

Features

- Working voltage: 15V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: $\pm 20\text{kV}$
Contact discharge: $\pm 15\text{kV}$
 - IEC61000-4-5 (Lightning) 5A (8/20 μs)
 - IEC61000-4-4 (EFT) 40A (5/50ns)
- RoHS Compliant

Ordering Information

Part Number	Qty per Reel	Reel Size
SMF15CT1G	3000	7"

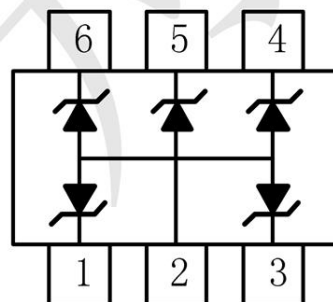
Mechanical Characteristics

- Package: SOT-363 (2.0X2.1X0.35mm)
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020

Applications

- Notebooks, Desktops, Servers
- Microprocessor Based Equipment
- Cell Phone Handsets and Accessories
- Personal Digital Assistants (PDAs) and Pagers

Dimensions and Pin Configuration



Marking: 6LK

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	Ppk	150	W
Peak Pulse Current (8/20 μs)	I _{PP}	5	A
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 20	kV
ESD per IEC 61000-4-2 (Contact)		± 15	
Operating Temperature Range	T _J	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T _{stg}	-55 to +150	$^{\circ}\text{C}$

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			15	V	
Breakdown Voltage	V _{BR}	16.8			V	I _T = 1mA
Reverse Leakage Current	I _R			0.1	μA	V _{RWM} = 15V
Forward Voltage	V _F		0.85	1.2	V	I _F = 15mA
Clamping Voltage	V _C			10	V	I _{PP} = 1A(8x20 μs pulse)
Clamping Voltage	V _C			30	V	I _{PP} = 5A(8x20 μs pulse)
Junction Capacitance	C _J			50	pF	V _R = 0V, f = 1MHz

