



# THE DATASHEET OF ESDLC5V0T7-TP





Micro Commercial Components



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ESDLC5V0T7

5V Low Capacitance
ESD Protection
Device

Features

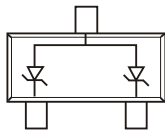
- Halogen free available upon request by adding suffix "-HF"
SOT-723 package
Low clamping voltage
Low leakage current
Working voltage: 5V
Protect up two data lines
110 watts peak pulse power(tp=8/20us)
Epoxy meets UL 94 V-0 flammability rating
Moisture Sensitivity Level 1

Maximum Ratings

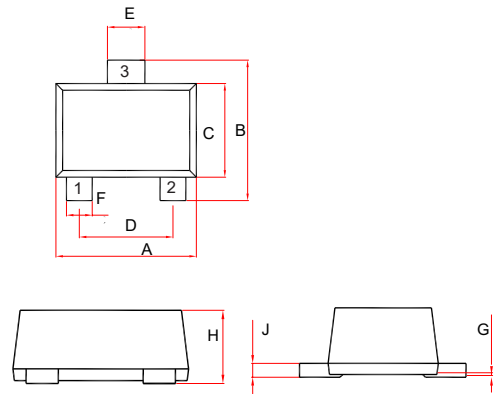
- Operating Junction & Storage Temperature: -55°C to +150°C

Table with 5 columns: Parameter, Symbol, Limits, unit. Rows include IEC61000-4-2(ESD) Air Contact, ESD Voltage per human body mode, Peak Pulse Power (tp=8/20µS), and Peak Pulse Current (tp=8/20µS).

Pin Configuration-Top View



SOT-723



DIMENSIONS table with columns for DIM, INCHES (MIN, MAX), MM (MIN, MAX), and NOTE. Rows A through J correspond to the dimensions in the drawing.

**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

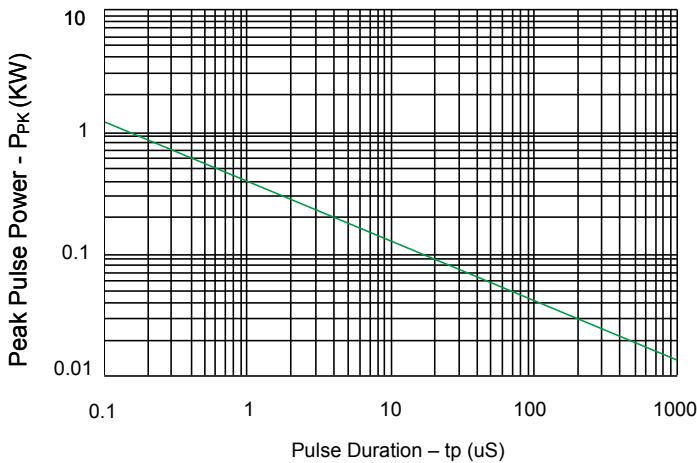


Fig1. Non-Repetitive Peak Pulse Power vs. Pulse time

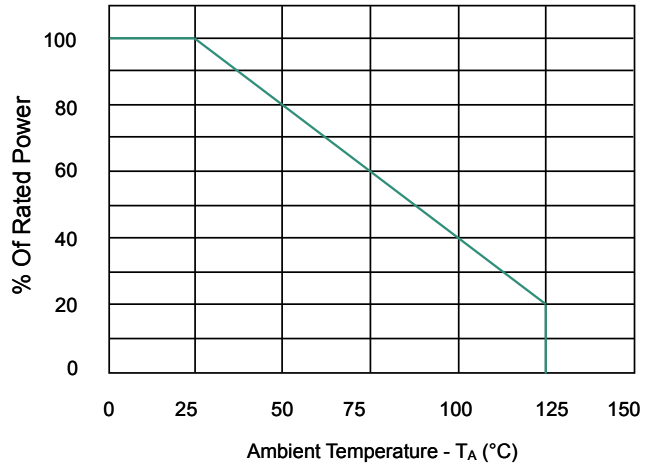


Fig2. Power Derating Curve

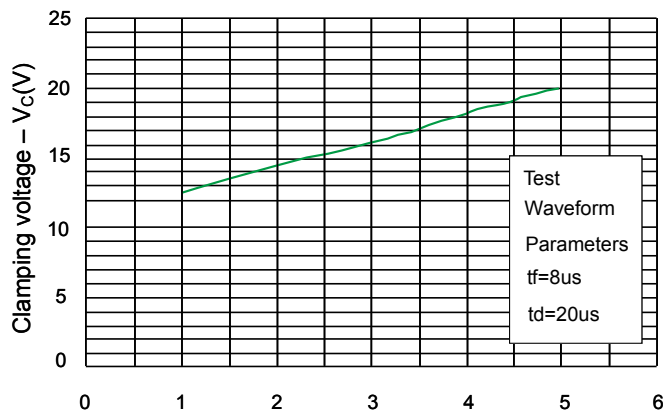


Fig 3. Clamping Voltage vs. peak Pulse Current  
(Pin 1 to Pin 2)

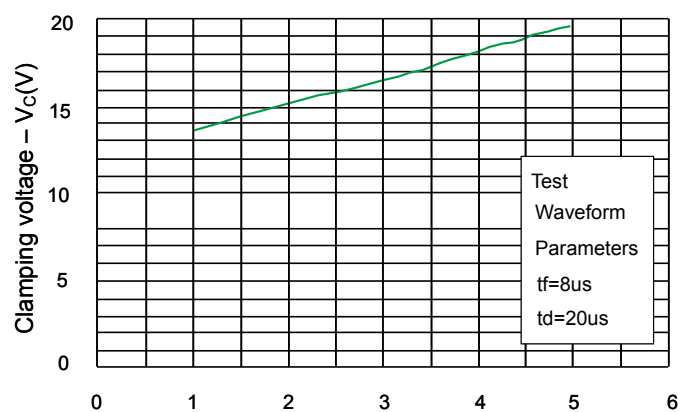


Fig 4. Clamping Voltage vs. peak Pulse Current  
(Pin 1 or Pin 2 to Pin 3)



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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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