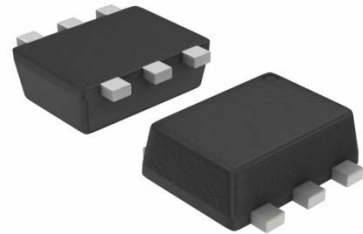
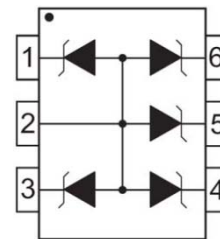


Features

- 100W peak pulse power per line ($t_p = 8/20\mu s$)
- SOT-563 package
- Protects four bidirectional lines and five Unidirectional lines
- Monolithic structure
- Working voltage: 5V
- Low clamping voltage
- Low leakage current
- ESD protection > 40 kV
- RoHS compliant
- Transient protection to IEC 61000-4-2(ESD) ± 15 KV(air), ± 8 KV(contact); IEC 61000-4-4 (EFT) 40A (5/50ns)



SOT-563



Schematic Diagram

Applications

- Communication systems & Cellular phones
- Printers
- Notebook and hand hold computers
- PDAs
- Video Equipment

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	100	W
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	10	A
Forward Voltage @10mA	V_F	1.5	V
Junction Temperature	T_J	-55 to +150	$^\circ C$
Storage temperature	T_{STG}	-55 to +150	$^\circ C$

Note: Pin 1, 3, 4, 5 or 6 to Pin 2

Electrical Characteristics per line ($T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbols	Conditions	Min	Typ	Max	Units
Reverse stand-off Voltage	V_{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6	-	-	V
Reverse Leakage Current	I_R	$V_{RWM}=5V$	-	-	5	μA
Clamping Voltage	V_C	$I_{PP}=1A, T_p=8/20\mu s$	-	-	8.8	V
Clamping Voltage	V_C	$I_{PP}=10A, T_p=8/20\mu s$	-	-	10.0	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	30	-	pF

