

SOT-363 Plastic-Encapsulate ESD Protection Diodes

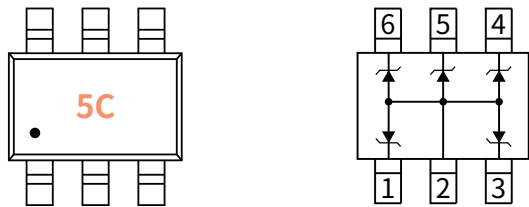
Features

- Low leakage current
- SOT-363 surface mount package
- IEC 61000-4-2 (ESD Air): ±30kV
- IEC 61000-4-2 (ESD Contact): ±30kV
- IEC 61000-4-5 (Lightning 8/20μs): 10A

Applications

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

Function Diagram



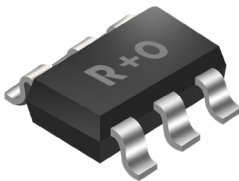
Reverse Working Voltage
5.0V Max.

Normal Capacitance

$C_{I/O-GND}=60\text{pF(Typ.)}$

$C_{I/O-I/O}=50\text{pF(Max.)}$

SOT-363

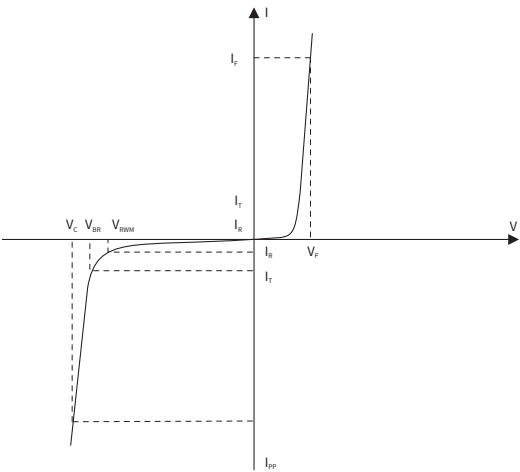


Maximum Ratings (Ta=25°C Unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{ESD}	Electrostatic Discharge Voltage	ESD per IEC 61000-4-2(Air)	±30	KV
		ESD per IEC 61000-4-2(Contact)	±30	KV
P_{PP}	Peak Pulse Power	$t_p = 8/20 \mu s$	100	W
I_{PP}	Rated Peak Pulse Current	$t_p = 8/20 \mu s$	10	A
T_J	Operating JunctionTemperature Range	—	-55 to +125	°C
T_{STG}	Operating JunctionTemperature Range	—	-55 to +150	°C

