



# THE DATASHEET OF ESDLC5V0DFN10-TP





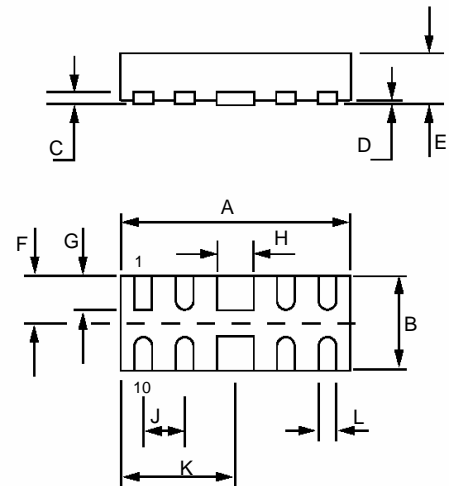
Micro Commercial Components

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# ESDLC5V0DFN10

## 5 Volts ESD Protection Device

### DFN-10



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.0094	0.102	2.40	2.60	
B	.035	.043	0.90	1.10	
C	.005		0.13		
D	.000	.002	0.00	0.05	
E	.020	.026	0.50	0.65	
F	.017	.022	0.45	0.55	
G	.012	.017	0.30	0.425	
H	.014	.018	0.35	0.45	
J	.020BSC		0.5BSC		
K	.047	.056	1.20	1.30	
L	.006	.010	0.15	0.25	

## Features

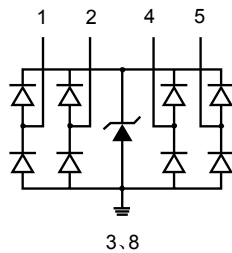
- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Small package saves board space
- Protects four(4) I/O lines
- Low clamping voltage
- 150W peak pulse power (tp=8/20us)
- Low capacitance
- Can handle multiple ESD strikes

## Maximum Ratings

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

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		±15 ±8	KV
IEC61000-4-5 (lightning): @ 8/20us		24	A
Peak Pulse Power: @ 8/20us	Ppp	150	W

## Pin Configuration



Pin	Identification
1,2,4,5	Input lines
6,7,9,10	Output Lines (No Internal Connection)
3,8	Ground

Electrical characteristics per line@25°C(unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse stand-off voltage	$V_{RWM}$				5	V
Reverse Breakdown voltage	$V_{BR}$	$I_t = 1\text{mA}$	6			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 5\text{V}$ $T=25^\circ\text{C}$			1	$\mu\text{A}$
Junction Capacitance	$C_j$	$V_R=0\text{V}$ $f = 1\text{MHz}$		0.5	0.9	pF
Clamping voltage	$V_C$	$I_{pp}=1\text{A}$			12.5	V
Clamping voltage	$V_C$	$I_{pp}=5\text{A}$			28.0	V

## Typical Characteristics

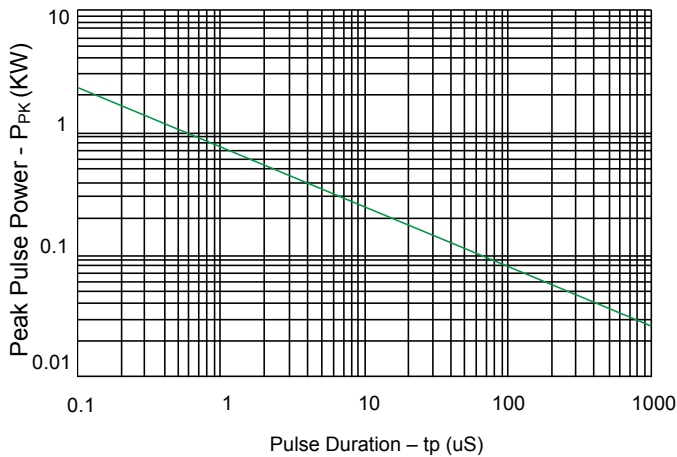


Fig1. Non-Repetitive Peak Pulse Power vs. Pulse time

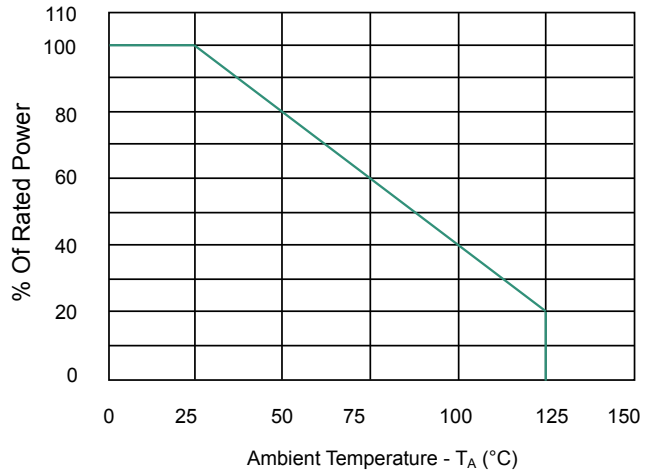


Fig2. Power Derating Curve

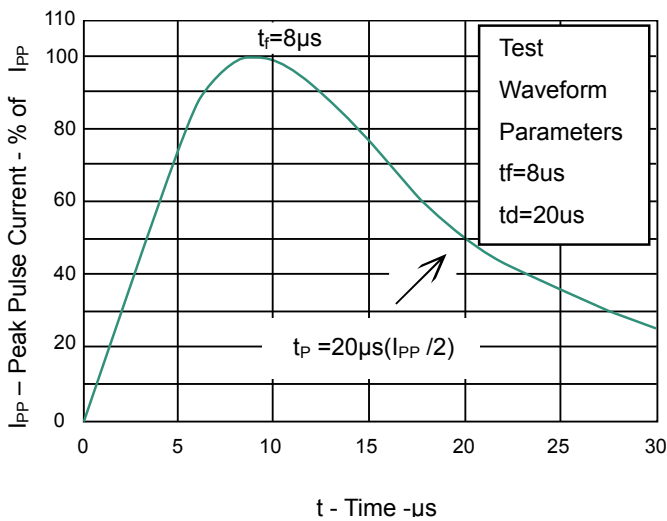


Fig 3. Pulse Waveform

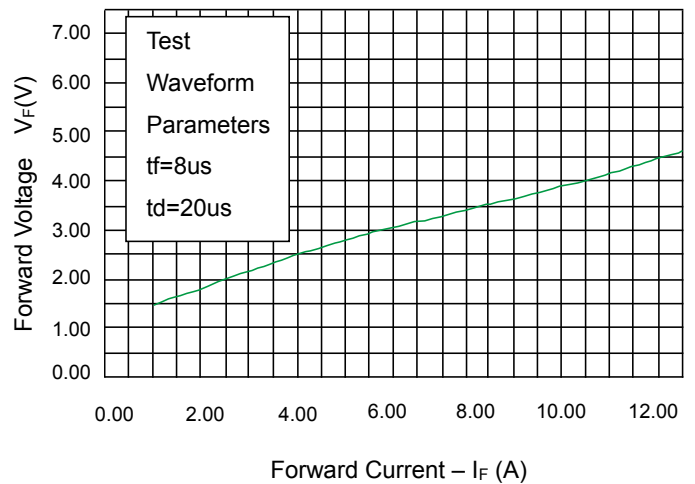


Fig.4 Forward Voltage vs. Forward Current



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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

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