

**Features**

- Ultra Low Capacitance
- Low Operating Voltage
- 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**

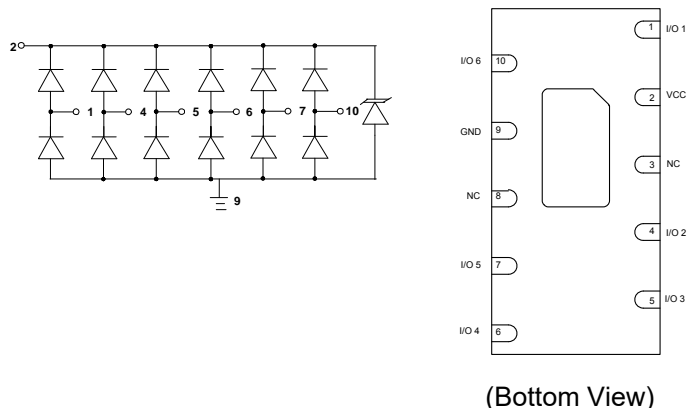
- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESDLC5V0PA6	0506

IEC61000-4-2(ESD)	Air Contact	±15KV ±8KV
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

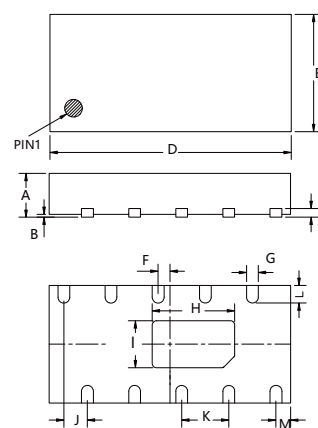
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

**Circuit and Pin Schematic**



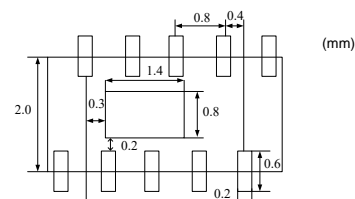
**ESD Protection Device**

**DFN4120-10**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.020	0.024	0.50	0.60	
B	0.000	0.002	0.00	0.05	
C	0.006		0.150		TYP.
D	0.162	0.166	4.05	4.15	
E	0.075	0.082	1.95	2.05	
F	0.008		0.200		TYP.
G	0.006	0.010	0.15	0.25	
H	0.050	0.060	1.25	1.50	
I	0.026	0.036	0.65	0.90	
J	0.016		0.40		TYP.
K	0.032		0.80		TYP.
L	0.008	0.016	0.20	0.40	
M	0.010		0.25		TYP.

**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			5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1\text{mA}$ , Any I/O Pin to Ground	6			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 5\text{V}$ , Any I/O Pin to Ground			0.5	$\mu\text{A}$
Clamping Voltage	$V_C$	$I_{PP} = 1\text{A}$ , $t_p = 8/20\mu\text{s}$ , Any I/O Pin to Ground			12	V
Clamping Voltage	$V_C$	$I_{PP} = 4\text{A}$ , $t_p = 8/20\mu\text{s}$ , Any I/O Pin to Ground			25	V
Junction Capacitance	$C_J$	$V_R = 0\text{V}$ , $f = 1\text{MHz}$ , Any I/O Pin to Ground		0.3	0.4	pF

