



为您的产品保驾护航

PRODUCT DATASHEET

Electro-Static Discharge

JET363-5V-5 ESD

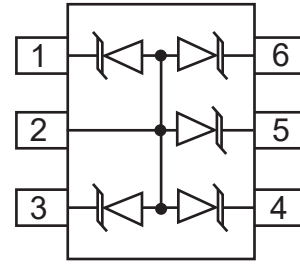
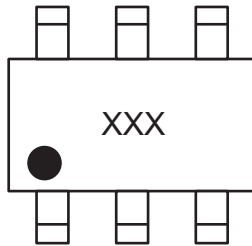
## Features

- Package: SOT-363
- Low leakage current
- Operating voltage: 5V
- Low clamping voltage
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    - Air discharge: 30kV
    - Contact discharge: ±30kV
  - IEC61000-4-5 (Lightning) 8A (8/20µs)
- RoHS compliant

## Applications

- Peripherals
- Industrial Equipment
- Notebook Computers
- Portable Instrumentation
- Microprocessor Based Equipment
- Cell Phone Handsets and Accessories
- Personal Digital Assistants (PDAs) and Pagers

## Pin Description



## Schematic Diagram

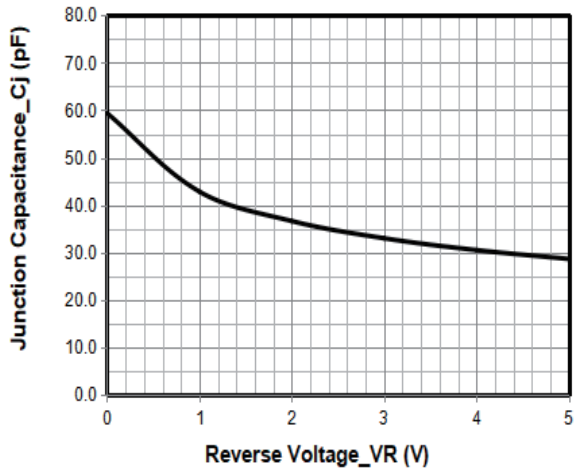
### Limiting Values( $T_A = 25\text{ }^\circ\text{C}$ , unless otherwise specified)

Symbol	Parameter	Conditions	Value	Unit
V <sub>ESD</sub>	Electrostatic Discharge Voltage	IEC 61000-4-2;Contact Discharge	±30	kV
		IEC 61000-4-2;Air Discharge	±30	kV
P <sub>PP</sub>	Peak Pulse Power	t <sub>P</sub> =8/20µs	100	W
I <sub>PP</sub>	Peak Pulse Current	t <sub>P</sub> =8/20µs	8	A
T <sub>J</sub>	Operating Temperature Range	-	-55 to +125	°C
T <sub>stg</sub>	Storage Temperature Range	-	-55 to +150	°C

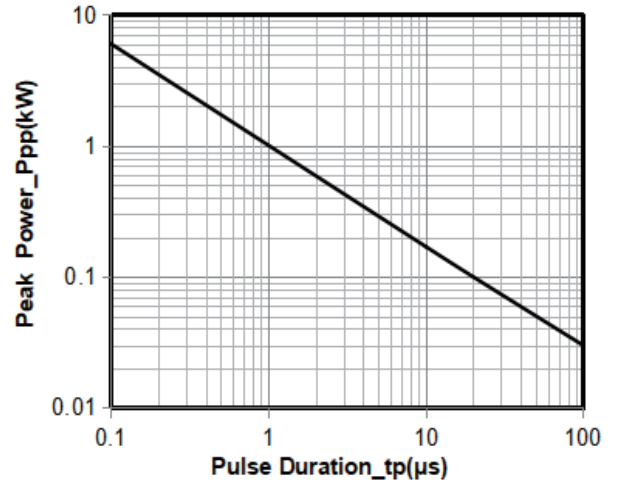
### Electrical Characteristics( $T_A = 25\text{ }^\circ\text{C}$ , unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
V <sub>RWM</sub>	Reverse Working Voltage	T <sub>A</sub> =25°C	-	-	5	V
V <sub>BR</sub>	Breakdown Voltage	I <sub>T</sub> =1mA	6	-	8.5	V
I <sub>R</sub>	Reverse Leakage Current	V <sub>RWM</sub> =5V,any I/O pin to ground	-	-	0.2	µA
V <sub>C</sub>	Clamping Voltage	I <sub>PP</sub> =1A(8x20µs pulse),any I/O pin to ground	-	-	8	V
V <sub>C</sub>	Clamping Voltage	I <sub>PP</sub> =8A(8x20µs pulse),any I/O pin to ground	-	-	12	V
C <sub>J</sub>	Junction Capacitance	V <sub>R</sub> =0V,f=1 MHZ,any I/O pin to ground	-	60	-	pF

