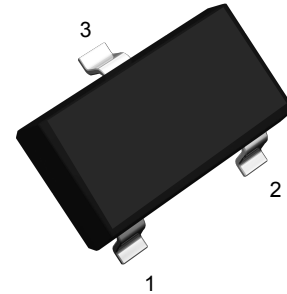


Features

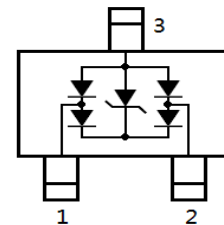
- 45Watts peak pulse power ($t_p = 8/20\mu s$)
- SOT-23 package
- Low clamping voltage
- Low leakage current
- Ultra low capacitance
- ESD Protection for high-speed data lines to:
 - IEC 61000-4-2 $\pm 15KV$ contact $\pm 15KV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 3.5A (8/20 μs)
- RoHS compliant



Package: SOT-23

Applications

- USB 3.0, USB 2.0, MHL
- HDMI 2.0, Display Port 1.3, eSATA
- Unified Display Interface (UDI)
- Digital Visual Interface (DVI)
- High Speed Serial Interface



Schematic Diagram

Absolute Maximum Ratings

($T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu S$)	P_{PP}	45	W
Peak Pulse Current ($T_P=8/20\mu S$)	I_{PP}	3.5	A
Junction Temperature	T_J	-55 to +125	$^\circ C$
Storage Temperature	T_{STG}	-55 to +150	$^\circ C$

Electrical Characteristics

($T_A=25^\circ C$ unless otherwise specified)

Parameter	mbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}		-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6	6.8	-	V
Reverse Leakage Current	I_R	$V_R=5V$	-	0.01	1	μA
Clamping Voltage	V_C	$I_{PP}=1A, T_P=8/20\mu S$	-	8	10	V
		$I_{PP}=3.5A, T_P=8/20\mu S$	-	11	13	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz, I/O$ to I/O	-	0.2	0.4	pF
	C_J	$V_R=0V, f=1MHz, I/O$ to GND	-	0.4	0.8	pF

Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

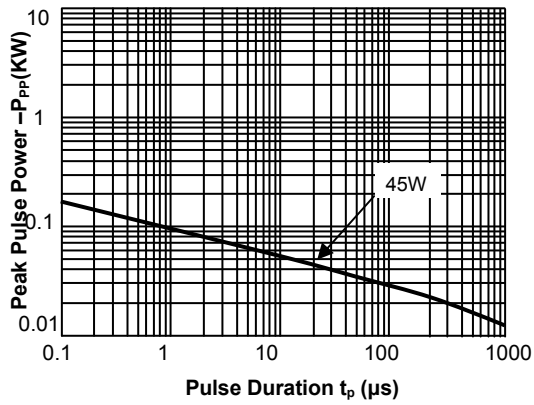


Fig.2 Pulse Derating Curve

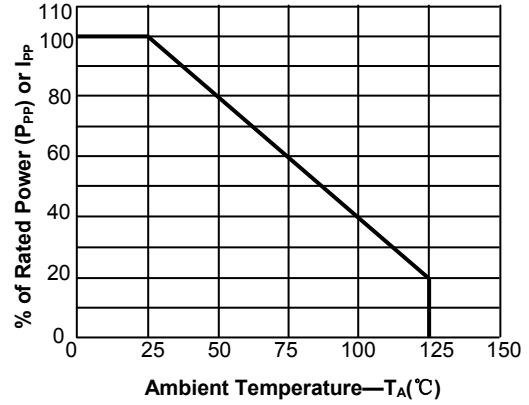


Fig.3 Pulse Waveform-8/20μs

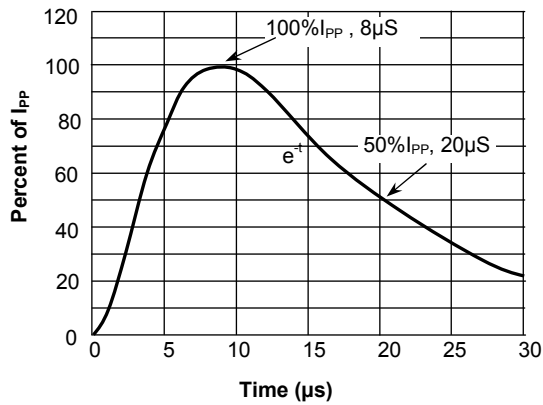
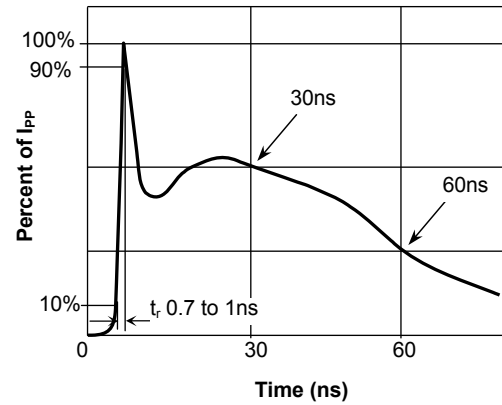
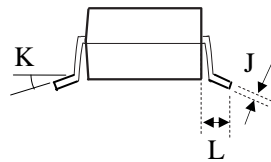
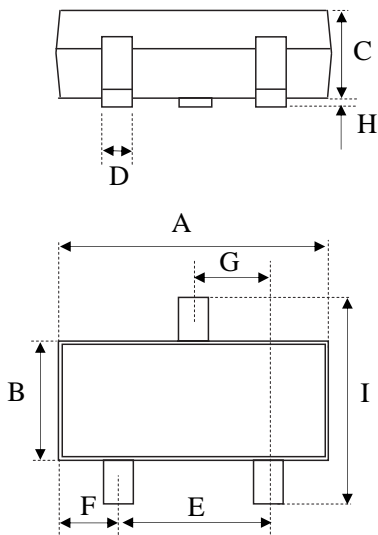


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



Product Dimensions

SOT-23



Dim	millimeters	
	min	max
A	2.80	3.00
B	1.20	1.40
C	0.89	1.11
D	0.30	0.50
E	1.78	2.04
F	0.45	0.60
G	0.89	1.02
H	0.013	0.100
I	2.25	2.55
J	0.085	0.177
K	0 $^{\circ}$	10 $^{\circ}$
L	0.45	0.60