Electrical Parameter

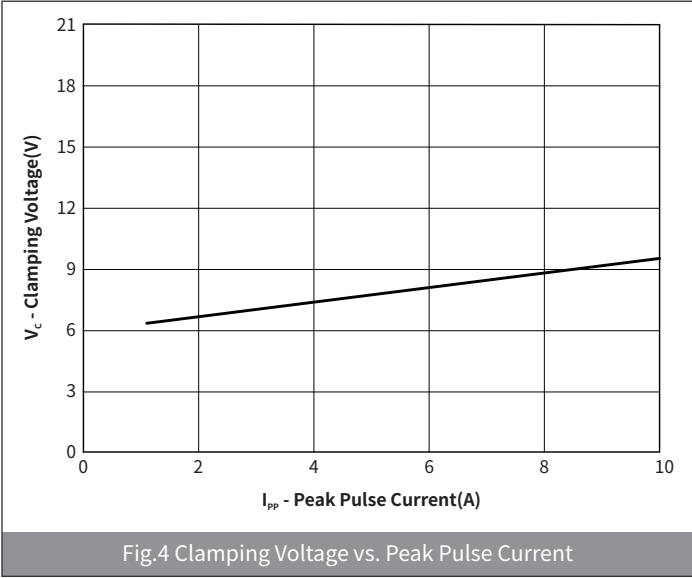
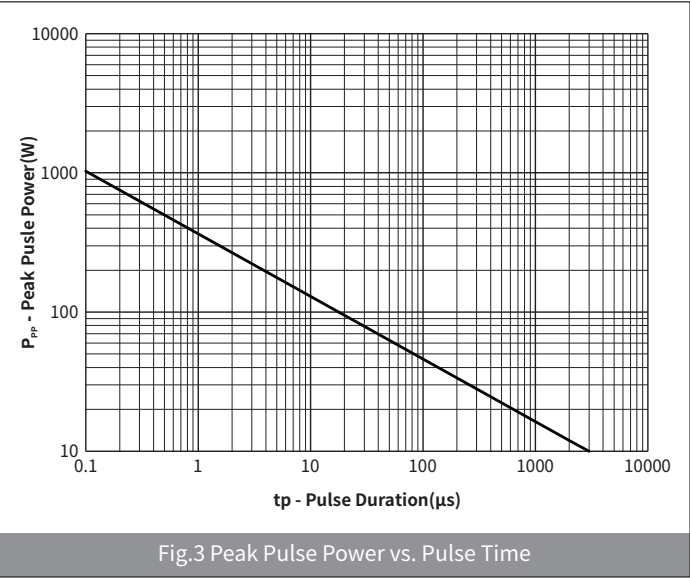
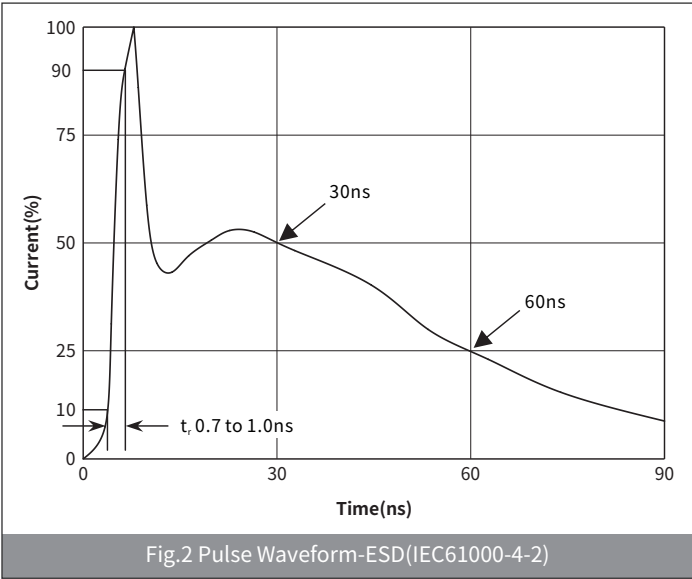
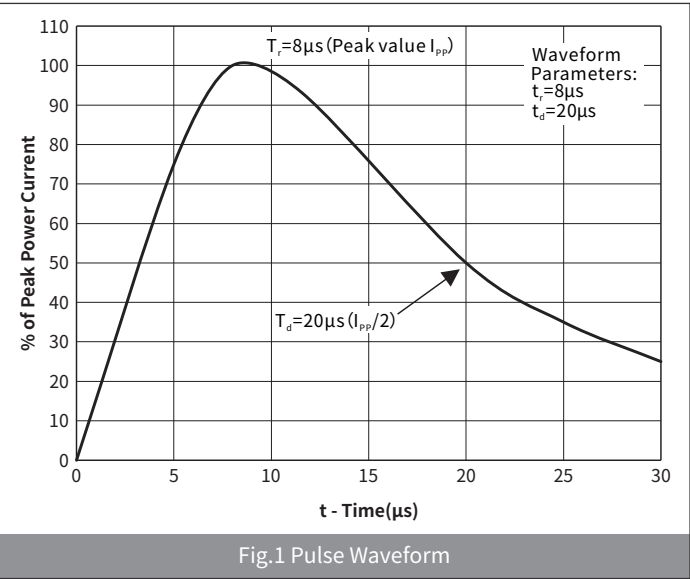
SYMBOL	PARAMETER
V_C	Clamping Voltage @ I_{PP}
V_{BR}	Breakdown Voltage @ I_T
I_{PP}	Peak Pulse Current
I_T	Test Current
I_R	Reverse Leakage Current @ V_{RWM}
V_{RWM}	Peak Reverse Working Voltage
P_{PP}	Peak Pulse Power Dissipation
C_J	Junction Capacitance @ $V_R=0V, f=1\text{MHz}$
I_F	Forward Current
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}	$I_R=1mA, T_a=25^{\circ}C$	6.0	—	—	V
Reverse Leakage Current	I_R	$V_R=5.0V, T_a=25^{\circ}C$	—	—	0.1	μA
Clamping Voltage	V_C	$I_{PP}=10A, t_p=8/20\mu s$	—	—	10	V
Junction Capacitance	C_J	$V_{RWM}=0V, f=1MHz, I/O \text{ pin to GND}$	—	60	90	pF
		$V_{RWM}=0V, f=1MHz, \text{Between I/O pins}$	—	30	50	

