

Features

- Small Package Saves Board Space
- Protects Four(4) I/O Lines
- Low Clamping Voltage
- Low Capacitance
- Can Handle Multiple ESD Strikes
- Halogen Free. "Green" Device (Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

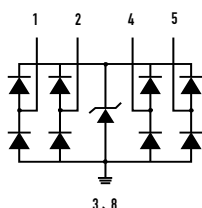
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESDLC0524DFN10	0524

IEC61000-4-2(ESD)	Air Contact	±15KV ±15KV
IEC61000-4-5(Surge)@8/20µs	I _{PP}	5A
Peak Pulse Power @ 8/20µs	P _{PP}	150W

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

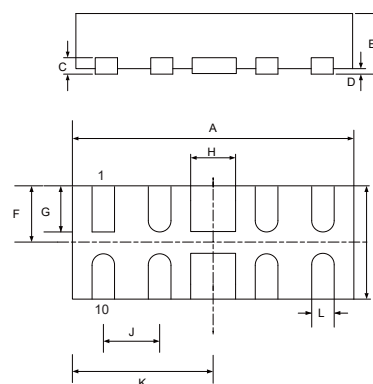
Pin Configuration



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

ESD Protection Device

DFN-10



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.094	0.102	2.40	2.60	
B	0.035	0.043	0.90	1.10	
C	0.005		0.13		TYP.
D	0.000	0.002	0.00	0.05	
E	0.020	0.026	0.50	0.65	
F	0.017	0.022	0.45	0.55	
G	0.012	0.017	0.30	0.425	
H	0.014	0.018	0.35	0.45	
J	.020		0.5		TYP.
K	0.047	0.056	1.20	1.30	
L	0.006	0.010	0.15	0.25	

Electrical Characteristics per line @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V_{RWM}	Any I/O Pin to GND			5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$, Any I/O Pin to GND	6.1		8.5	V
Reverse Leakage Current	I_R	$V_{RWM}=5V$, Any I/O Pin to GND			0.9	μA
Forward Voltage	V_F	$I_F=15mA$, GND to any I/O Pins			1.15	V
Clamping Voltage	V_C	$I_{PP}=1A$, $t_P=8/20\mu s$		9.5	11	V
Clamping Voltage	V_C	$I_{PP}=5A$, $t_P=8/20\mu s$		15	18	V
Junction Capacitance	$C_{I/O-GND}$ $C_{I/O-I/O}$	$V_R=0V$, $f=1MHz$			0.8 0.4	pF

Curve Characteristics

Fig. 1 - 8 X 20 μ s Pulse Waveform

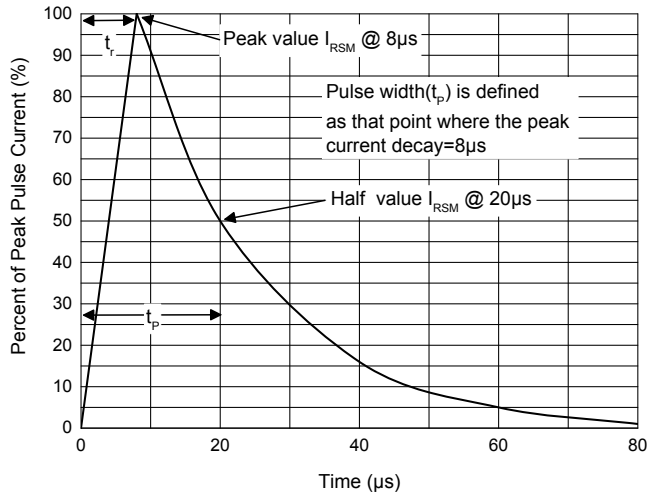


Fig. 2 - Pulse Derating Curve

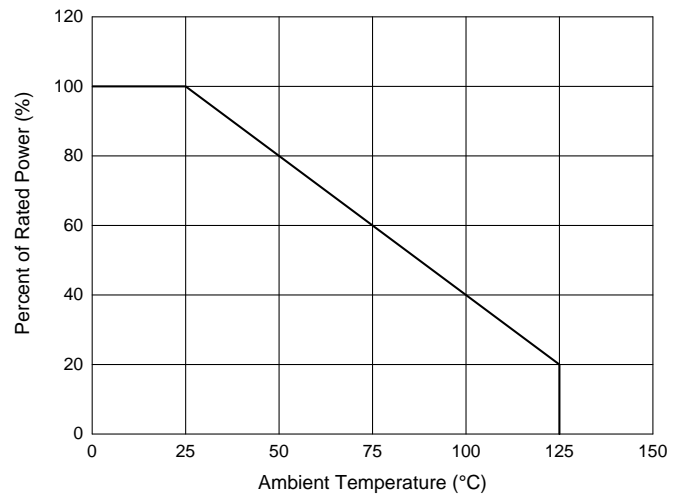


Fig. 3 - Capacitance Characteristics

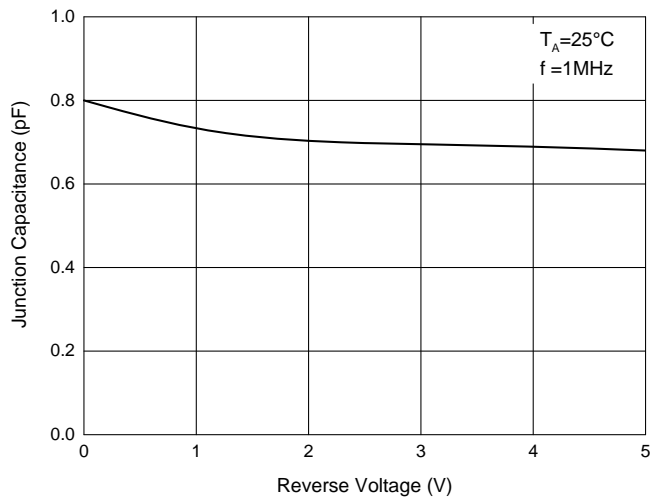
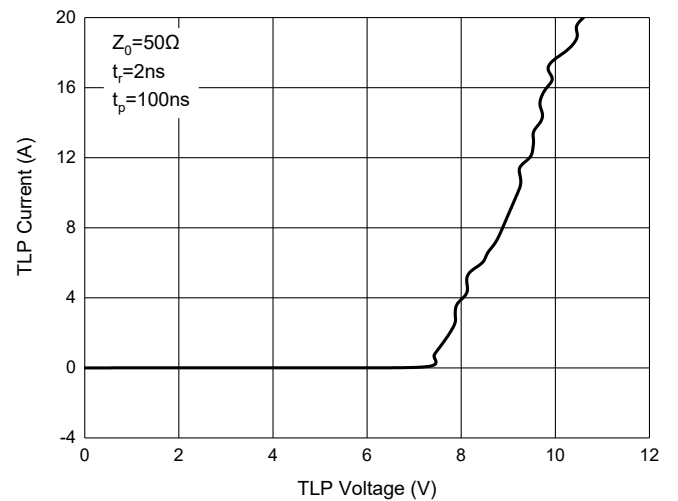


Fig. 4 - TLP Measurement (I/O-GND)



Ordering Information

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

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