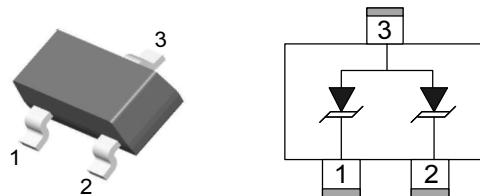


ESD TVS Array in SOT-23

Features

- 380Watts peak pulse power ($t_p = 8/20\mu s$)
- Tiny SOT-23 package
- Unidirectional configurations
- Protects two I/O port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2 ±30KV contact
±30KV air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 24A (8/20μs)



Mechanical Data

- **Case:** SOT-23 (plastic package). Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:** UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- Cellular Handsets and Accessories
- RS-232, RS-422 & RS-485
- Control & Monitoring Systems
- Set-Top Box
- Portable Electronics
- Other electronics equipments Communication systems

Absolute Maximum Ratings

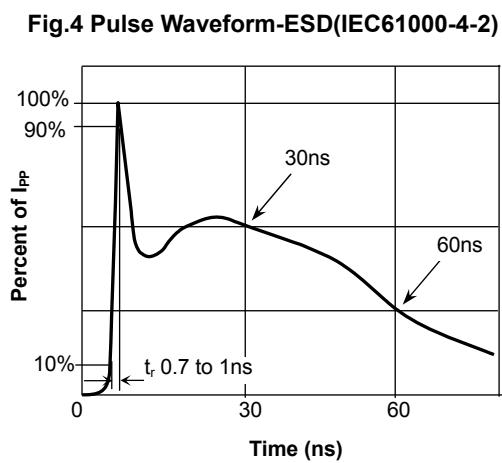
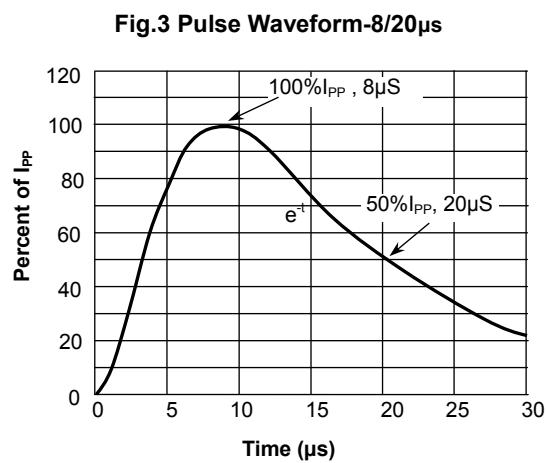
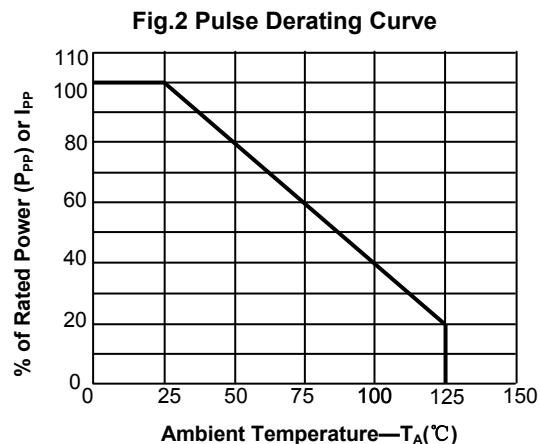
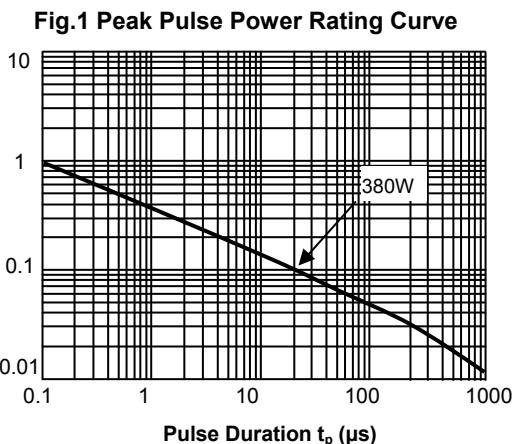
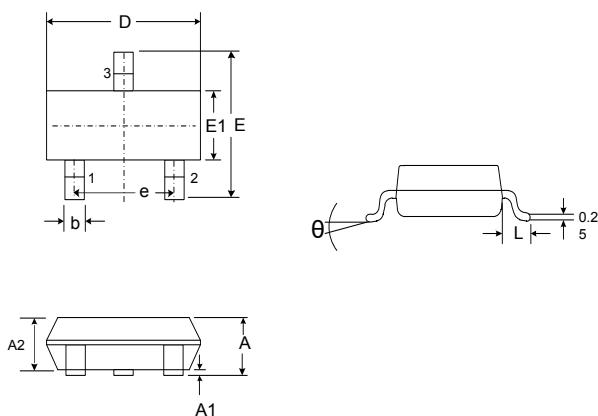
Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	380	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	30/30	kV
Peak Pulse Current ($T_p = 8/20\mu s$)	I_{PP}	24	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

