

**Features**

- Low Operating Voltage
- Low Clamping Voltage
- Ultra Low Leakage: nA level
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

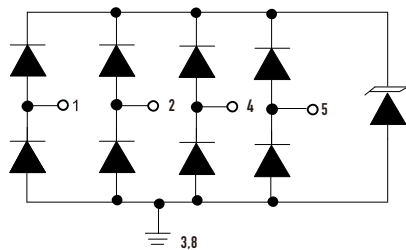
**Maximum Ratings**

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

MCC Part Number	Device Marking
ESDLC0544P5	0544

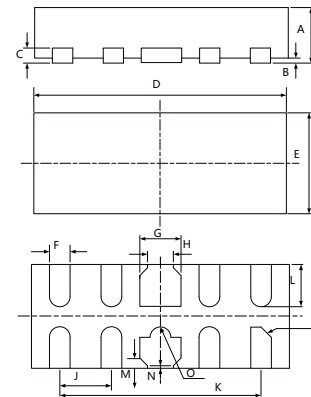
IEC61000-4-2(ESD)	Air Contact	±30KV ±25KV
IEC61000-4-4 (EFT) @5/50ns		40A
Peak Pulse Current(8/20µs)	I <sub>PP</sub>	4A
Peak Pulse Power (8/20µs)	P <sub>PK</sub>	100W

**Circuit and Pin Schematic**



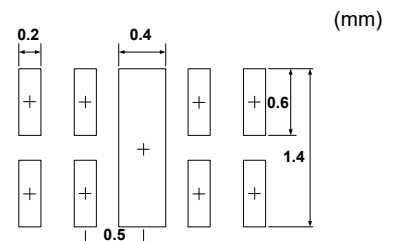
**ESD Protection Device**

**DFN2510-10**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.45	0.55	
B	0.000	0.002	0.00	0.05	
C	0.004	0.008	0.10	0.20	
D	0.098	0.102	2.45	2.55	
E	0.038	0.042	0.95	1.05	
F	0.006	0.010	0.15	0.25	
G	0.014	0.018	0.35	0.45	
H	0.008	0.012	0.20	0.30	
J	0.020		0.500		TYP.
K	0.080		2.000		TYP.
L	0.014	0.018	0.35	0.45	
M	0.003		0.075		TYP.
N	0.002		0.050		TYP.
O	0.002	0.006	0.05	0.15	

**SUGGESTED SOLDER PAD LAYOUT**



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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	$V_{RWM}$	$I_R < 1\mu A$ , Any I/O Pin to Ground			6	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1mA$ , Any I/O Pin to Ground	6			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 5V$ , Any I/O Pin to Ground			0.5	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 1A$ , $t_p = 8/20\mu s$ , Any I/O Pin to Ground		10		V
Clamping Voltage	$V_C$	$I_{PP} = 2A$ , $t_p = 8/20\mu s$ , Any I/O Pin to Ground		12		V
Clamping Voltage	$V_C$	$I_{PP} = 4A$ , $t_p = 8/20\mu s$ , Any I/O Pin to Ground		20	25	V
Junction Capacitance	$C_J$	$V_R = 0V$ , $f = 1MHz$ , Any I/O Pin to Ground		0.2	0.3	pF

## Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

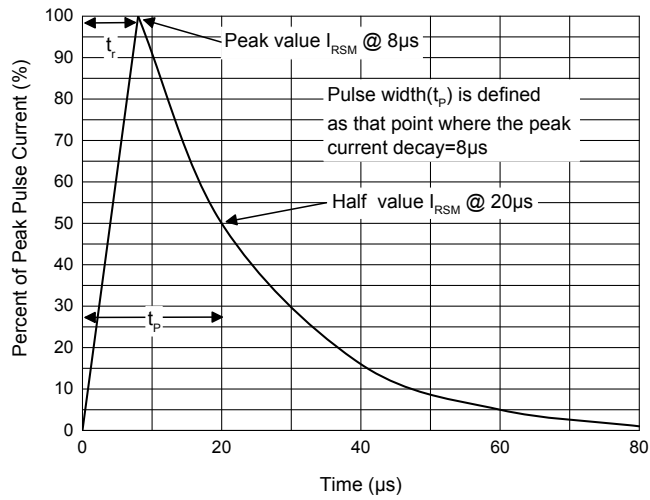


Fig. 2 - Pulse Derating Curve

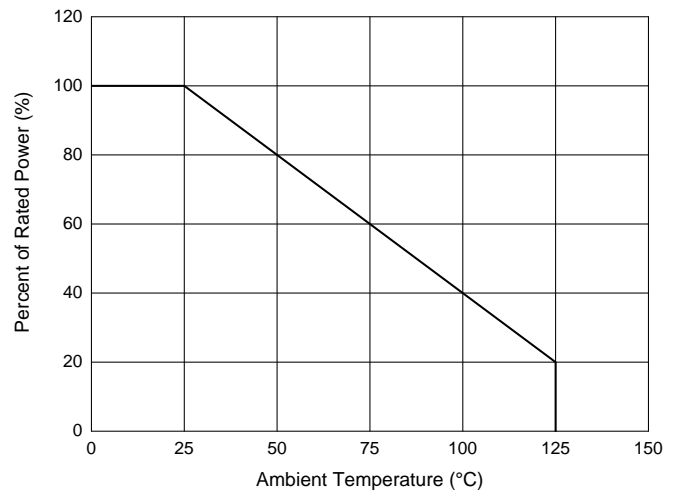


Fig. 3 - Capacitance Characteristics

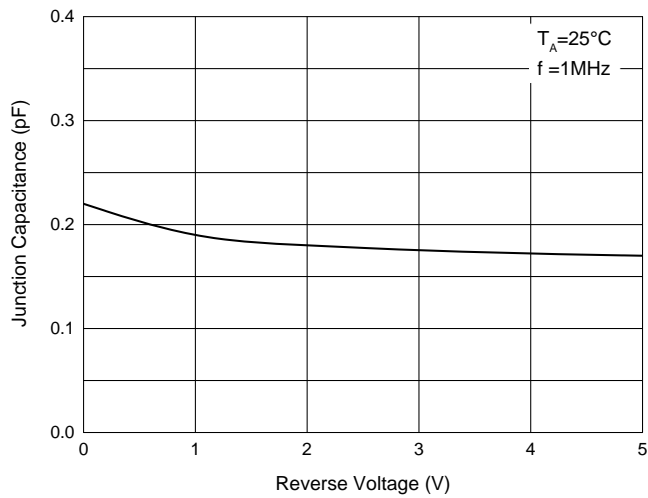
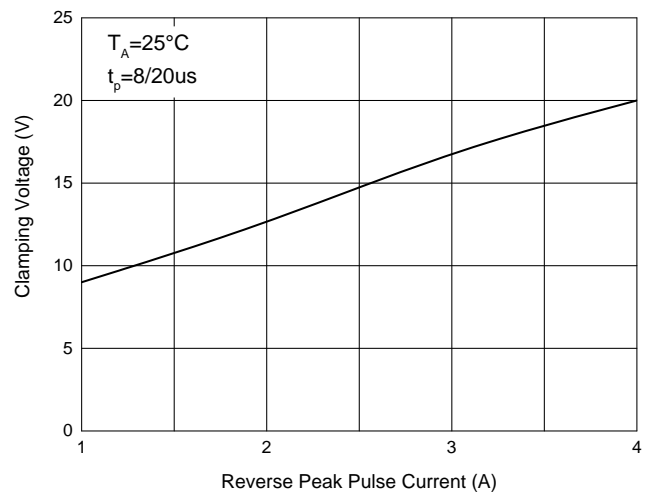


Fig. 4 - Clamping Voltage Characteristics



## 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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