

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: $\pm 15\text{kV}$
Contact discharge: $\pm 8\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
- ROHS Compliant

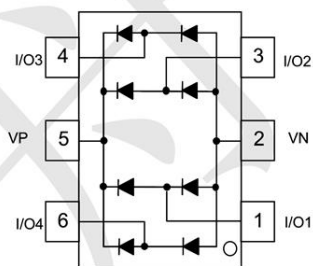
Mechanical Characteristics

- 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: LG $\square$ Or DALC

Absolute Maximum Ratings (T_{amb}=25°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=2.5μs tp=1ms tp=100ms	I _{FRM}	6 2 1	A
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to 150	°C

Electrical Characteristics (T_A=25°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} =50μA	85	-	-	V
Reverse Leakage Current	I _R	V _{RWM} =70V	-	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

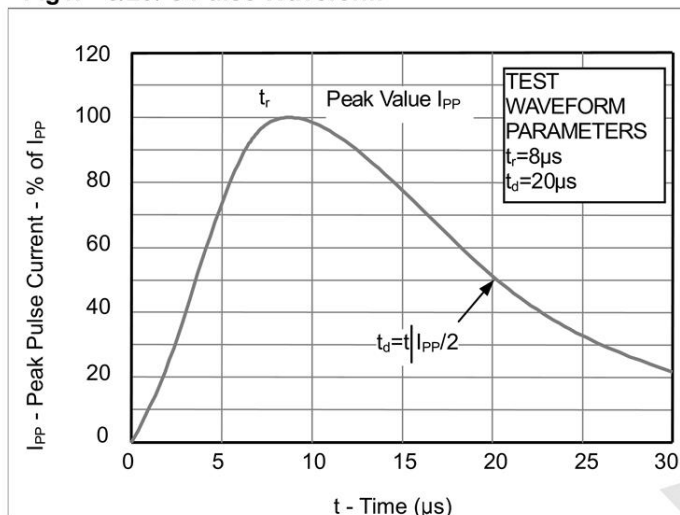


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

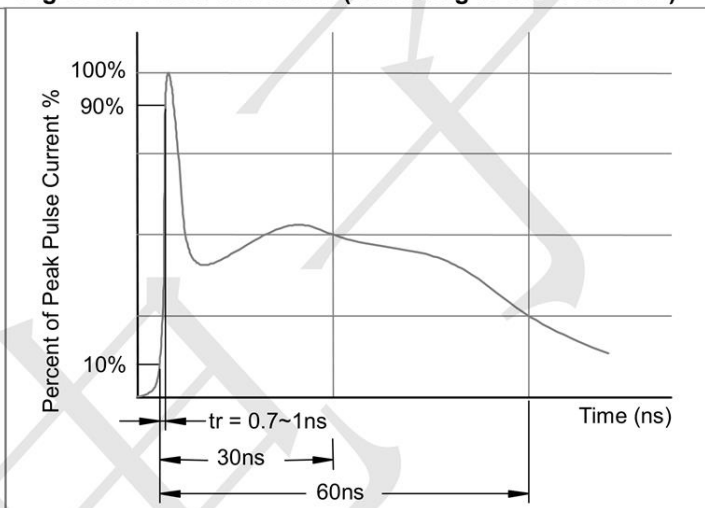
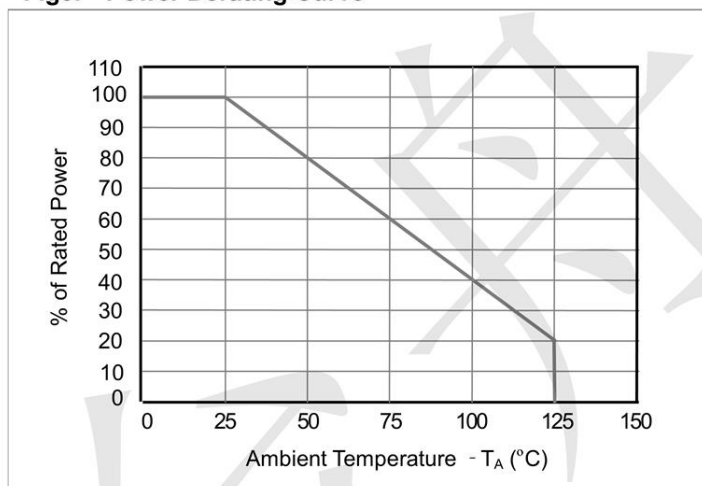
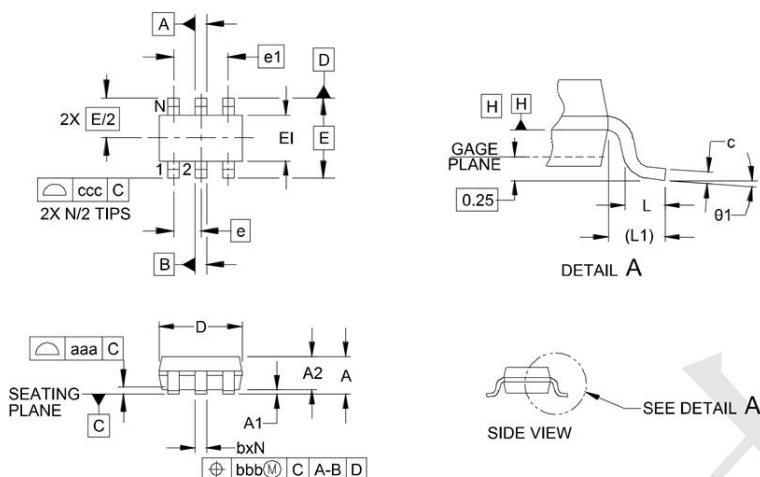


Fig3. Power Derating Curve



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		
θ1	0°	-	10°	0°	-	10°
aaa	.004			0.10		
bbb	.008			0.20		
ccc	.008			0.20		

Land Pattern - SOT23-6

