

Features

- 4-Channel Uni-directional ESD Diode
- Ultra Low Leakage
- Ultra Low Capacitance
- Low Clamping Voltage
- Halogen Free. "Green" Device (Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

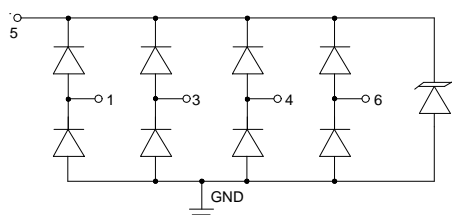
- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESDLC0524P3	524

IEC61000-4-2 (ESD)	Air Contact	±30KV ±30KV
IEC61000-4-4 (EFT) (5/50ns)		80A
Peak Pulse Current (8/20μs)	I _{PP}	17
Peak Pulse Power (8/20μs)	P _{PK}	230W

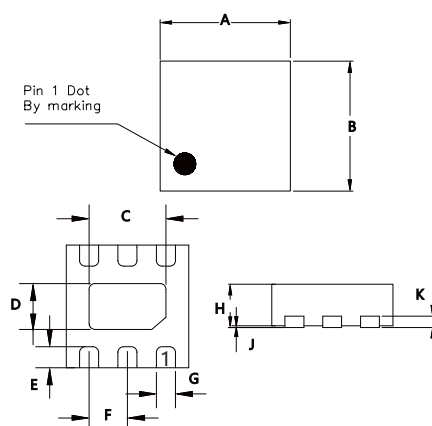
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



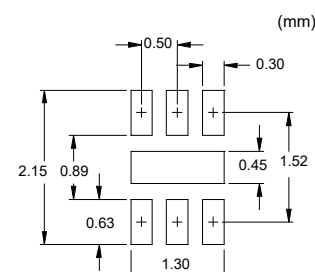
ESD Protection Device

DFN1616-6



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.061	0.065	1.55	1.65	
B	0.061	0.065	1.55	1.65	
C	0.035	0.051	0.90	1.30	
D	0.020	0.026	0.50	0.65	
E	0.008	0.016	0.20	0.40	
F	0.020		0.50		TYP.
G	0.008	0.012	0.20	0.30	
H	0.018	0.024	0.45	0.60	
J	0.000	0.002	0.00	0.05	
K	0.006		0.15		TYP.

SUGGESTED SOLDER PAD LAYOUT



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.5	7.5	9	V
Reverse Leakage Current	I_R	$V_{RWM}=5V$			0.1	μA
Clamping Voltage	V_C	$I_{PP}=1A, t_p=8/20\mu s$ (I/O-GND)			9.5	V
Clamping Voltage	V_C	$I_{PP}=7A, t_p=8/20\mu s$ (I/O-GND)			14	V
Clamping Voltage	V_C	$I_{PP}=17A, t_p=8/20\mu s$ (VCC-GND)			14	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$ (I/O to GND)		1.1	1.3	pF
Junction Capacitance	C_J	$V_R=0V, f=1MHz$ (I/O to I/O)		0.6	0.7	pF

Curve Characteristics

Fig. 1 - 8 X 20μs Pulse Waveform

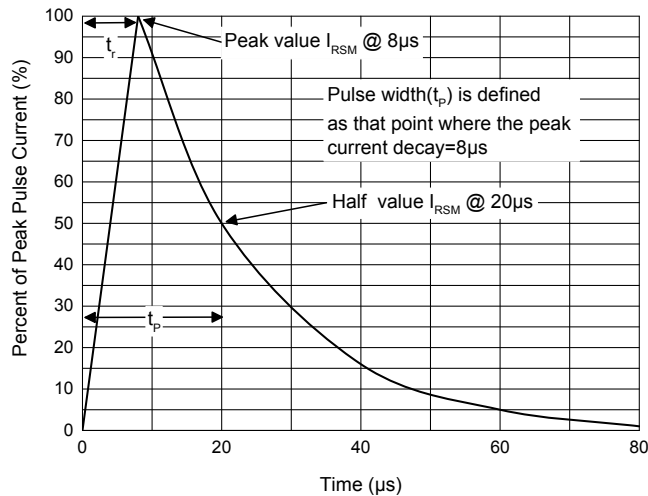


Fig. 2 - Clamping Voltage Characteristics

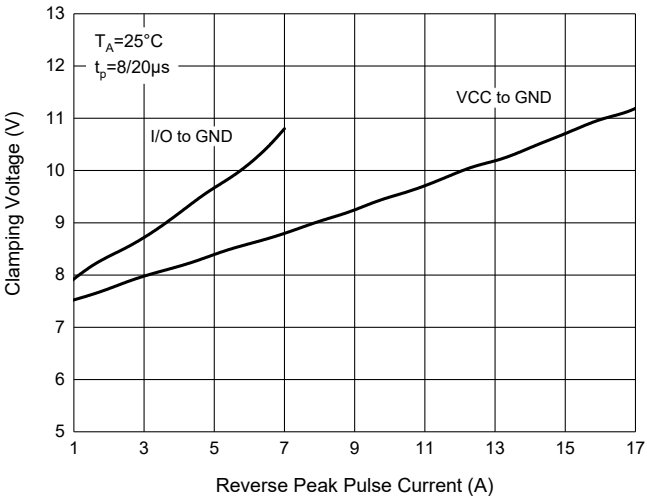


Fig. 3 - Capacitance Characteristics

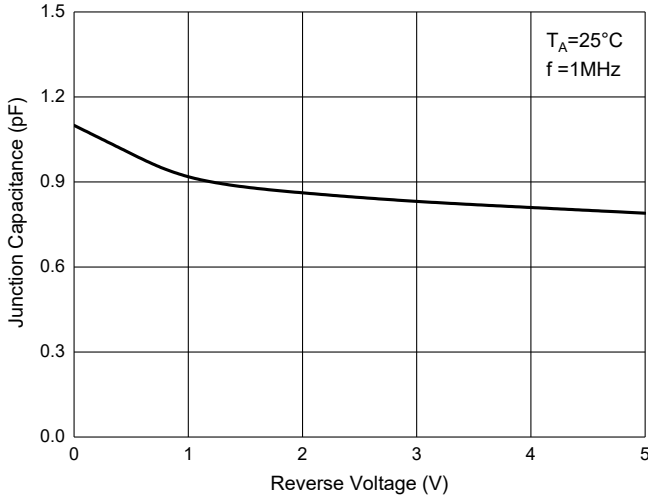
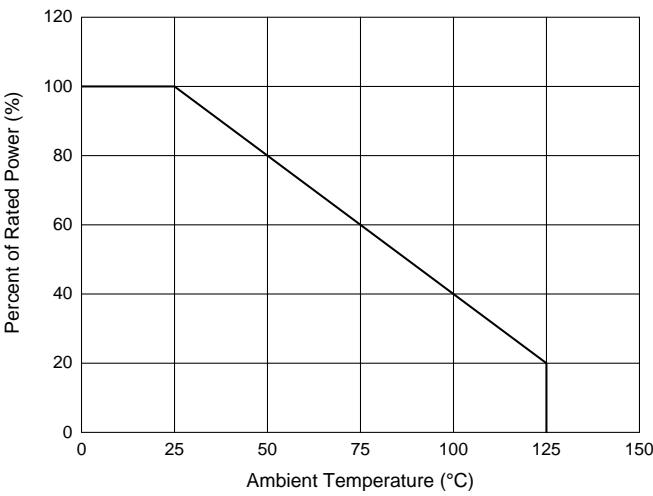


Fig. 4 - Pulse Derating Curve



Ordering Information

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

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