

LTVS20H24AT5G

1-Line Uni-directional TVS Diode

The TVS20H24A is an uni-directional TVS diode, utilizing leading monolithic silicon technology to provide fast response time and low ESD clamping voltage, making this device an ideal solution for protecting voltage sensitive data and power line. The TVS20H24 complies with the IEC 61000-4-2 (ESD) standard with $\pm 30\text{kV}$ air and $\pm 30\text{kV}$ contact discharge. The high ESD surge protection make TVS20H24A an ideal choice to protect cell phone, digital cameras, audio players and many other portable applications.

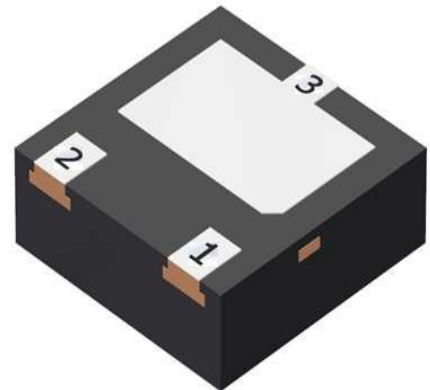
Features

- Ui-directional TVS diode
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 30\text{kV}$
 - Contact discharge: $\pm 30\text{kV}$
- RoHS Compliant

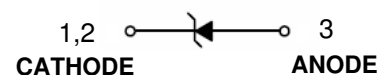
Applications

- Mobile Phones
- Battery Protection
- Power Line Protection
- Vbat pin for Mobile Devices
- Hand Held Portable Applications

LTVS20H24AT5G



DFN2020-3



Ordering information

Device	Marking	Shipping
LTVS20H24AT5G	24A	4000/Tape&Reel

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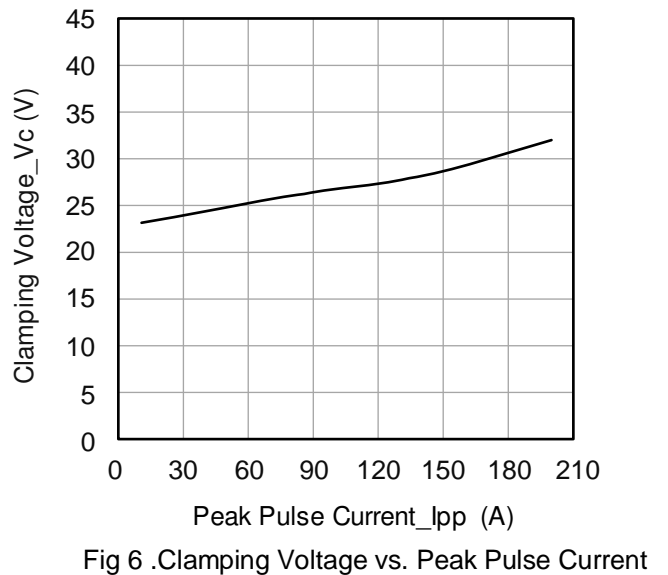
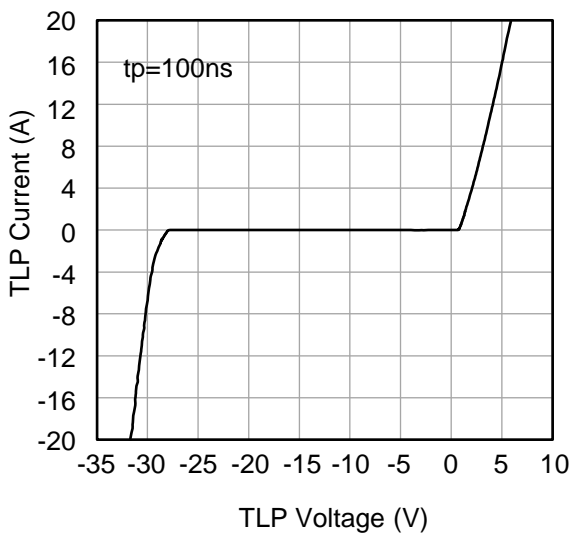
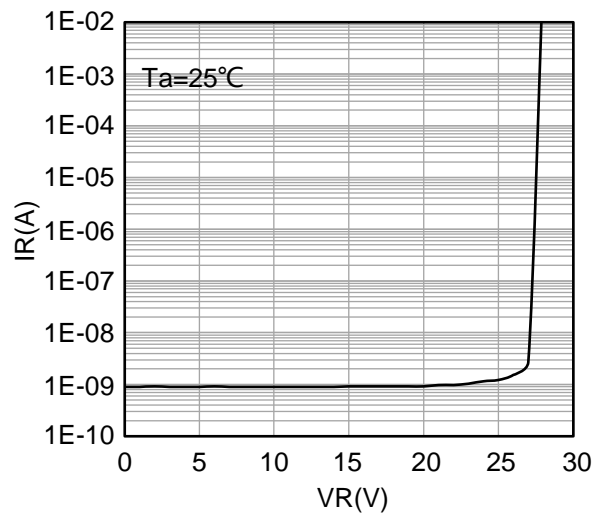
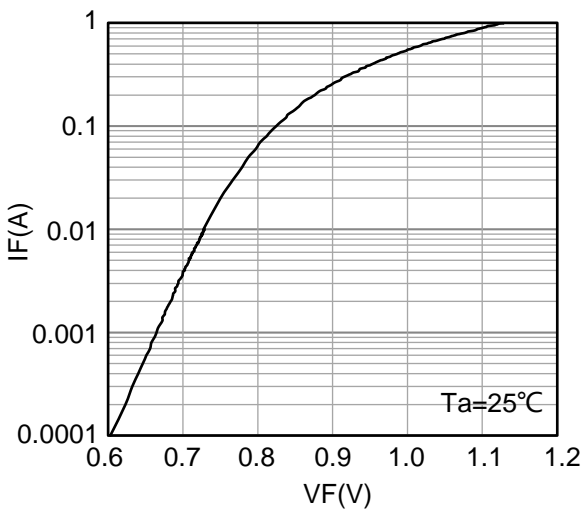
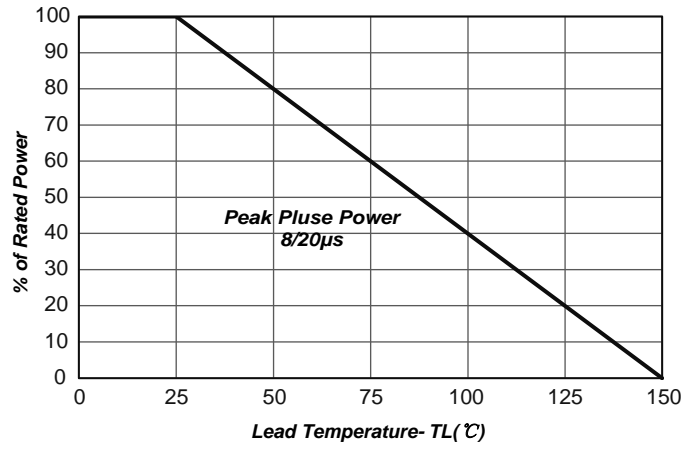
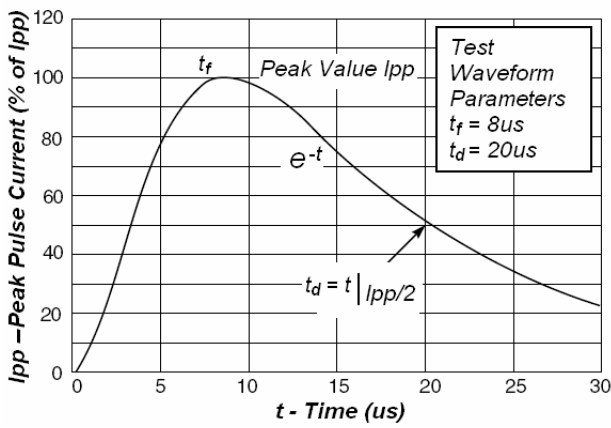
Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	Ppk	4600	W
Peak Pulse Current (8/20 μs)	Ipp	160	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	± 30 ± 30	kV
Operating Temperature Range	TJ	-55 to +150	$^{\circ}\text{C}$
Storage Temperature Range	Tstg	-55 to +150	$^{\circ}\text{C}$