**Curve Characteristics**

Fig. 1 - 8 X 20µs Pulse Waveform

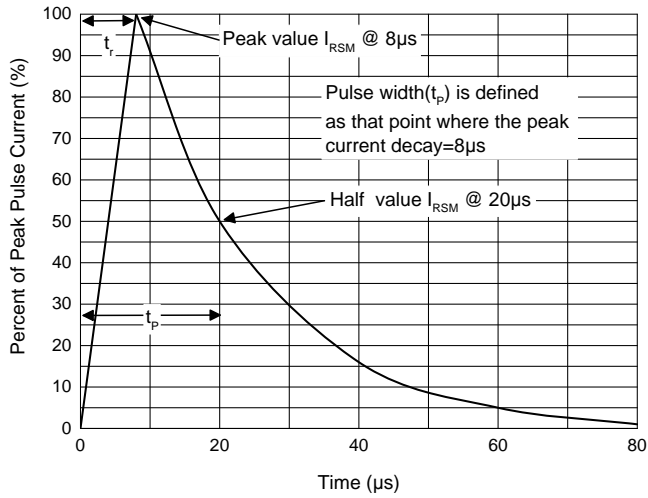


Fig. 2 - Pulse Derating Curve

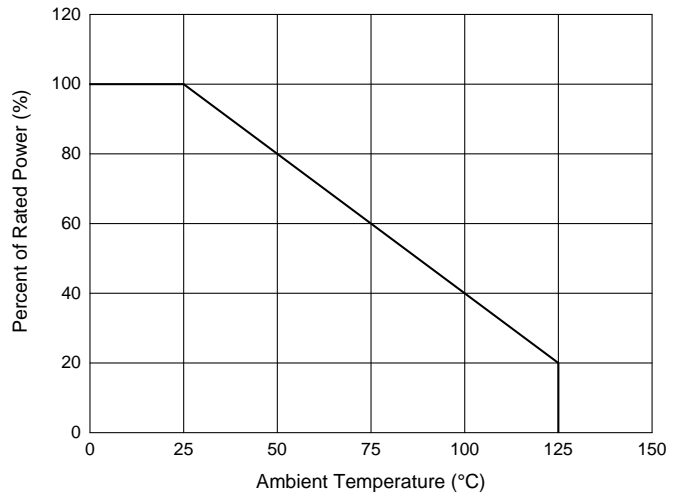


Fig. 3 - Capacitance Characteristics

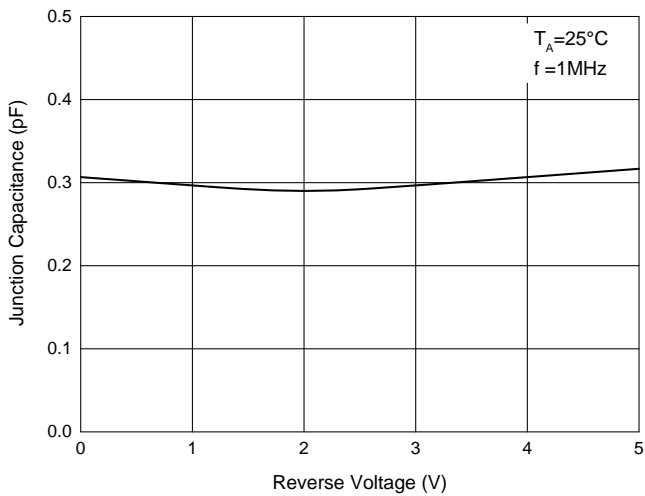
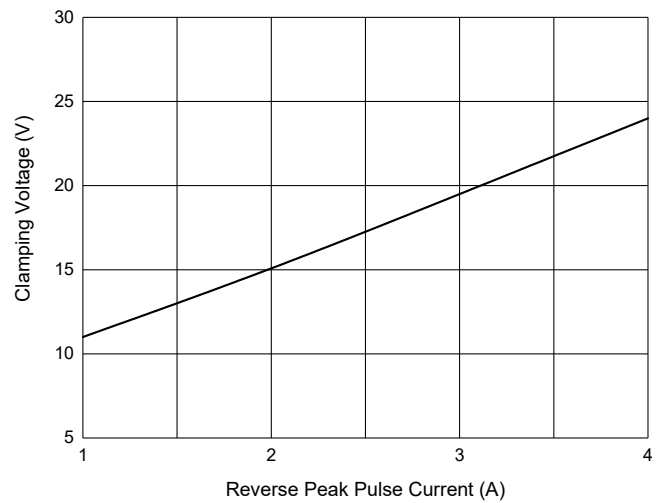


Fig. 4 - Clamping Voltage Characteristics



## Ordering Information

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

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