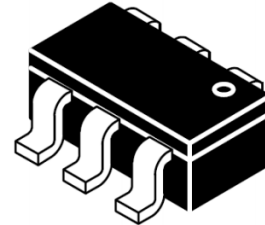


## Features

- Ultra low leakage: nA level
- Operating voltage: 24V
- Low clamping voltage
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    - Air discharge:  $\pm 30\text{kV}$
    - Contact discharge:  $\pm 30\text{kV}$
  - IEC61000-4-4 (EFT) 40A (5/50ns)
  - IEC61000-4-5 (Lightning) 8A (8/20  $\mu\text{s}$ )
- RoHS Compliant

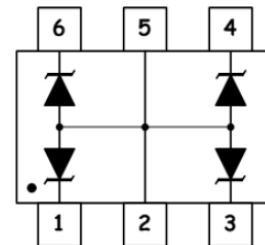
## Dimensions SOT-26



## Applications

- Peripherals
- Industrial Equipment
- Notebook Computers
- Portable Instrumentation
- Microprocessor Based Equipment
- Cell Phone Handsets and Accessories

## Pin Configuration



## Mechanical Characteristics

- Package: SOT-26
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 3,000 pcs
- Reel Size: 7 inch
- Device Marking: 24D

## Absolute Maximum Ratings (T<sub>amb</sub>=25°C unless otherwise specified)

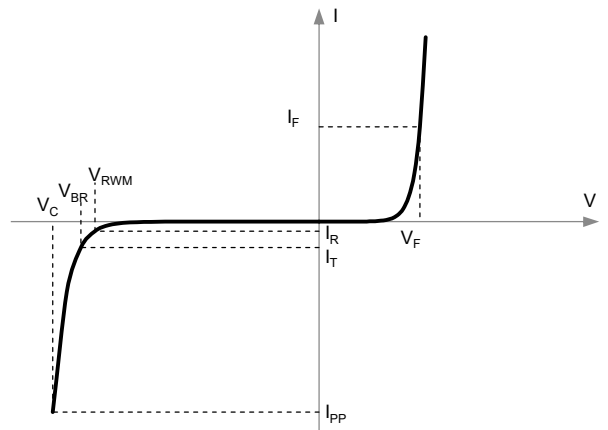
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 $\mu\text{s}$ )	P <sub>pp</sub>	320	W
ESD per IEC 61000-4-2 (Air)	V <sub>ESD</sub>	$\pm 30$	kV
ESD per IEC 61000-4-2 (Contact)		$\pm 30$	
Operating Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STJ</sub>	-55 to +150	°C

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	$V_{RWM}$				24	V
Breakdown Voltage	$V_{BR}$	$I_T = 1mA$	26.7			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 24V$			0.1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 8A$ (8 x 20 $\mu s$ pulse)			40	V
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz$		30		pF

## Electrical Parameters (TA=25°C unless otherwise specified)

Symbol	Definition
$I_{PP}$	Peak Pulse Current
$V_C$	Clamping Voltage
$V_{RWM}$	Reverse Working Voltage
$I_R$	Reverse Leakage Current
$V_{BR}$	Breakdown Voltage
$I_T$	Test Current
$V_F$	Forward Voltage
$I_F$	Forward Current