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

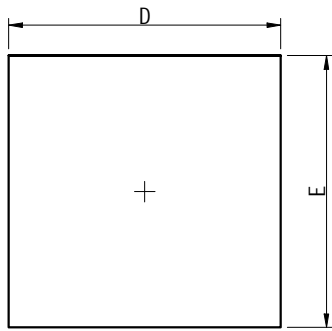
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			24	V	
Breakdown Voltage	VBR	26		30	V	$I_T = 1\text{mA}$
Reverse Leakage Current	IR			0.5	μA	$V_R = 24\text{V}$
Forward Voltage	VF			1.2	V	$I_F = 10\text{mA}$
Clamping Voltage	VC			31	V	$I_{PP} = 160\text{A}$ (8 x 20 μs pulse)
Junction Capacitance	CJ			850	pF	$V_R = 0\text{V}$, $f = 1\text{MHz}$

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

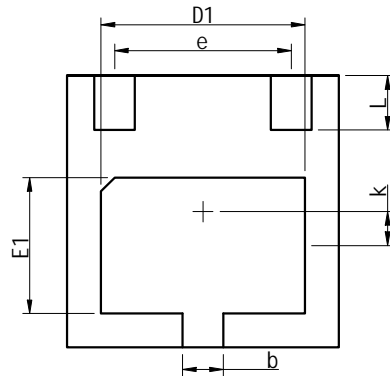


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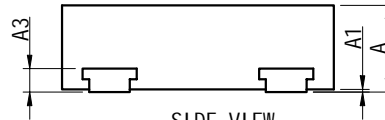
OUTLINE AND DIMENSIONS



TOP VIEW



BOTTOM VIEW

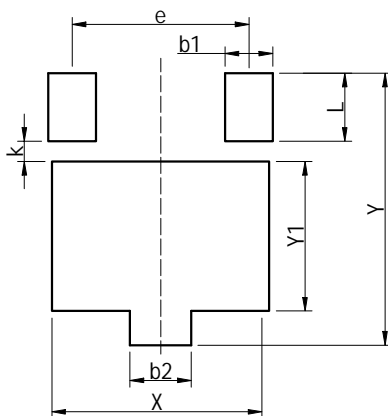


SIDE VIEW

DFN2020-3			
Dim	Min.	Typ.	Max.
A	0.60	0.65	0.70
A1	0.00	0.02	0.05
A3	0.152REF.		
D	1.95	2.00	2.05
E	1.95	2.00	2.05
D1	1.45	1.50	1.55
E1	0.95	1.00	1.05
b	0.25	0.30	0.35
e	1.30TYP.		
k	0.20	0.25	0.30
L	0.35	0.40	0.45

All Dimensions in mm

SOLDERING FOOTPRINT



DFN2020-3	
Dim	(mm)
X	1.60
Y	2.00
b1	0.35
b2	0.45
L	0.50
Y1	1.10
k	0.15
e	1.30

DISCLAIMER

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