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ESDLC5V0T7

5V Low Capacitance ESD Protection Device

Features

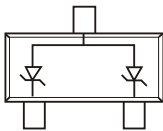
- Halogen free available upon request by adding suffix "-HF"
- SOT-723 package
- Low clamping voltage
- Low leakage current
- Working voltage: 5V
- Protect up two data lines
- 110 watts peak pulse power ($t_p=8/20\mu s$)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

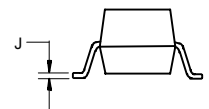
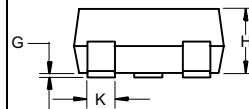
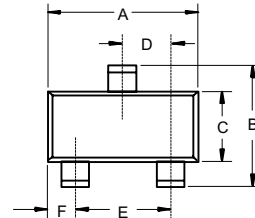
- Operating Junction & Storage Temperature: $-55^{\circ}C$ to $+150^{\circ}C$

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		± 15 ± 8	KV
ESD Voltage per human body mode		16	KV
Peak Pulse Power ($t_p=8/20\mu s$)	P _{pp}	110	W
Peak Pulse Current ($t_p=8/20\mu s$)	I _{pp}	5.5	A

Pin Configuration-Top View



SOT-723



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.043	.051	1.10	1.30	
B	.043	.051	1.10	1.30	
C	.030	.033	0.75	0.85	
D	.014	.017	0.36	0.44	
E	.028	.034	0.72	0.88	
F	.008	.023	0.22	0.58	
G	.0005	.0039	.013	.100	
H	.019	.021	0.47	0.53	
J	.003	.005	.075	.130	
K	.011	.014	0.29	0.35	

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

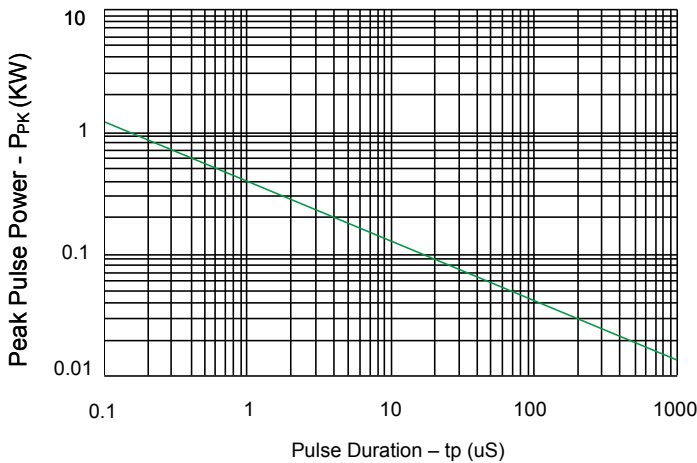


Fig1. Non-Repetitive Peak Pulse Power vs. Pulse time

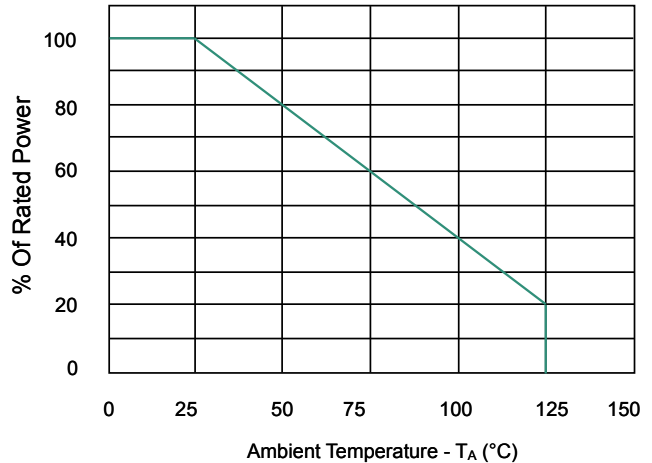


Fig2. Power Derating Curve

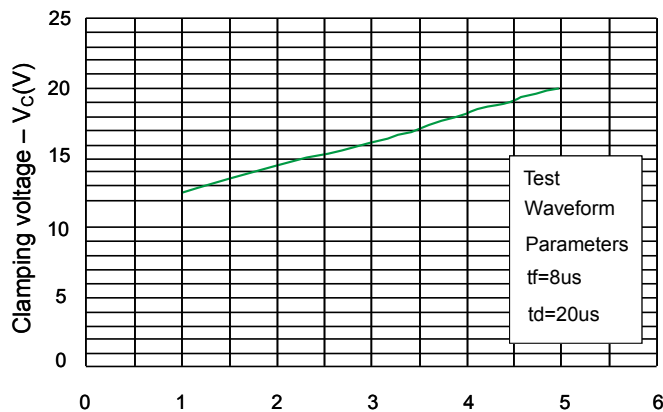


Fig 3. Clamping Voltage vs. peak Pulse Current
(Pin 1 to Pin 2)

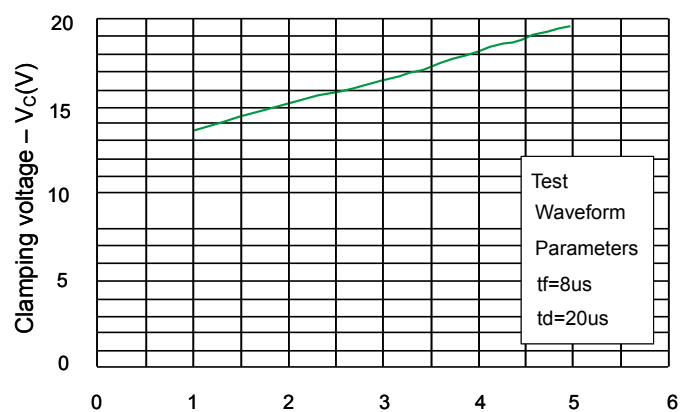


Fig 4. Clamping Voltage vs. peak Pulse Current
(Pin 1 or Pin 2 to Pin 3)



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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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