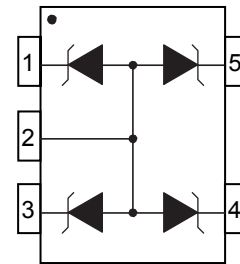


Features

- 100W peak pulse power per line ($t_p = 8/20\mu s$)
- SOT-553 package
- Protects three bidirectional lines or four Unidirectional lines
- Monolithic structure
- Working voltage: 5V
- Low clamping voltage
- ESD protection > 30 kV
- Low leakage current
- RoHS compliant
- Transient protection for data lines to
IEC 61000-4-2(ESD) ± 15 KV(air), ± 8 KV(contact)
IEC 61000-4-4 (EFT) 40A (5/50ns)



SOT-553



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}	8	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	$^\circ C$

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	$V_{RWM} = 5V$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP} = 1A, T_P = 8/20\mu S$	-	-	8.8	V
	V_C	$I_{PP} = 8A, T_P = 8/20\mu S$	-	-	15.0	V
Junction Capacitance ⁽¹⁾	C_J	$V_R = 0V, f = 1MHz$	-	10	-	pF

Note1: Pin 1, 3, 4, 5 to Pin 2

Typical Characteristics

Fig.1 Peak Pulse Power vs Pulse Time

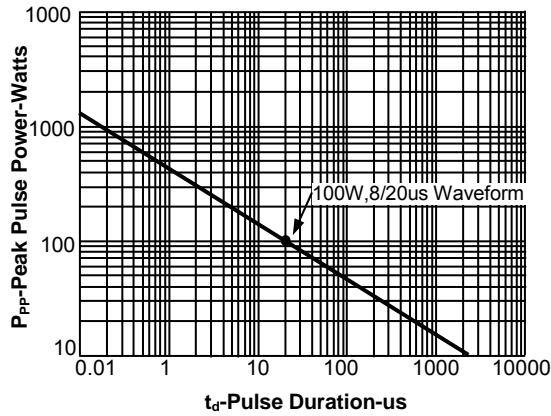


Fig.2 Pulse Wave Form

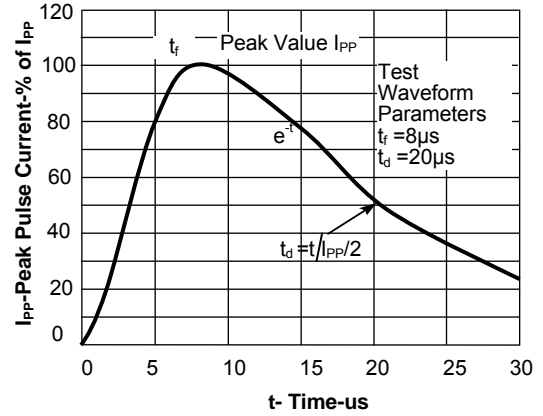
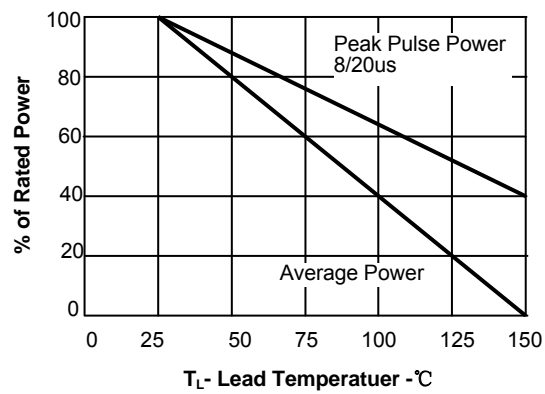
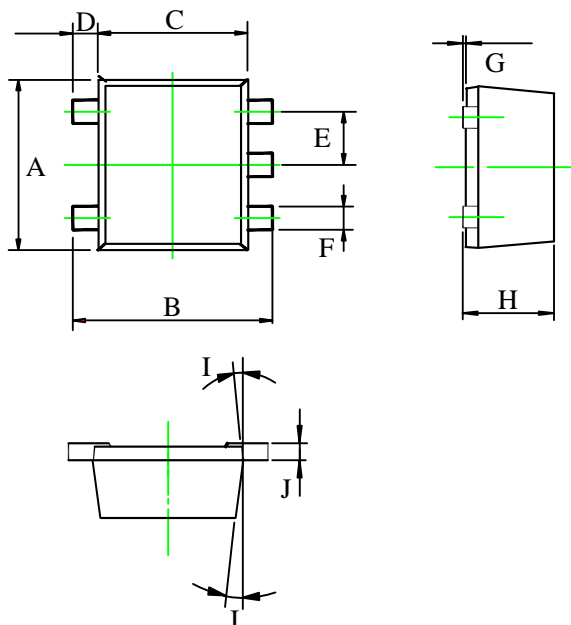


Fig.3 Power Derating Curve



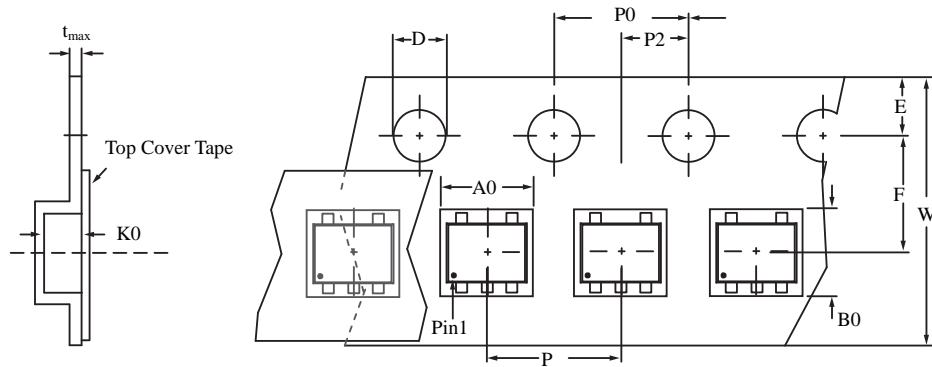
Product Dimensions



SOT-553

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	0.00	0.05
H	0.50	0.60
I	7°REF	7°REF
J	0.08	0.16

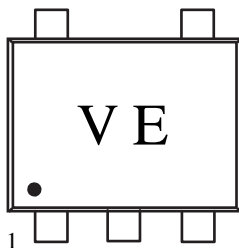
Package Information



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

Note2: Dimensions are in millimeters

Marking



Order Information

Device	Package	Net Weight	Carrier	Quantity	HSF Status
SPESP5VT553-5	SOT-553	0.0025g	Tape & Reel	3000pcs	RoHS compliant