repetitive Peak Reverse Voltage	V_{RRM}	70	V
ESD per IEC61000-4-2 (Air)	V_{ESD}	>15	kV
ESD per IEC61000-4-2 (Contact)		>8	
Surge Non Repetitive Forward Current-Rectangular waveform tp=2.5 μ s tp=1ms tp=100ms	I_{FRM}	6 2 1	A
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Peak Reverse Stand-Off Voltage	V_{RRM}		-	-	70	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR} = 50\mu\text{A}$	85	-	-	V
Reverse Leakage Current	I_R	$V_{RWM} = 70\text{V}$	-	0.1	1	μA
Off State Junction Capacitance	C_J	0Vdc, f=1MHz between I/O lines and GND	-	-	1	pF
Off State Junction Capacitance	C_J	0Vdc, f=1MHz between I/O lines	-	-	0.9	pF

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

Fig1. 8/20 μs Pulse Waveform

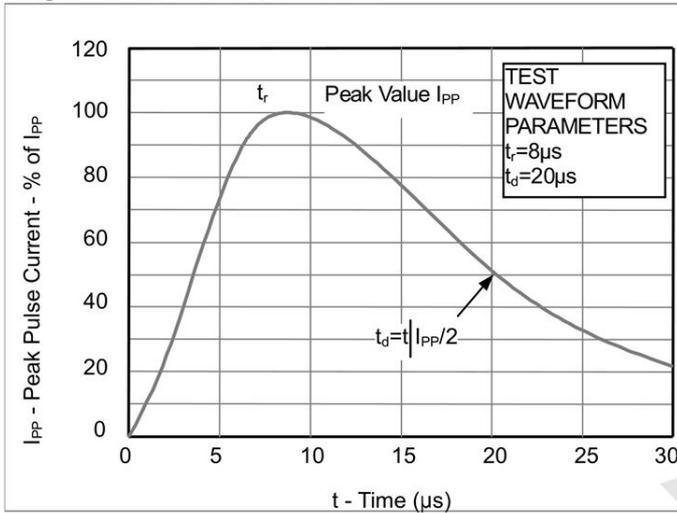


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

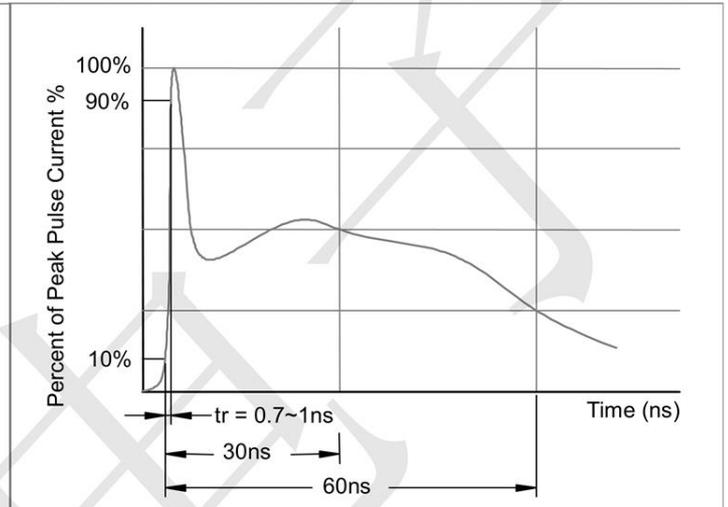
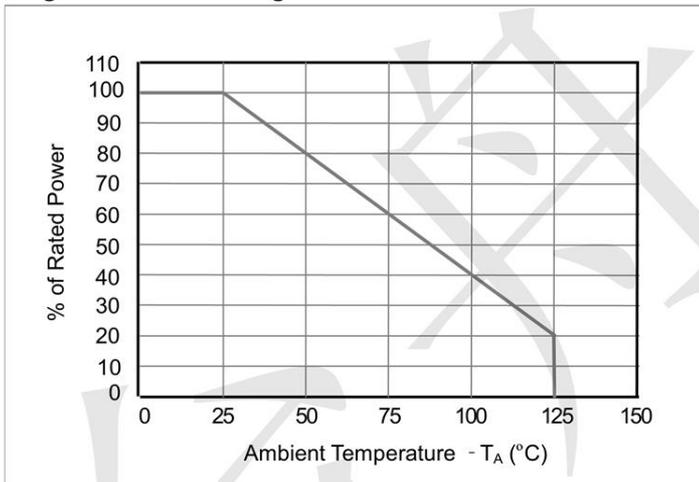
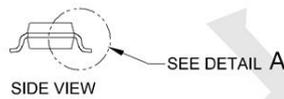
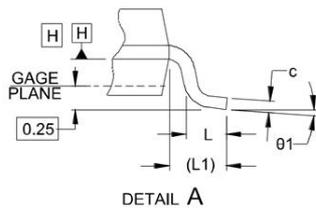
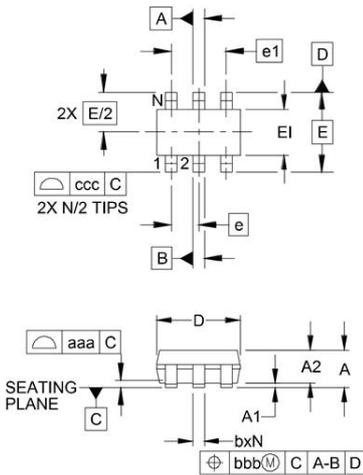


Fig3. Power Derating Curve

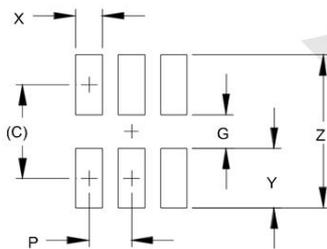


Outline Drawing - SOT23-6



DIM	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	
$\theta 1$	0°	- 10°	0°	- 10°
aaa	.004		0.10	
bbb	.008		0.20	
ccc	.008		0.20	

Land Pattern - SOT23-6



DIM	DIMENSIONS	
	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