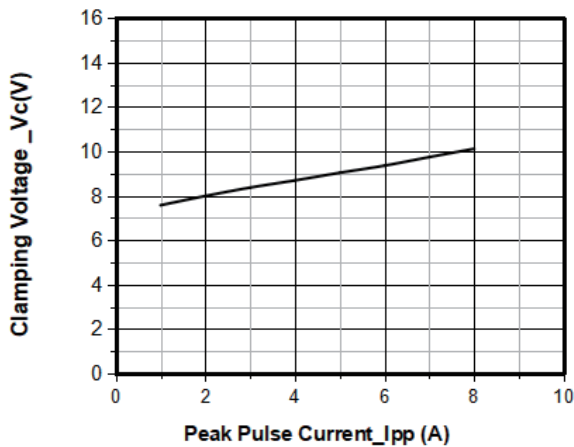
Typical Characteristics



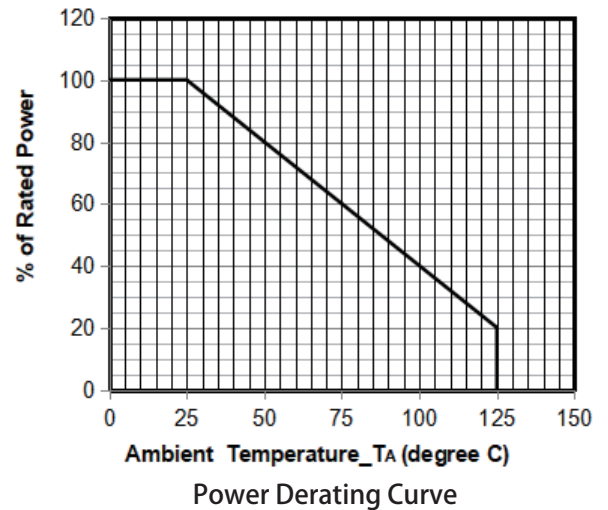
Junction Capacitance vs. Reverse Voltage



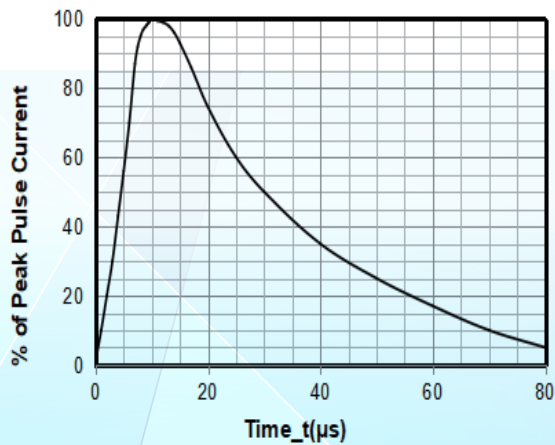
Peak Pulse Power vs. Pulse Time



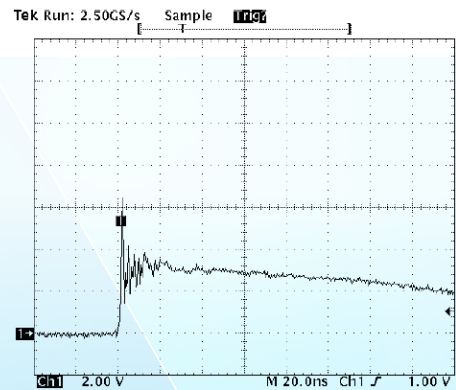
Clamping Voltage vs. Peak Pulse Current (tp = 8/20 μs)



