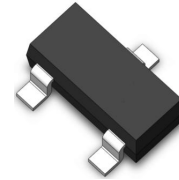


Features

- 350 Watts Peak Pulse Power per Line ($t_p = 8/20\mu s$)
- Protects two +12V to -7V lines
- Low Leakage Current
- Moisture sensitivity level: Level 3
- Low operating and clamping voltages
- Lead Free/RoHS compliant
- Solid-state silicon avalanche technology
- Meet IEC61000-4-2
 - Contact discharge $\pm 30kV$
 - Air discharge $\pm 30kV$



Applications

- 10/100 Ethernet
- WAN/LAN Equipment
- Switching Systems
- Desktops, Servers, Notebooks & Handhelds
- Laser Diode Protection
- Base Stations

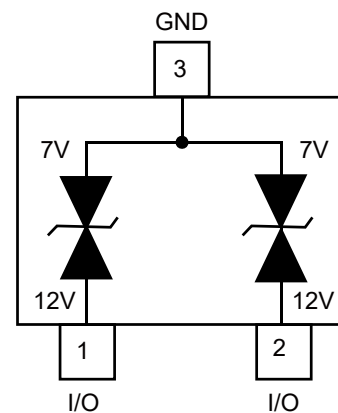
Mechanical Data

- SOT-23 package
- Molding compound flammability rating: UL94V-0
- Packaging: Tape and Reel(7 inch)

Agency Approvals

Icon	Description
RoHS	Compliance with (EU)2015/863
HF	Compliance with IEC61249-2-21:2003
	Mean lead free

Schematic & PIN Configuration



Top View

Absolute Maximum Rating

Parameter	Symbol	Value	Unit
Peak Pulse Power($t_p=8/20\mu s$)	P_{PK}	350	W
Peak Pulse Current($t_p=8/20\mu s$)	I_{PP}	10	A
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}C$
Junction Temperature	T_J	-55 to + 125	$^{\circ}C$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$

Electrical Characteristics (TA=25°C unless otherwise specified)

Pin3 to Pin1 /Pin2

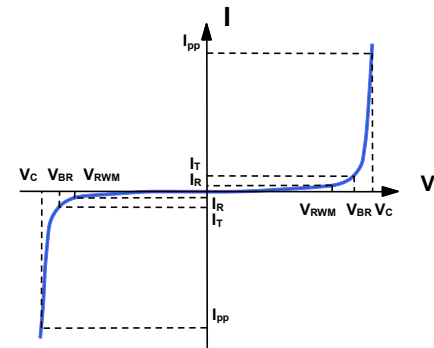
Parameter	Symbol	Conditions	MIN	TYP	MAX	Units
Reverse Stand-Off Voltage	V_{RWM}		-	-	7	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	7.5	-	-	V
Reverse leakage current	I_R	$V_R = V_{RWM}$	-	-	20	μA
Clamping voltage ($t_p=8/20\mu s$)	V_C	$I_{PP}=5A$	-	-	10	V
Clamping voltage ($t_p=8/20\mu s$)	V_C	$I_{PP}=10A$	-	-	24	V
Junction capacitance	C_J	$V_R=0V, f=1MHZ$	-	-	75	pF
Junction capacitance	C_J	$V_R=V_{RWM}, f=1MHZ$	-	45	-	pF

Pin1/Pin2 to Pin3

Parameter	Symbol	Conditions	MIN	TYP	MAX	Units
Reverse Stand-Off Voltage	V_{RWM}		-	-	12	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	13.3	-	-	V
Reverse leakage current	I_R	$V_R = V_{RWM}$	-	-	1	μA
Clamping voltage ($t_p=8/20\mu s$)	V_C	$I_{PP}=5A$	-	-	20	V
Clamping voltage ($t_p=8/20\mu s$)	V_C	$I_{PP}=10A$	-	-	35	V
Junction capacitance	C_J	$V_R=0V, f=1MHZ$	-	-	75	pF
Junction capacitance	C_J	$V_R=V_{RWM}, f=1MHZ$	-	45	-	pF

I-V Curve Characteristics

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



Characteristics Curves(TA=25°C unless otherwise Specified)

Fig 1. 8/20μs Pulse Waveform

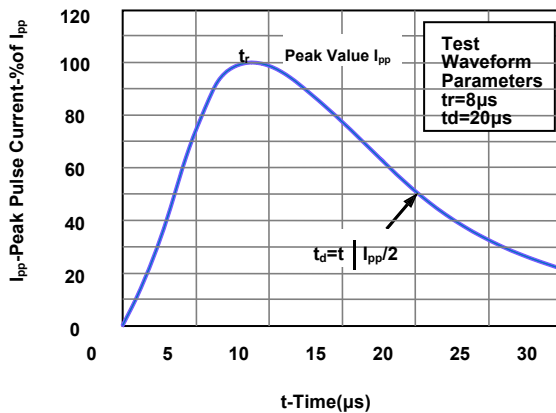


Fig2.ESD Pulse Waveform (according to IEC61000-4-2)

