

#### **Features**

- Protects Four(4) I/O Lines
- · Ultra Low Capacitance
- · Ultra Low Leakage
- · Low Clamping Voltage
- · Moisture Sensitivity Level 1
- · Epoxy Meets UL 94 V-0 Flammability Rating
- · Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C

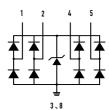
MCC Part Number	Device Marking		
ESDSLC0534DFN10	0534		

IEC61000-4-2(ESD)	Air Contact	±25KV ±20KV	
Peak Pulse Current(8/20µs)	I <sub>PP</sub>	3A	
Peak Pulse Power (8/20µs)	P <sub>PK</sub>	50W	

#### Note:

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

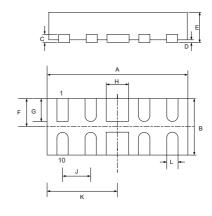
#### **Internal Structure**



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**



	DIMENSIONS				
DIM INCHES		MM		NOTE	
Dilvi	MIN	MAX	MIN	MAX	NOIL
Α	0.094	0.102	2.40	2.60	
В	0.035	0.043	0.90	1.10	
С	0.005		C 0.005 0.13		TYP.
D	0.000	0.002	0.00	0.05	
Е	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	
Н	0.014	0.018	0.35	0.45	
J	.020		.020 0.5		TYP.
K	0.047	0.056	1.20	1.30	
L	0.006	0.010	0.15	0.25	



# Electrical Characteristics @ 25°C (Unless Otherwise Specified)

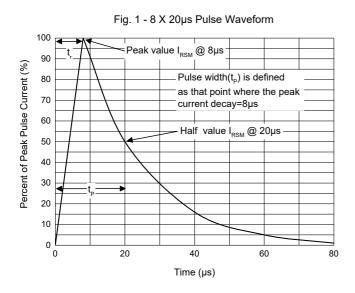
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Working Voltage	V <sub>RWM</sub>				5	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =5V			200	nA
Reverse Breakdown Voltage	$V_{BR}$	I <sub>T</sub> = 1mA	6	7.5	8.5	V
Clamping Voltage <sup>(Note 2)</sup>	V <sub>C</sub>	I <sub>PP</sub> =16A, t <sub>P</sub> =100ns		16.5		V
Dynamic Resistance <sup>(Note 2)</sup>	R <sub>DYN</sub>			0.68		Ω
Clamping Voltage <sup>(Note 3)</sup> V <sub>C</sub>	V	I <sub>PP</sub> =1A, t <sub>P</sub> =8/20μs			9	V
	I <sub>PP</sub> =3A, t <sub>P</sub> =8/20µs			15	V	
Junction Capacitance	C <sub>I/O-GND</sub>	V <sub>R</sub> =0V, f=1MHz		0.4	0.5	pF
	$C_{\text{I/O-I/O}}$	v <sub>R</sub> -0v, 1-1101112		0.2	0.25	pF

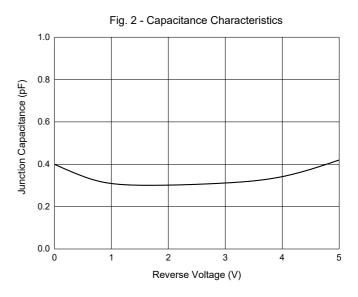
#### Note:

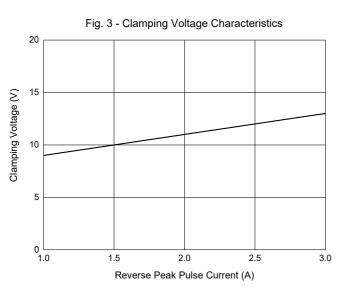
- 2. TLP Parameter:  $Z_0$ =50 $\Omega$ ,  $t_p$ =100ns,  $t_r$ =2ns, Averaging Window from 60ns to 80ns.  $R_{DYN}$  is Calculated from 4A to 16A.
- 3. Non-repetitive Current Pulse, According to IEC61000-4-5.

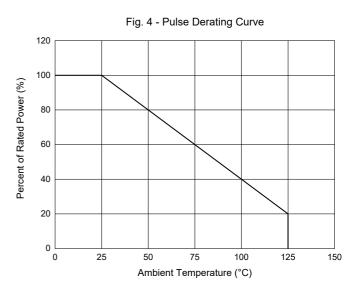


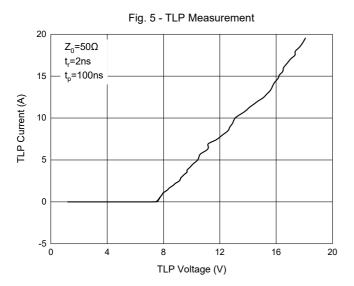
#### **Curve Characteristics**













# **Ordering Information**

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

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