



ESDLC5V0T7

5V Low Capacitance ESD Protection Device

Features

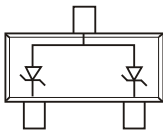
- Halogen free available upon request by adding suffix "-HF"
- SOT-723 package
- Low clamping voltage
- Low leakage current
- Working voltage: 5V
- Protect up two data lines
- 110 watts peak pulse power (tp=8/20us)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

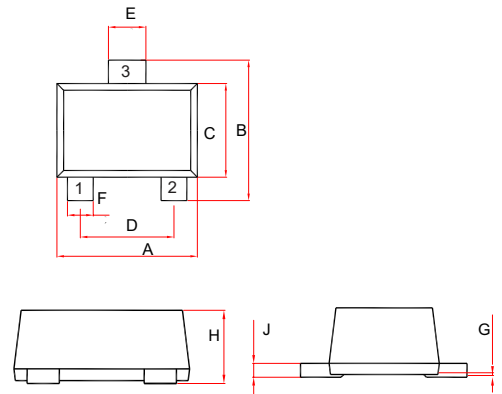
- Operating Junction & Storage Temperature: -55°C to +150°C

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		±15 ±8	KV
ESD Voltage per human body mode		16	KV
Peak Pulse Power (tp=8/20µS)	Ppp	110	W
Peak Pulse Current (tp=8/20µS)	Ipp	5.5	A

Pin Configuration-Top View



SOT-723



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.045	.049	1.15	1.25	
B	.045	.049	1.15	1.25	
C	.030	.033	0.75	0.85	
D	.031TYP.		0.80TYP.		
E	.011	.015	0.27	0.37	
F	.007	.011	0.17	0.27	
G	.000	.002	.000	.050	
H	.017	.020	0.43	0.50	
J	.003	.006	.080	.150	

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_t = 1\text{mA}$	5.6			V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$			1	μA
Clamping Voltage	V_C	$I_{PP} = 1\text{A}$, $t_p = 8/20\mu\text{s}$ pin1 to pin2			13.5	V
Clamping Voltage	V_C	$I_{PP} = 5\text{A}$, $t_p = 8/20\mu\text{s}$ pin1to pin2			23.0	V
Clamping Voltage	V_C	$I_{PP} = 5\text{A}$, $t_p = 8/20\mu\text{s}$ pin1or pin2 to pin3			20.0	V
Junction Capacitance	C_j	$V_R=0\text{V}$, $f = 1\text{MHz}$ Pin1 to Pin2		1.4	2	pF
Junction Capacitance	C_j	$V_R=0\text{V}$ $f = 1\text{MHz}$ pin1or pin2 to pin3		2.8	3.5	pF

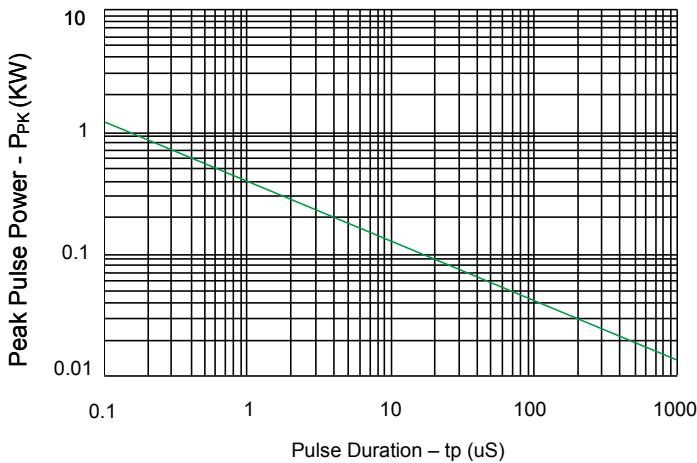


Fig1. Non-Repetitive Peak Pulse Power vs. Pulse time

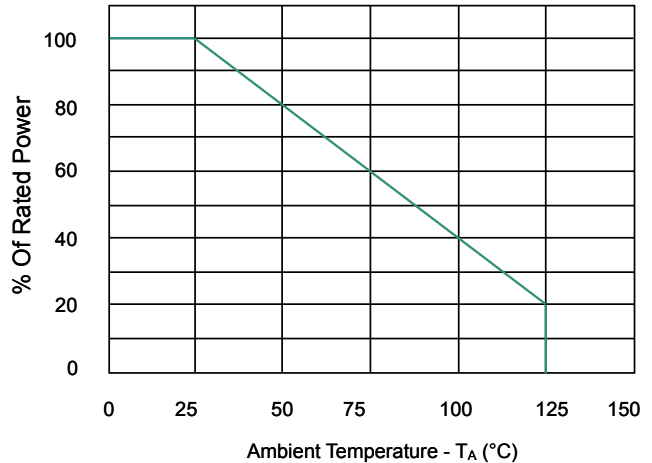


Fig2. Power Derating Curve

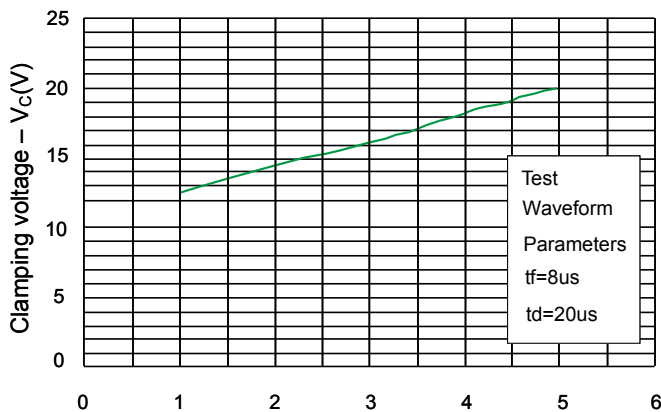


Fig 3. Clamping Voltage vs. peak Pulse Current
(Pin 1 to Pin 2)

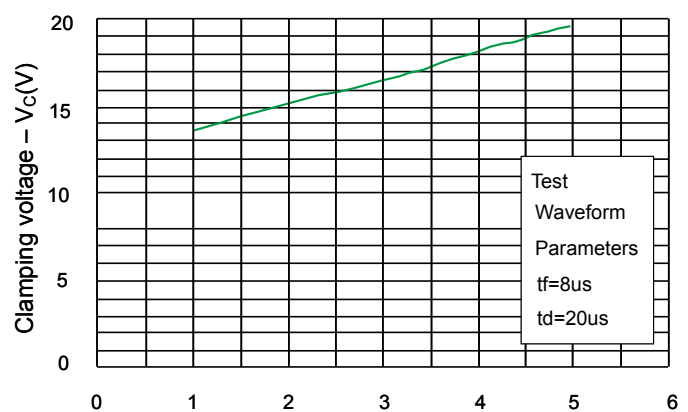


Fig 4. Clamping Voltage vs. peak Pulse Current
(Pin 1 or Pin 2 to Pin 3)



Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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