

Features

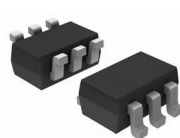
- 30Watts peak pulse power ($t_p = 8/20\mu s$)
- SOT363 package
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low capacitance ($C_j = 15pF$ typ.)
- IEC 61000-4-2 $\pm 8kV$ contact $\pm 15kV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 3A (8/20 μs)

Applications

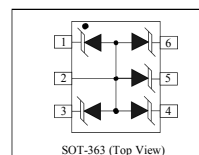
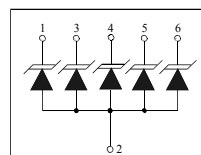
- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras

Mechanical Data

- SOT363 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

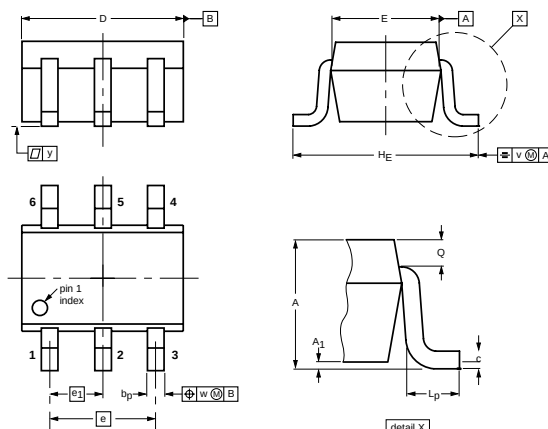


SOT363



Schematic & PIN Configuration

SOT-363



0 1 2 mm
scale

DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max	b ₁	c	D	E	e	e ₁	H ₁	L _p	Q	v	w	y
mm	1.1 0.8	0.1	0.30 0.20	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.25 0.15	0.2	0.2	0.1

Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{pp}	30	Watts
Peak Pulse Current ($t_p = 8/20\mu s$) (note1)	I_{pp}	3.0	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	15 8	kV
Lead Soldering Temperature	T_L	260(10seconds)	°C
Junction Temperature	T_J	-55 to + 125	°C
Storage Temperature	T_{stg}	-55 to + 125	°C

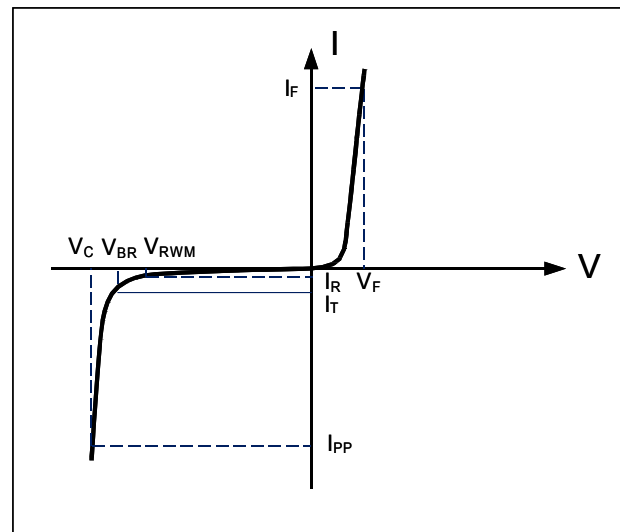
PESD3V3L5UY

Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	4.5			V
Reverse Leakage Current	I_R	$V_{RWM}=3.3V, T=25^{\circ}C$			0.5	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$			3	A
Clamping Voltage	V_C	$I_{PP}=3.0A, t_p=8/20\mu s$			13	V
Junction Capacitance	C_j	$V_R=0V, f=1MHz$ IO to IO		15		pF
		$V_R=0V, f=1MHz$ IO to GND		30		

Electrical Parameters (TA = 25 °C unless otherwise noted)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current



Note: 8/20 μs pulse waveform.

RATING AND CHARACTERISTIC CURVES

Fig.1 Peak Pulse Power Rating Curve

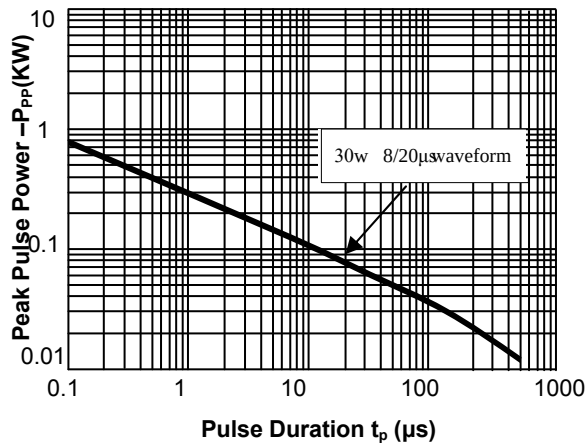


Fig.2 Pulse Derating Curve

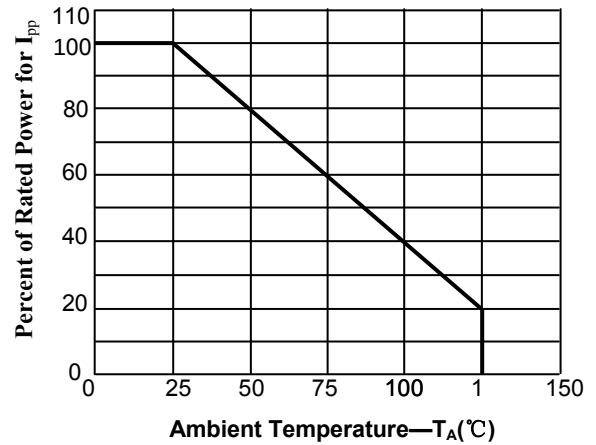


Fig.3 Pulse Waveform-8/20 μ s

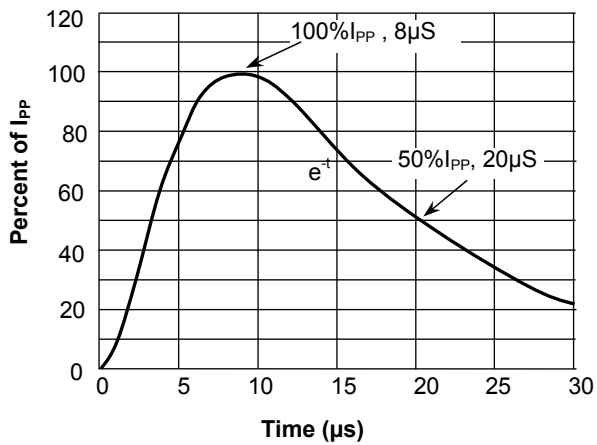


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