Fig1. 8/20 μ s Pulse Waveform

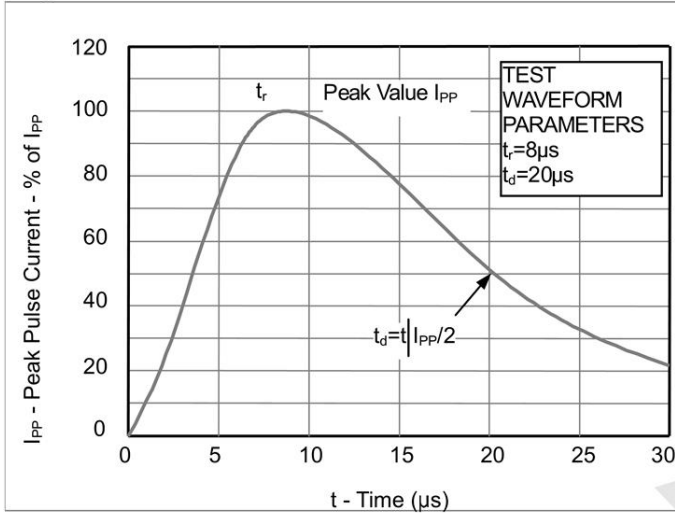


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

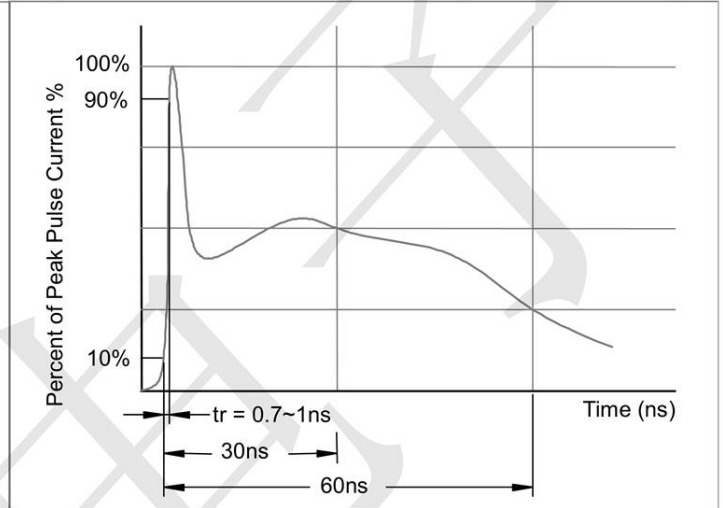
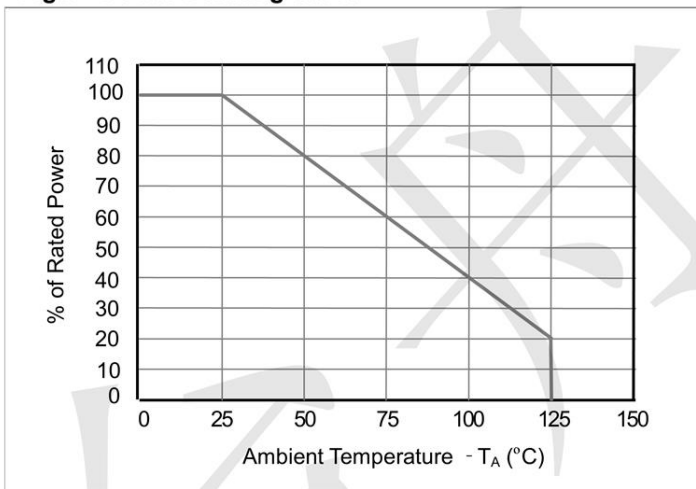
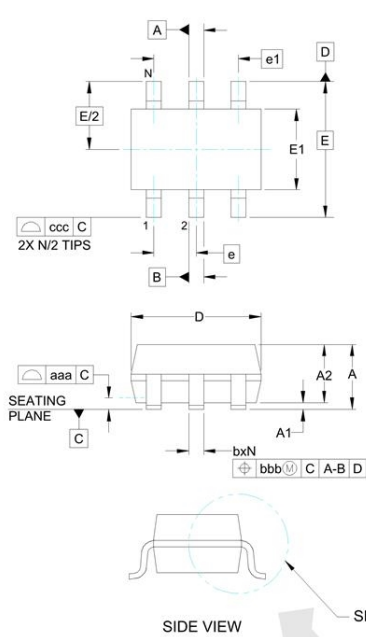


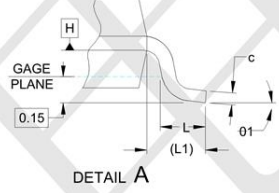
Fig3. Power Derating Curve



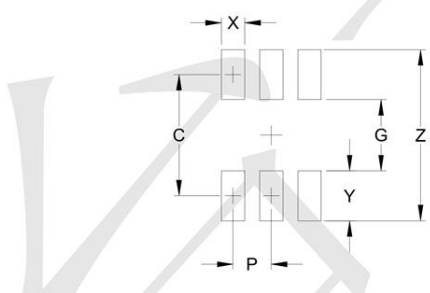
Outline Drawing - SOT-363(2.0X2.1)



DIM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	-	-	.043	-	-	1.10
A1	.000	-	.004	0.00	-	0.10
A2	.028	.035	.039	0.70	0.90	1.00
b	.006	-	.012	0.15	-	0.30
c	.003	-	.009	0.08	-	0.22
D	.071	.079	.087	1.80	2.00	2.20
E1	.045	.049	.053	1.15	1.25	1.35
E	.083 BSC			2.10 BSC		
e	.026 BSC			0.65 BSC		
e1	.051			1.30 BSC		
L	.010	.014	.018	0.26	0.36	0.46
L1	(0.17)			(0.42)		
N	6			6		
N1	0°	-	8°	0°	-	8°
aaa	.004			0.10		
bbb	.004			0.10		
ccc	.012			0.30		



Land Pattern - SOT-363



DIM	DIMENSIONS	
	INCHES	MILLIMETERS
C	(.073)	(1.85)
G	.039	1.00
P	.026	0.65
X	.016	0.40
Y	.033	0.85
Z	.106	2.70