

SOT-23 Plastic-Encapsulate ESD Protection Diodes

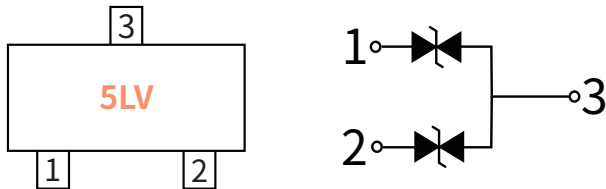
Features

- Low leakage current
- SOT-23 surface mount package
- IEC 61000-4-2 (ESD Air): ±25kV
- IEC 61000-4-2 (ESD Contact): ±25kV
- IEC 61000-4-5 (Lightning 8/20μs): 8A

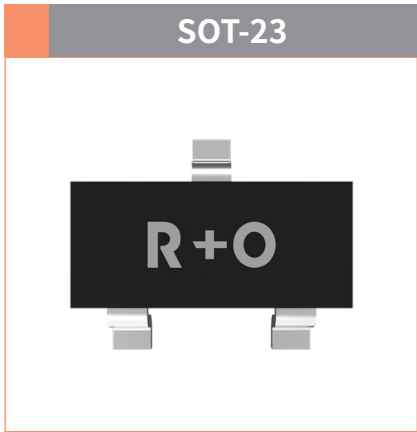
Applications

- Cellular Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants
- Notebooks, Desktops, and Servers
- Portable Instrumentation,Networking and Telecom
- Peripherals, Serial and Parallel Ports

Function Diagram



Reverse Working Voltage
5.0V Max.
Normal capacitance
20 pF(Max.)

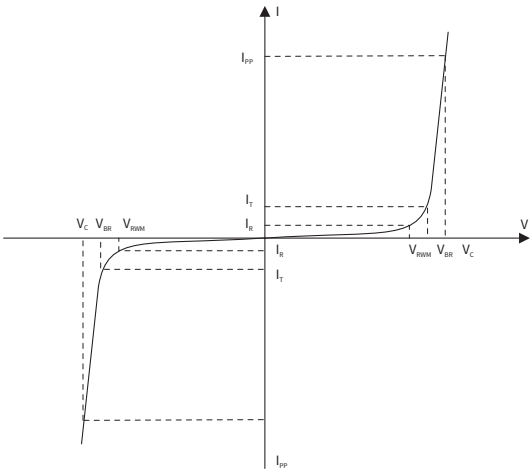


Maximum Ratings (Ta=25°C Unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{ESD}	Electrostatic Discharge Voltage	ESD per IEC 61000-4-2(Air)	±25	KV
		ESD per IEC 61000-4-2(Contact)	±25	KV
P _{PP}	Peak Pulse Power	tp = 8/20 μs	80	W
I _{PP}	Rated Peak Pulse Current	tp = 8/20 μs	8	A
T _J	Operating JunctionTemperature Range	—	-55 to +125	°C
T _{STG}	Operating JunctionTemperature Range	—	-55 to +125	°C

Electrical Parameter

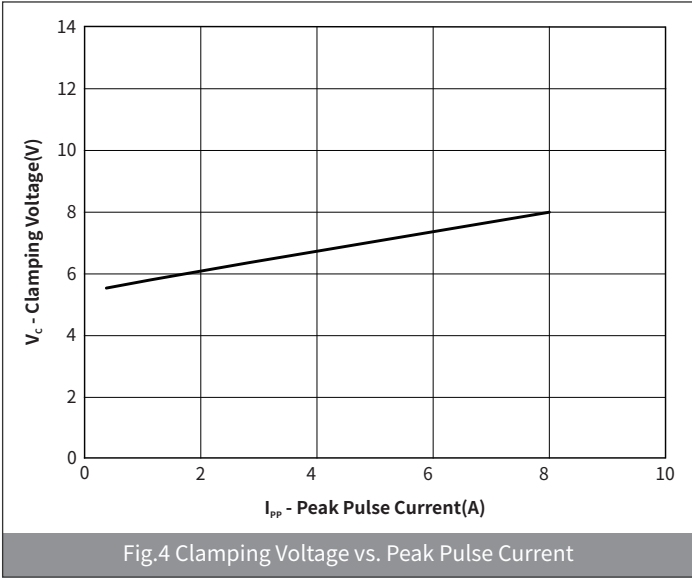
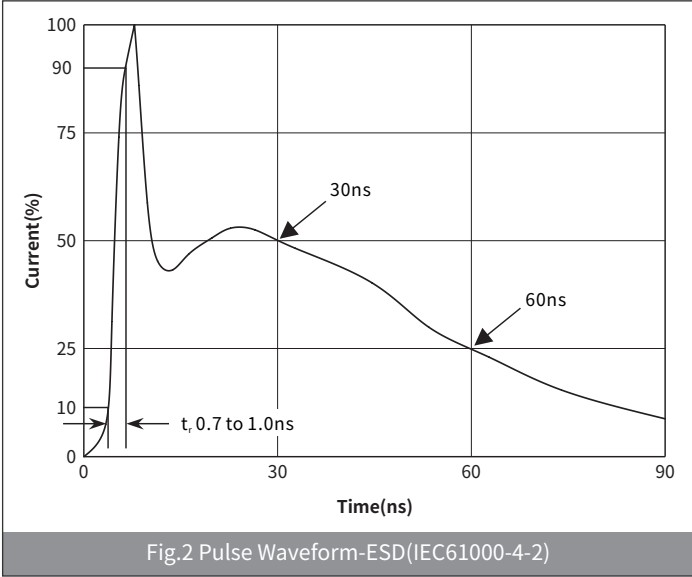
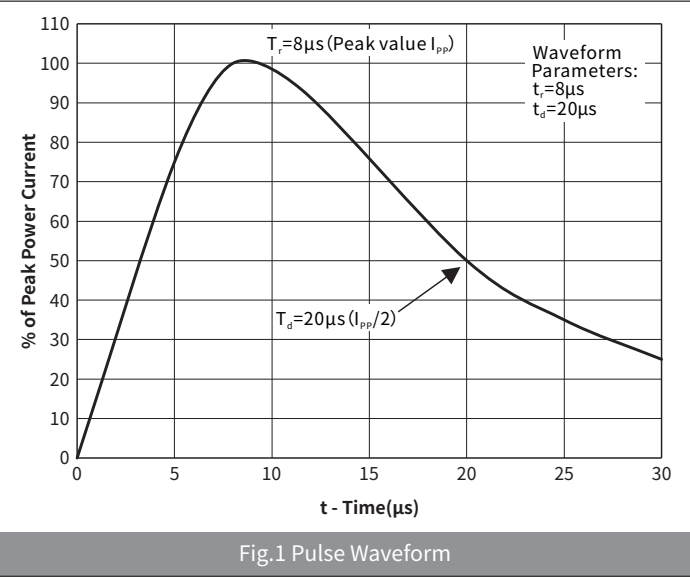
SYMBOL	PARAMETER
V _C	Clamping Voltage @ I _{PP}
V _{BR}	Breakdown Voltage @ I _T
I _{PP}	Peak Pulse Current
I _T	Test Current
I _R	Reverse Leakage Current @ VRWM
V _{RWM}	Peak Reverse Working Voltage
P _{PP}	Peak Pulse Power Dissipation
C _J	Junction Capacitance @ V _R =0V,f=1MHz
I _F	Forward Current
V _F	Forward Voltage @I _F



● Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	CONDITION	Min	Typ	Max	UNIT
Peak Reverse Working Voltage	V_{RWM}	$T_a=25^{\circ}C$	—	—	5.0	V
Breakdown Voltage	V_{BR}	$I_R=1.0mA, T_a=25^{\circ}C$	6.0	—	—	V
Reverse Leakage Current	I_R	$V_R=5.0V, T_a=25^{\circ}C$	—	—	0.5	μA
Clamping Voltage	V_C	$I_{PP}=8A, t_p=8/20\mu s$	—	10	12	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	—	15	20	pF

● Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



H5VNT2BC

Bi-directional 5.0V Normal Capacitance ESD

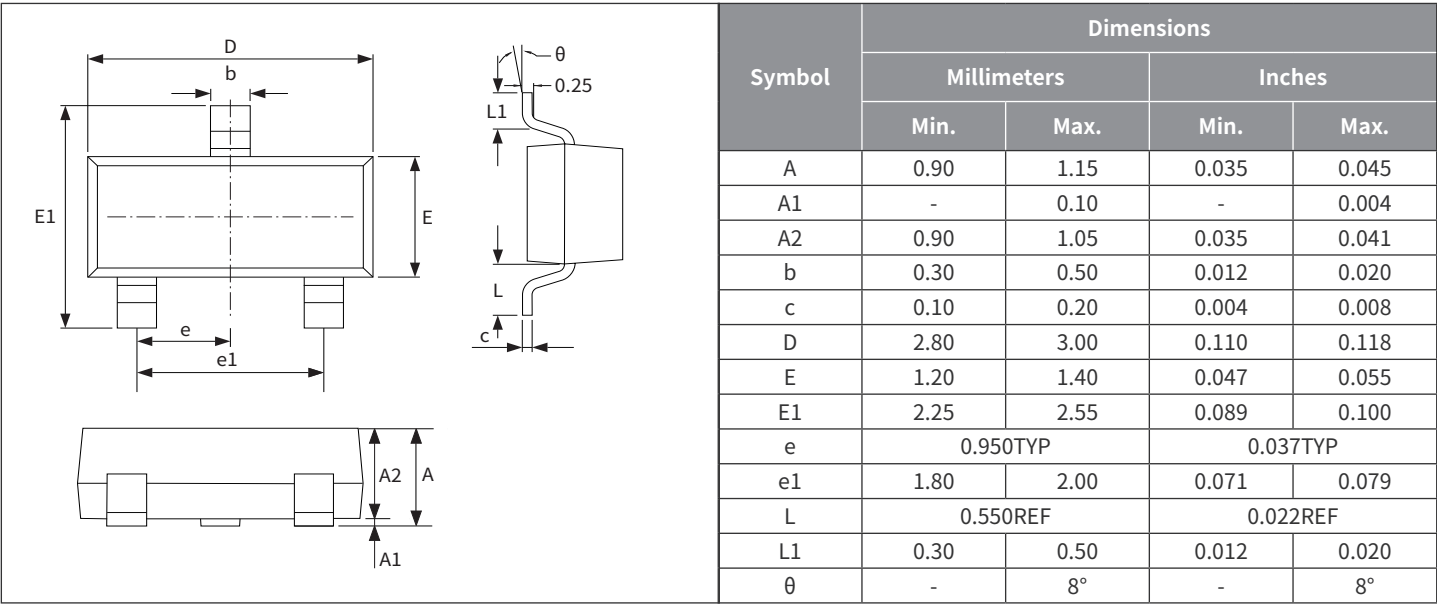
Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOT-23	R1	0.008	3000	45000	180000	7"

Recommended Soldering Conditions



Package Outline Dimensions (SOT-23)



Suggested Pad Layout