Note: Pin 1, 3, 4, 5 or 6 to Pin 2

Typical Characteristic Curves

Fig.1 Peak Pulse Power vs Pulse Time

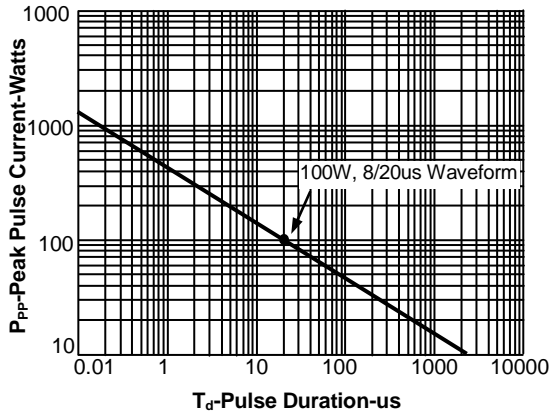


Fig.2 Pulse Wave Form - 8/20 μ s

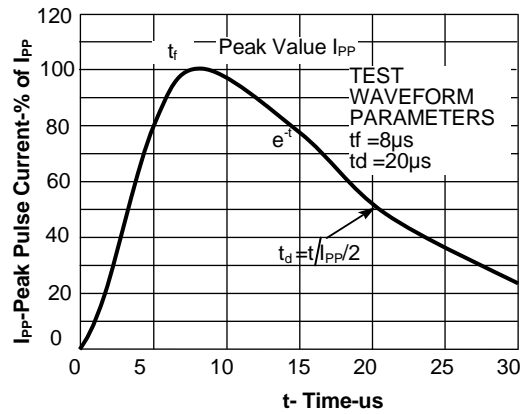


Fig.3 Power Derating Curve

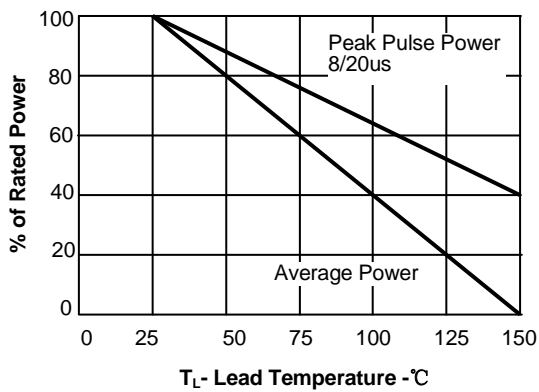


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

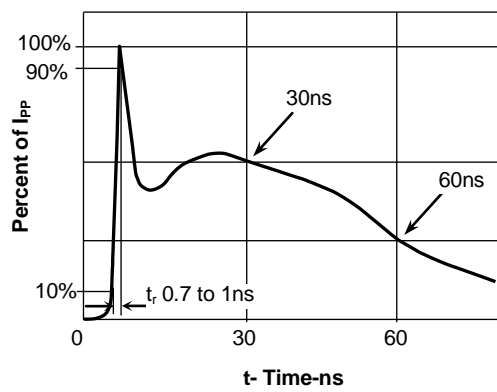


Fig.5 Typical Clamping Voltage vs Peak Pulse Current

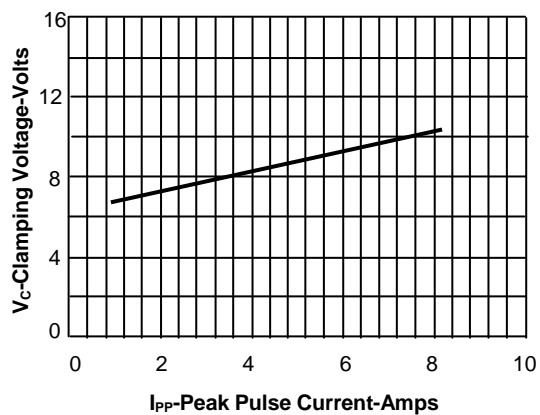
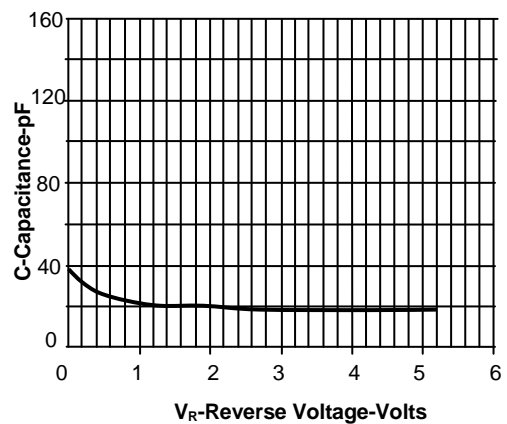
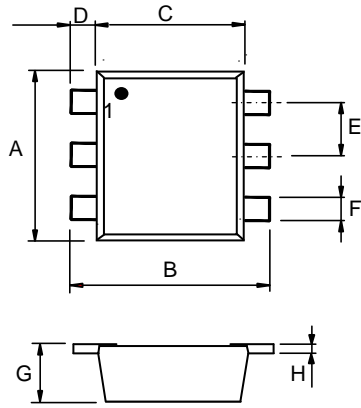


Fig.6 Typical Reverse Voltage vs Capacitance



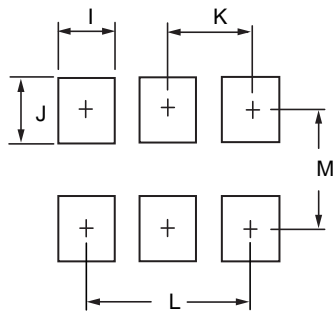
Product Dimensions



SOT-563

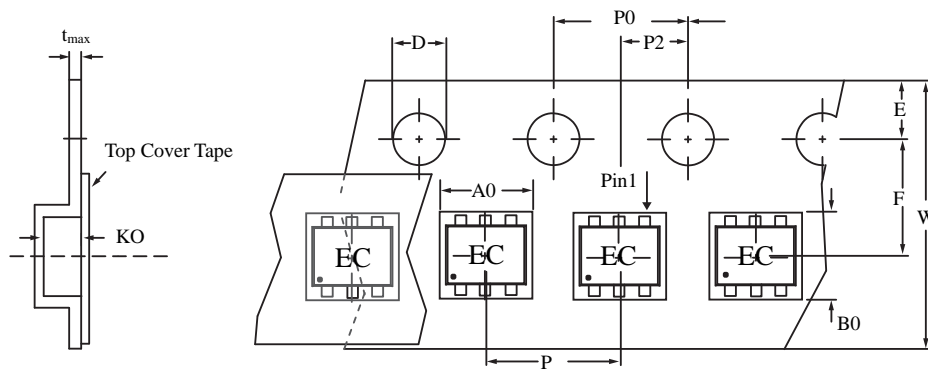
Dim	millimeters	
	min	max
A	1.50	1.70
B	1.50	1.70
C	1.10	1.30
D	0.10	0.30
E	0.50BSC	
F	0.17	0.27
G	0.50	0.60
H	0.08	0.16

PAD Dimensions



Dim	millimeters
I	0.30
J	0.51
K	0.51
L	1.02
M	1.40

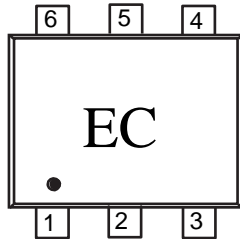
Package Informations



A0	B0	K0	D	E	F	W	P0	P2	P	tmax
1.78±0.05	1.78±0.05	0.69±0.05	1.50±0.10	1.75±0.10	3.50±0.05	8.00±0.30	4.00±0.10	2.00±0.05	4.00±0.10	0.25

NOTES: (1) Dimensions are in millimeters

Marking



Order Information

Device	Package	Net Weight	Carrier	Quantity	HSF Status
SPESP5VT563-6	SOT-563	0.0030g	Tape & Reel	3000pcs	RoHS compliant