

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. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

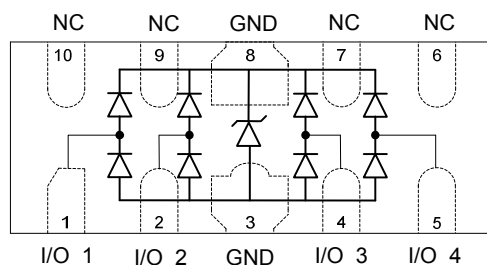
- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESDLC3304P5	3324

IEC61000-4-2(ESD)	Air Contact	±20KV ±20KV
IEC61000-4-4 (EFT) @5/50ns		40A
Peak Pulse Current(8/20µs)	I _{PP}	5A
Peak Pulse Power (8/20µs)	P _{PK}	50W

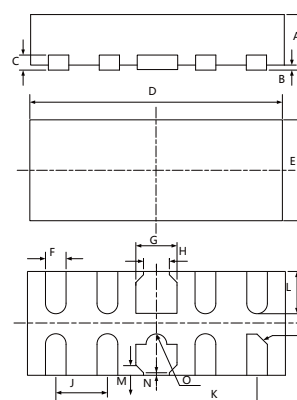
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Circuit and Pin Schematic



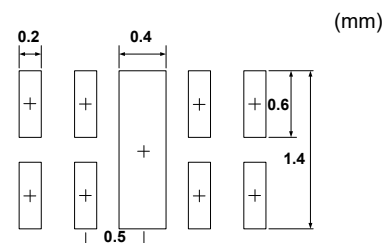
ESD Protection Device

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}	Any I/O Pin to Ground			3.3	V
Punch-Through Voltage	V_{PT}	$I_T=2\mu A$, Any I/O Pin to Ground	3.5			V
Snap-Back Voltage	V_{SB}	$I_T=50mA$, Any I/O Pin to Ground	2.8			V
Reverse Leakage Current	I_R	$V_{RWM}=3.3V$, Any I/O Pin to Ground			0.5	μA
Clamping Voltage	V_C	$I_{PP}=1A$, $t_P=8/20\mu s$, Any I/O Pin to Ground			6.5	V
Clamping Voltage	V_C	$I_{PP}=5A$, $t_P=8/20\mu s$, Any I/O Pin to Ground			10	V
Junction Capacitance	C_J	$V_R = 0V$, $f = 1MHz$, Between I/O Pins		0.6	0.8	pF

Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

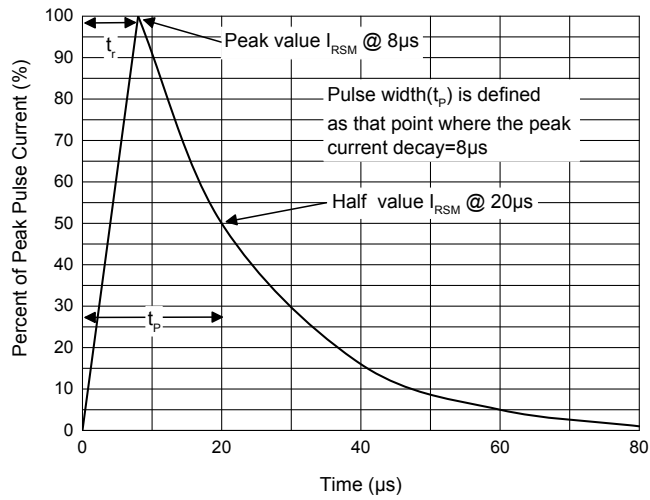


Fig. G - Pulse Derating Curve

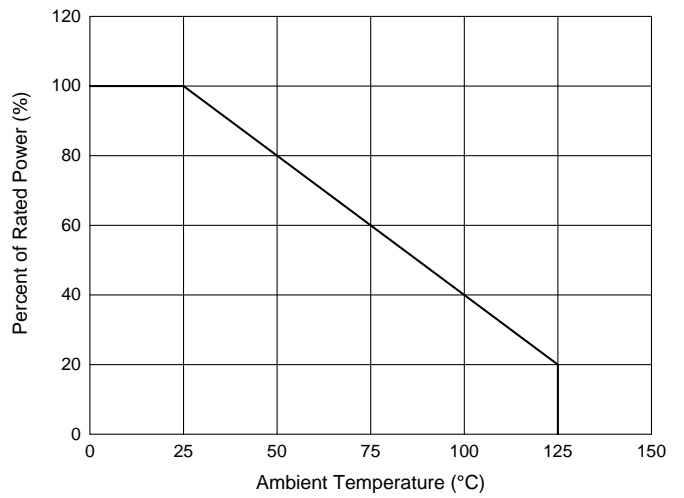


Fig. H - Capacitance Characteristics

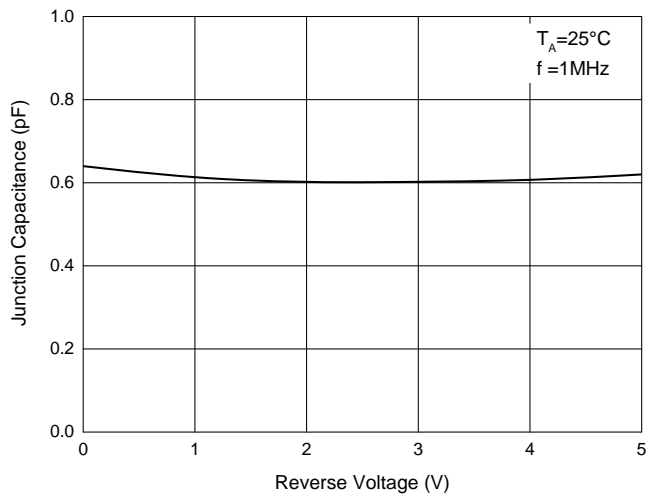
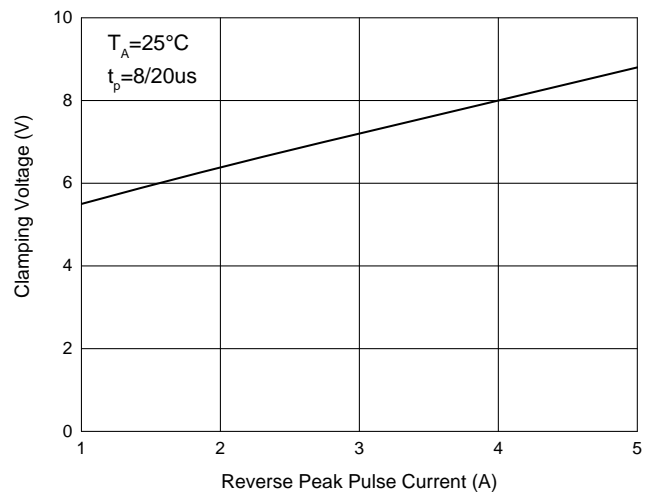


Fig. 4 - Clamping Voltage Characteristics



Ordering Information

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

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