# Typical Performance Characteristics (TA=25°C unless otherwise specified)

Fig.1 - Peak Pulse Power Rating

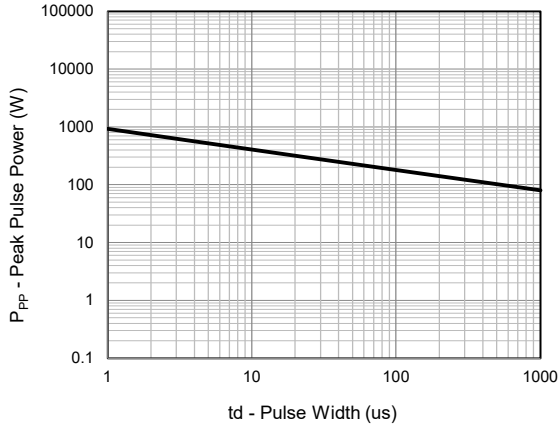


Fig.2 - Pulse Derating Curve

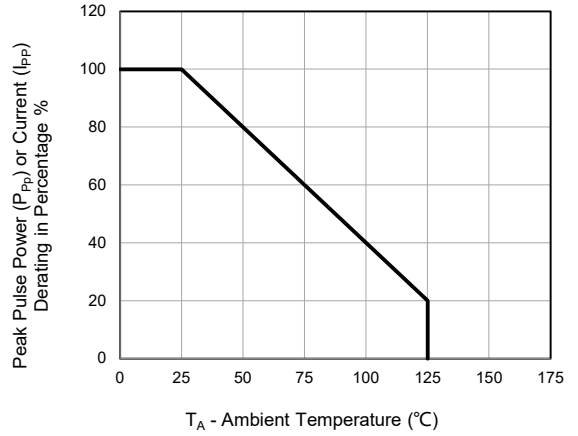


Fig.3 - 8/20us Pulse Waveform

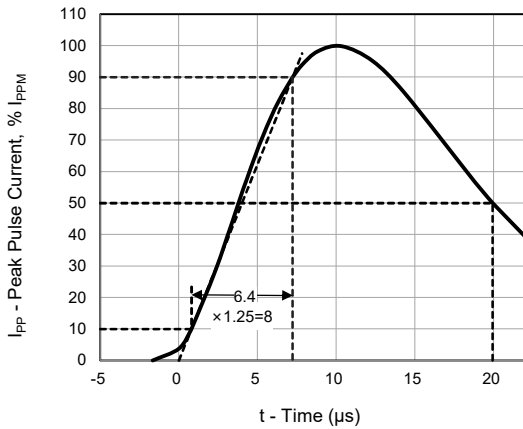


Fig.4 - Typical Clamping Voltage

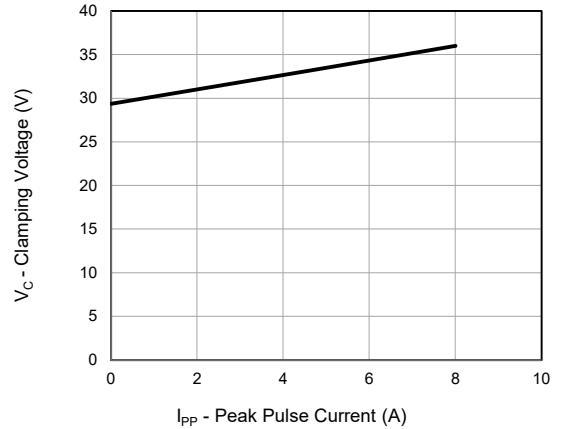


Fig.5 - ESD Pulse Waveform (IEC61000-4-2)

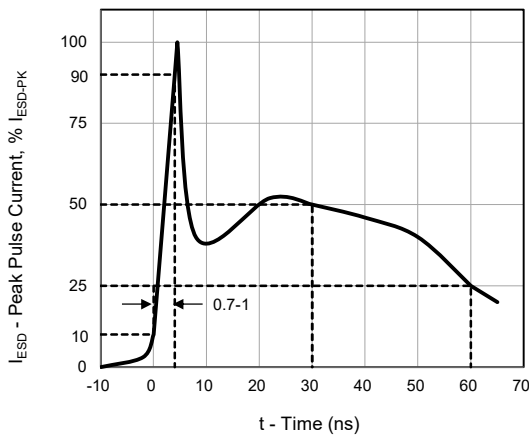
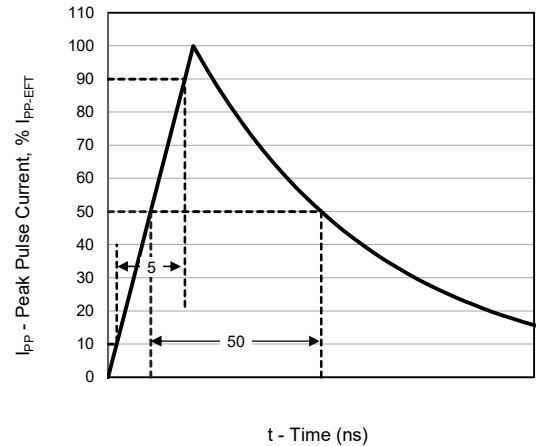
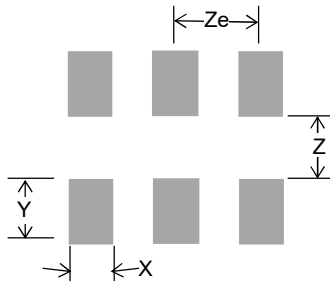
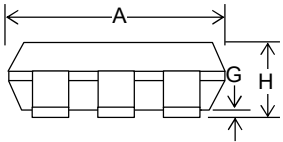
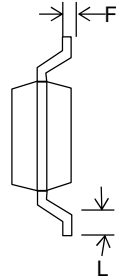
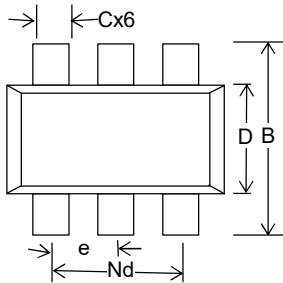


Fig.6 - 5/50ns EFT Waveform (IEC61000-4-4)



## SOT-26 Package Outline & Dimensions



SOT-26			
SYMBOL	Millimeters		
	MIN	NOM	MAX
A	2.8	2.9	3.1
B		2.8	
C	0.25		0.5
D	1.5	1.6	1.75
F	0.08		0.22
G	0		0.15
H	0.9	1.18	1.45
J	0.9	1.15	1.3
L	0.3		0.7
e		0.95	
Nd		1.9	
X		0.6	
Y		1.1	
Z		1.4	
Ze		0.95	

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