



Micro Commercial Components



Micro Commercial Components  
20736 Marilla Street Chatsworth  
Chatsworth, CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

## ESDLC5V0T7

### Features

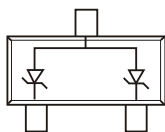
- Halogen free available upon request by adding suffix "-HF"
- SOT-723 package
- Low clamping voltage
- Low leakage current
- Working voltage: 5V
- Protect up two data lines
- 110 watts peak pulse power( $t_p=8/20\mu s$ )
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings

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

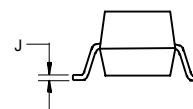
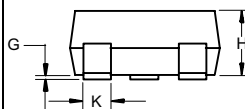
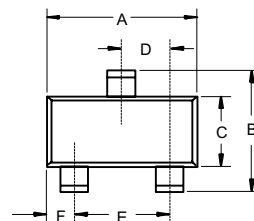
Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		$\pm 15$ $\pm 8$	KV
ESD Voltage per human body mode		16	KV
Peak Pulse Power ( $t_p=8/20\mu s$ )	Ppp	110	W
Peak Pulse Current ( $t_p=8/20\mu s$ )	I <sub>pp</sub>	5.5	A

### Pin Configuration-Top View



## 5V Low Capacitance ESD Protection Device

### 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	$\mu\text{A}$
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

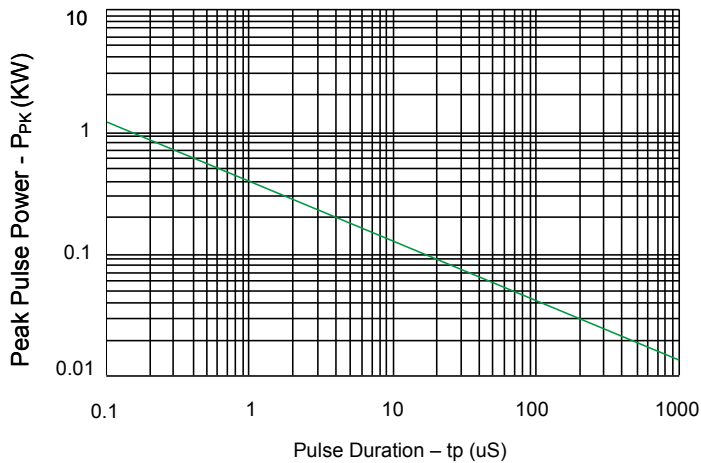


Fig1.Non-Repetitive Peak Pulse Power vs. Pulse time

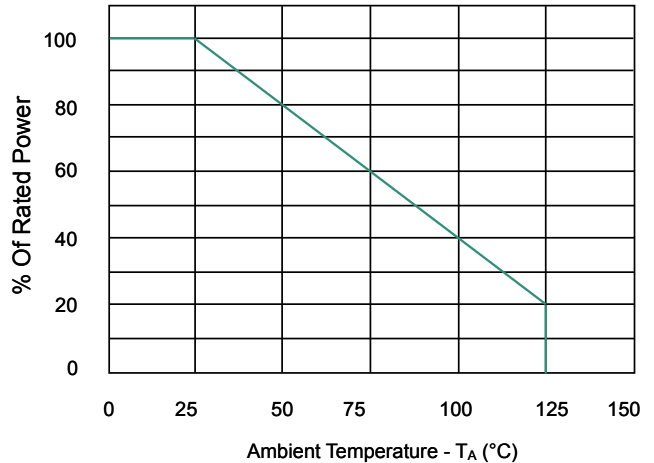


Fig2. Power Derating Curve

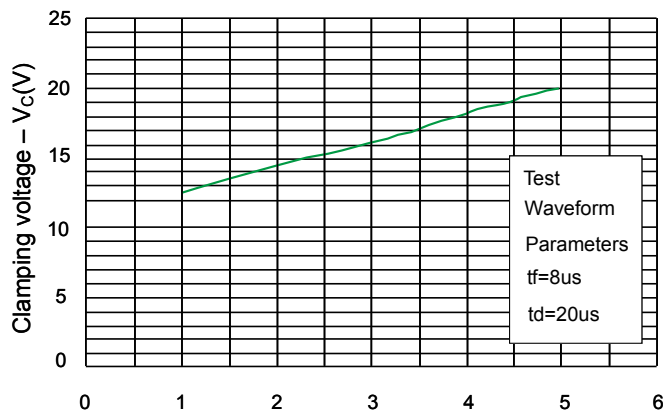


Fig 3.Clamping Voltage vs. peak Pulse Current  
(Pin 1 to Pin 2)

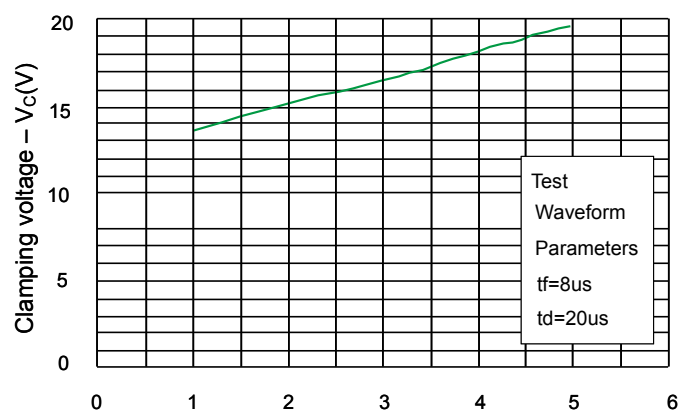


Fig.4 Clamping Voltage vs. peak Pulse Current  
(Pin 1 or Pin 2 to Pin 3)



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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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