Power Derating Curve

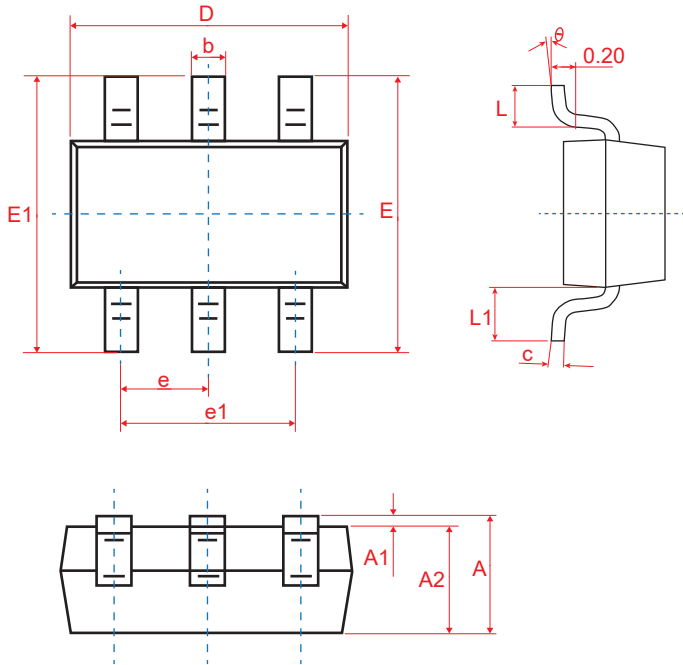


8x20 μs Pulse Waveform



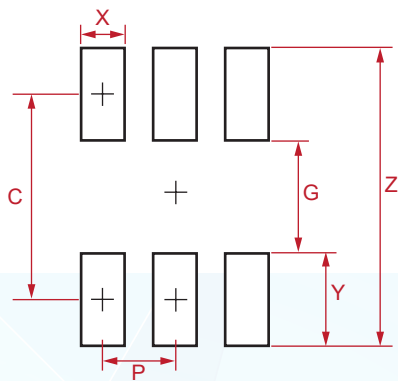
Note: Data is taken with a 10x attenuator  
ESD Clamping Voltage  
8 kV Contact per IEC61000-4-2

Physical Dimensions(mm.)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.90	1.10	0.035	0.043
A1	0.00	0.10	0.000	0.004
A2	0.90	1.00	0.035	0.039
b	0.15	0.35	0.006	0.014
c	0.08	0.15	0.003	0.006
D	2.00	2.20	0.079	0.087
E	2.15	2.45	0.085	0.096
E1	1.15	1.35	0.045	0.053
e	0.650 TYP		0.026 TYP	
e1	1.20	1.40	0.047	0.055
L	0.26	0.46	0.010	0.018
L1	0.525 REF		0.021 REF	
$\theta$	0°	8°	0°	8°

Suggested Land Pattern

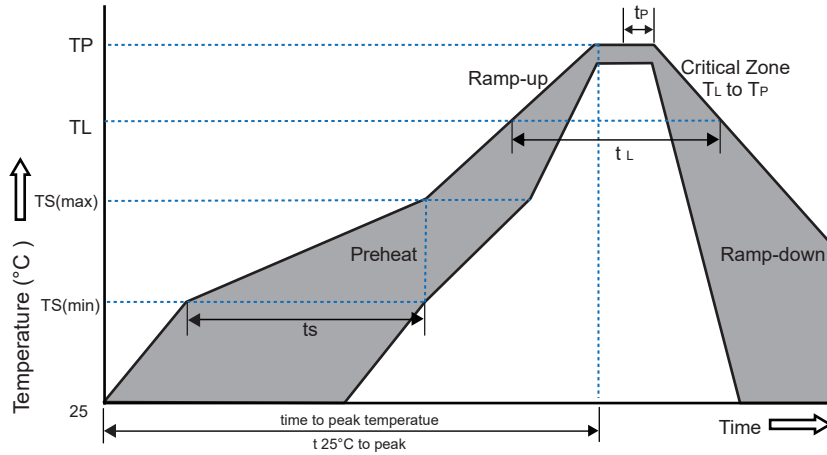


Symbol	Dimensions	
	Inches	Millimeters
C	0.073	1.85
G	0.039	1.00
P	0.026	0.65
X	0.016	0.40
Y	0.033	0.85
Z	0.106	2.70

Packaging Quantity

Part Number	Delivery Form	Delivery Quantity
JET363-5V-5	7"T&R	3,000

### Soldering Parameters



Reflow Condition		Pb-Free Assembly
Pre-heat	-Temperature Min( $T_{s(min)}$ )	+150°C
	-Temperature Max( $T_{s(max)}$ )	+200°C
	-Time(Min to Max)( $t_s$ )	60~180 secs.
Average ramp up rate (Liquid us Temp( $T_L$ ) to peak)		3°C/sec. Max
Ts(max) to $T_L$ - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature( $T_L$ )(Liquid us)	+217°C
	-Temperature ( $t_L$ )	60~150 secs.
Peak Temp ( $T_P$ )		+260(+0/-5)°C
Time within 5°C of actual Peak Temp ( $t_p$ )		30 secs. Max
Ramp-down Rate		6°C/sec. Max
xTime 25°C to Peak Temp (TP)		8 min. Max
Do not exceed		+260°C

### Part Number System

**JE T363 - 5V - 5**

