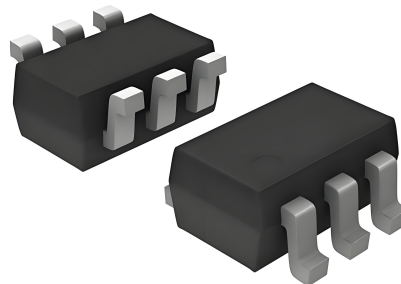


Features

- 100W (tp=8/20μs) Peak Pulse Power
- Uni-directional configurations
- ESD and Latch-Up Protection
- Low clamping voltage
- Low leakage current
- Moisture sensitivity level: Level 3
- Solid-state silicon avalanche technology

Contact discharge ±30kV

Air discharge ±30kV



Applications

- Peripherals
- Audio Players
- Digital Cameras
- Cordless Phones
- Portable Instrumentation
- Notebooks and Handhelds
- Personal Digital Assistants (PDA's)
- Cellular Handsets and Accessories

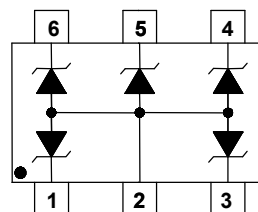
Mechanical Data

- SOT-363 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



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Peak Pulse Power($t_p=8/20\mu s$)	P_{PK}	100	W
Peak Pulse Current($t_p=8/20\mu s$)	I_{PP}	6	A
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}C$
Operating Temperature	T_J	-55 to +125	$^{\circ}C$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$

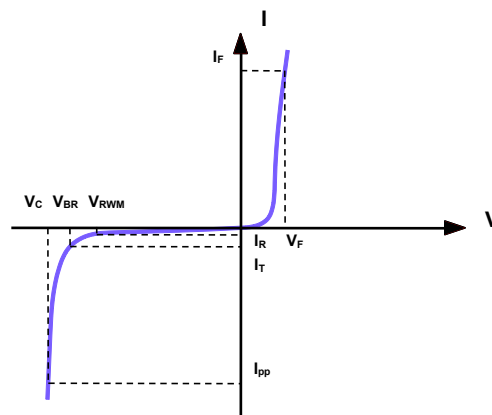
Electrical Characteristics (TA=25 $^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	$I_T = 1mA$	6	7	8	V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$			1	μA
Clamping Voltage	V_C	$I_{PP} = 1A, t_p=8/20\mu s$			10	V
Clamping Voltage	V_C	$I_{PP} = 6A, t_p=8/20\mu s$		12	18	V
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		80	110	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

Note: 8/20 μs pulse waveform.



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

Fig 1. 8/20μs Pulse Waveform

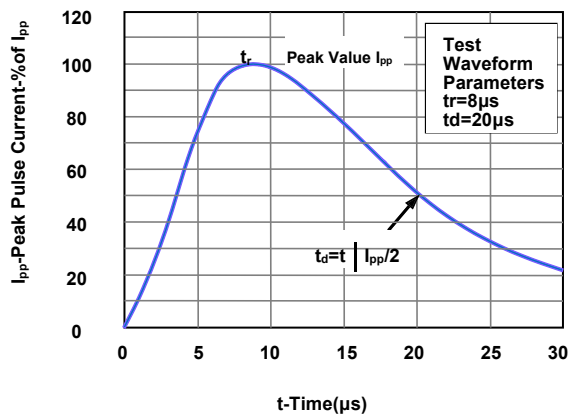


Fig 2. ESD Pulse Waveform (according to IEC61000-4-2)