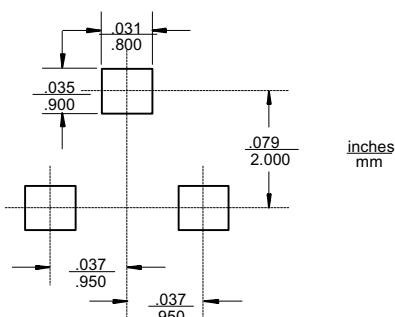
($T_A = 25$ °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				3.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	4.0			V
Reverse Leakage Current	I_R	$V_{RWM}=3V$			0.5	uA
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP}=24A$		16		V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$		100		pF

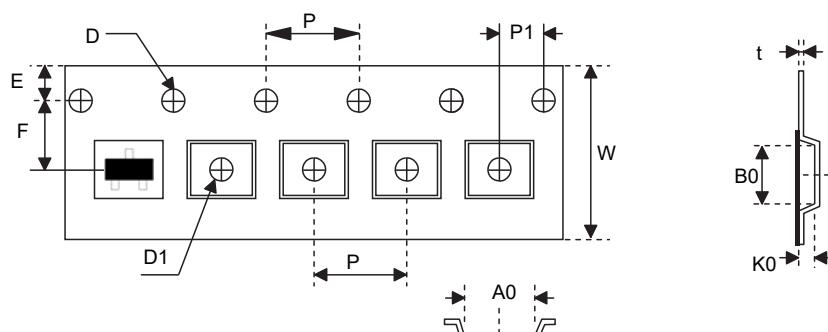
Typical Characteristics ($T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)

Package Dimensions


SYMBOL	DIMENSIONS			
	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.89	1.12	0.035	0.044
A1	0.01	0.10	0.0006	0.0043
A2	0.88	1.02	0.035	0.040
D	2.80	3.04	0.110	0.120
E	2.10	2.64	0.082	0.104
E1	1.20	1.40	0.047	0.055
e	1.90BSC		0.75 BSC	
L	0.40	0.60	0.015	0.024
θ	0	8	0	8

Pad Dimensions



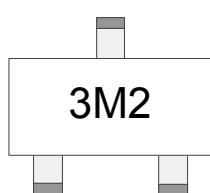
Pad Dimensions



Unit:mm

A0	B0	K0	D1	D	E	F	W	P	P1	t
3.15±0.10	2.77±0.10	1.22±0.10	0.95~1.10	1.50~1.60	1.75±0.10	3.50±0.05	7.90~8.3	4.00±0.10	2.00±0.05	0.22±0.40

Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
TEST23NC3V3U	SOT-23	Tape and reel	3000pcs / reel	EIA STD RS-481