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



H5VNT3UB

Uni-directional 5V Normal Capacitance ESD

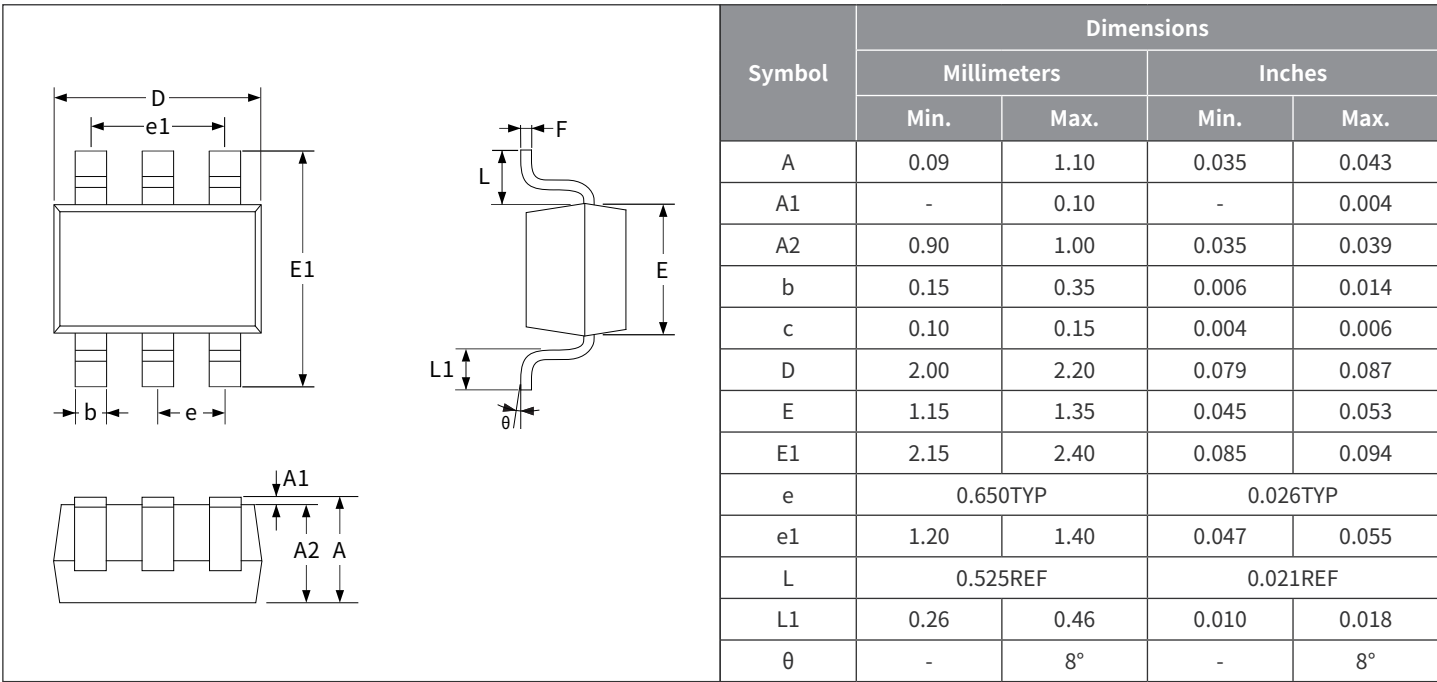
● Ordering Information

PREFERED P/N	PACKAGE	SIZE(mm)	DELIVERY MODE	MPQ(PCS)
H5VNT3UB	SOT-363	2.10×2.275×0.095	7"REEL	3000

● Recommended Soldering Conditions



● Package Outline Dimensions (SOT-363)



● Suggested Pad Layout