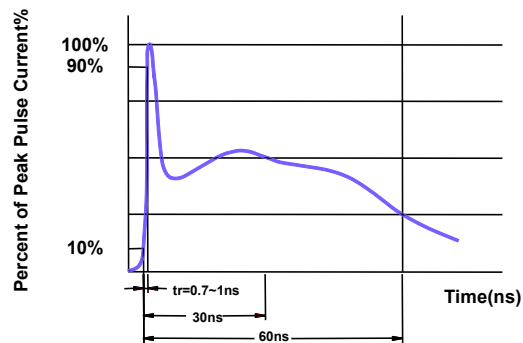


Fig 3. Power Derating Curve

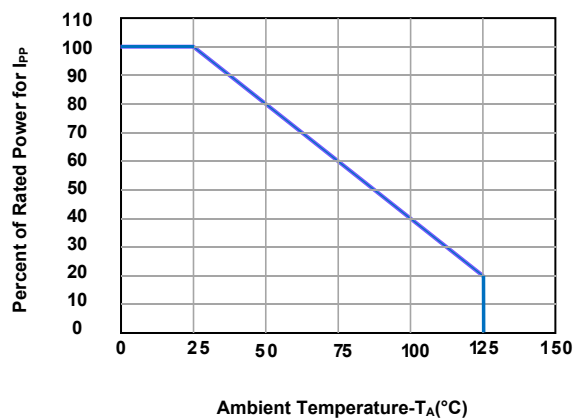


Figure 4. Clamping Voltage vs. Ipp

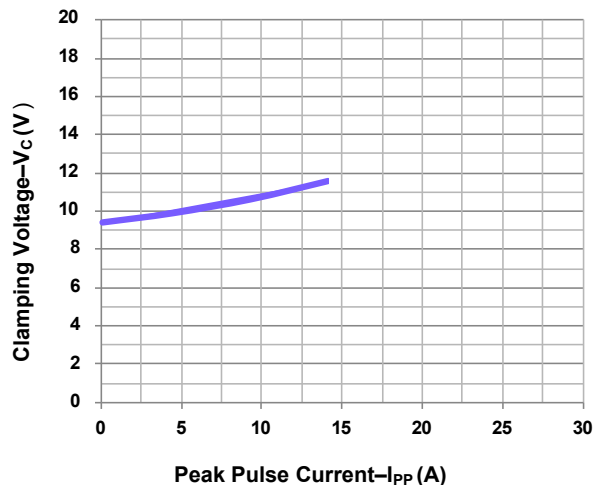


Fig 5. Peak Pulse Power vs. Pulse Time

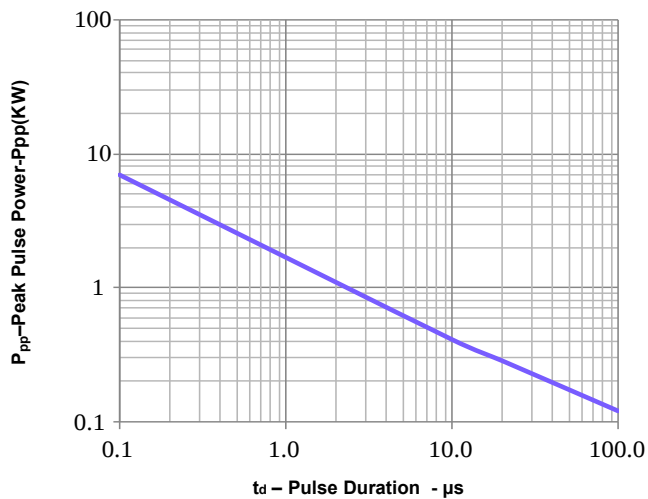
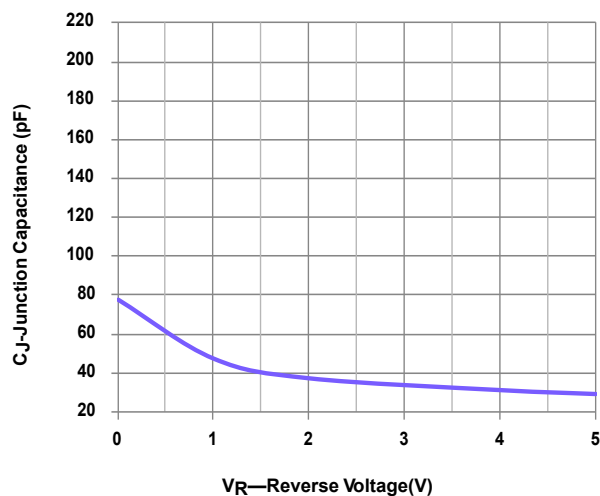
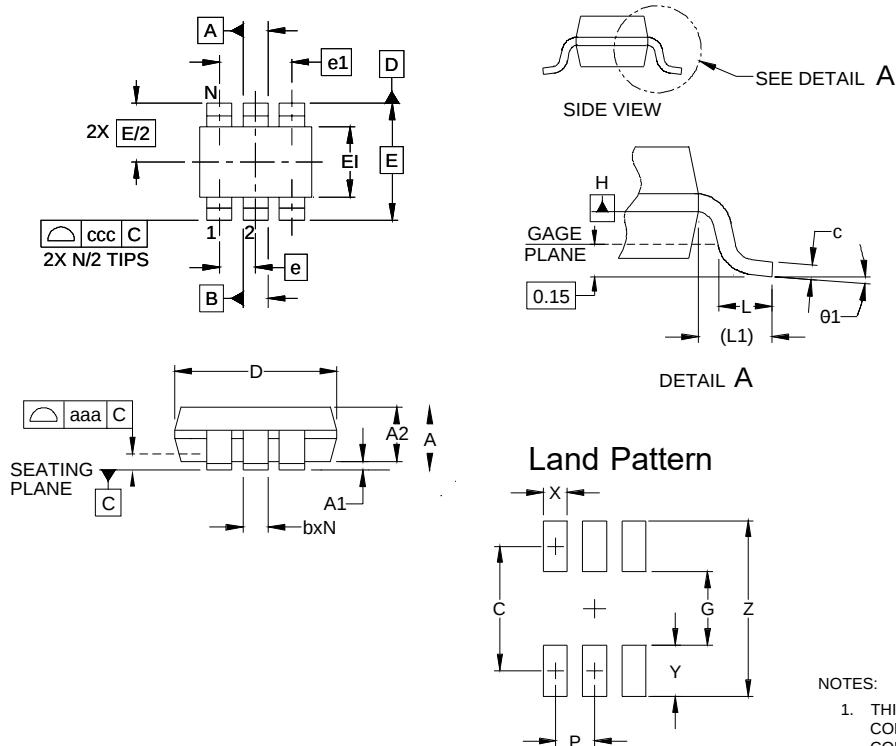


Figure 6. Junction Capacitance vs. Reverse Voltage



SOD323 Package Outline



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	.083	1.80	2.00	2.10
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	(.017)			(0.42)		
N	6			6		
θ1	0°	-	8°	0°	-	8°
aaa	.004			0.10		
bbb	.004			0.10		
ccc	.012			0.30		

DIM	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	

NOTES:

1. THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY. CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR COMPANY'S MANUFACTURING GUIDELINES ARE MET.

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.