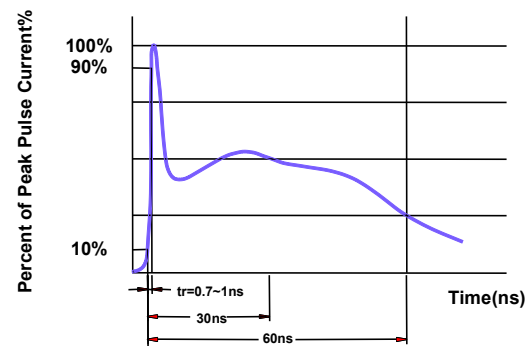


Fig 3. Power Derating Curve

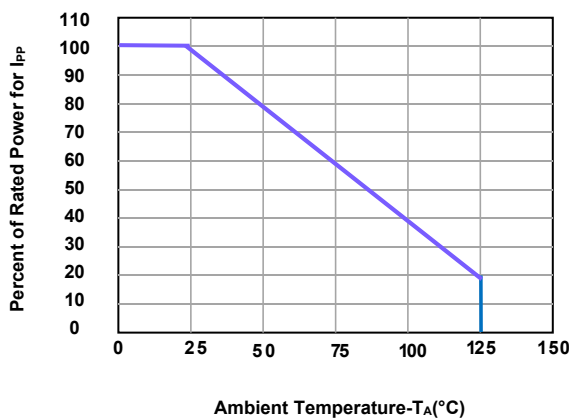
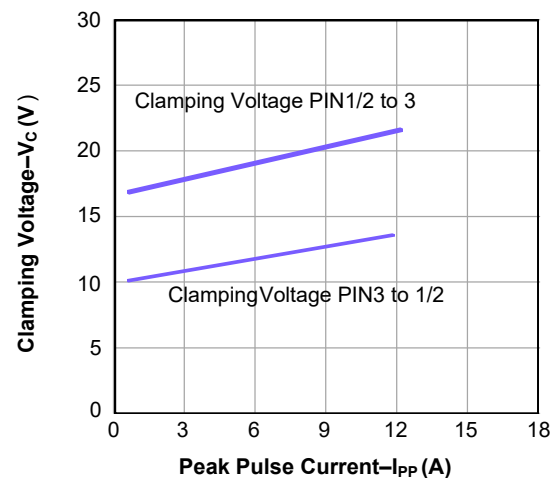
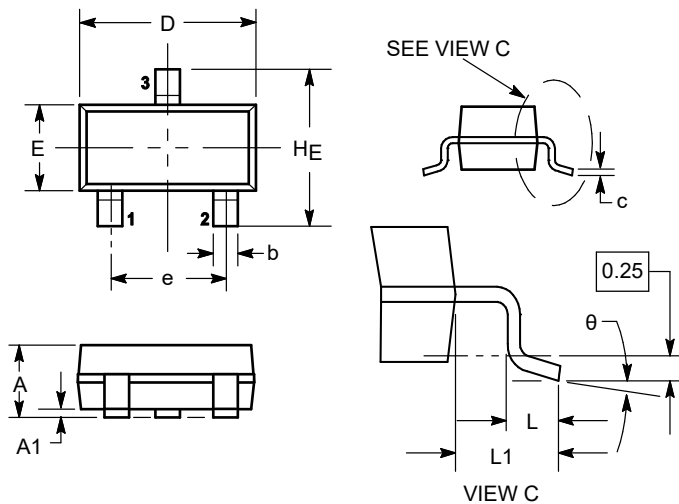


Figure 4.Clamping Voltage vs.Ipp



Package dimension SOT-23

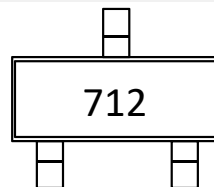


DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.4	2.64	0.083	0.094	0.104
θ	0°	---	10°	0°	---	10°

Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

Marking Information



Packaging Information

	Reel	Inner Box	Carton
Size	φ178mm(7 inch)	215×205×205mm	435×435×230mm
Quantity	MPQ/MOQ: 1 reel=3000pcs	1 Inner box=10 reels=30,000pcs	1Carton=4 Inner boxes=120,000pcs
Photos			

Notice: 1、 Each reel is placed in an aluminum foil bag and vacuum-packed separately.

2、 Above packaging photos make from 3D software for reference only, please refer to actual product as the standard.