

**Features**

- 6-Pin Leadless Package
- Up to 2-Line Protects
- Low Clamping Voltage
- Low Operating 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**

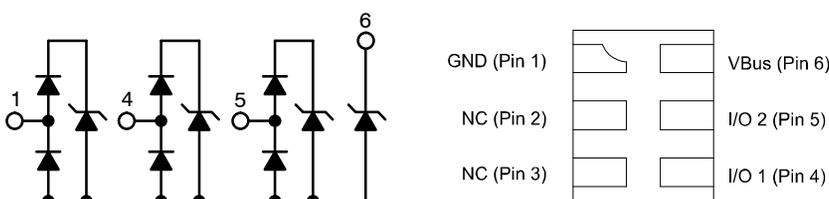
- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESDLC0502P2	52P

IEC61000-4-2(ESD)	Air Contact	±30KV ±25KV
IEC61000-4-4 (EFT) @5/50ns		40A
IEC61000-4-5(Surge) @8/20us	I <sub>PP</sub>	5A
Peak pulse power(tp=8/20us)	P <sub>PP</sub>	125W

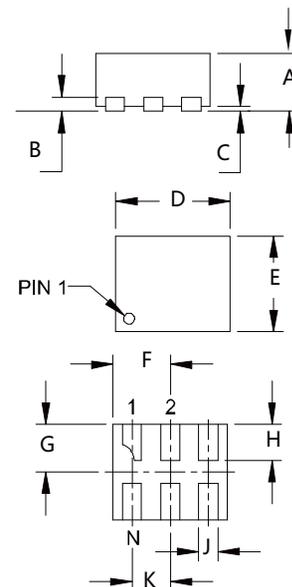
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

**Pin Schematic**



**ESD Protection Device**

**DFN1210-6**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.020	0.026	0.50	0.65	
B	0.005		0.13		TYP.
C	0.000	0.002	0.00	0.05	
D	0.043	0.051	1.10	1.30	
E	0.035	0.043	0.90	1.10	
F	0.022	0.026	0.55	0.65	
G	0.018	0.022	0.45	0.55	
H	0.012	0.017	0.30	0.425	
J	0.006	0.010	0.15	0.25	
K	0.16		0.40		TYP.

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1\text{mA}$	6			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 5\text{V}$			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			15	V
Clamping Voltage	$V_C$	$I_{PP}=5\text{A}$ , $t_p=8/20\mu\text{s}$ , 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	0.5	pF

## Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

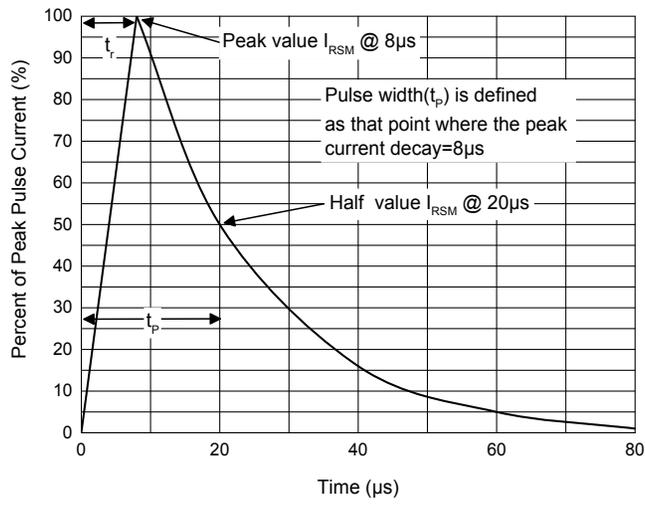


Fig. 2 - Pulse Derating Curve

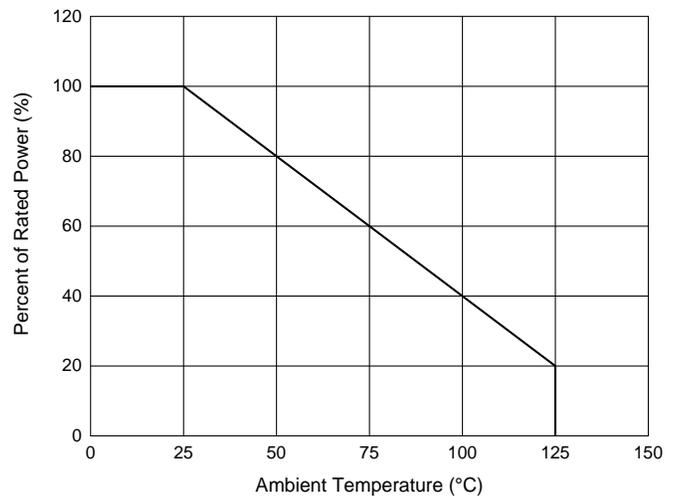


Fig. 3 - Capacitance Characteristics

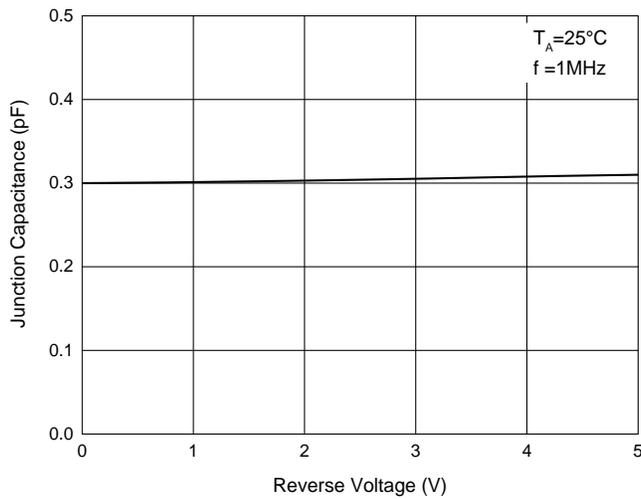
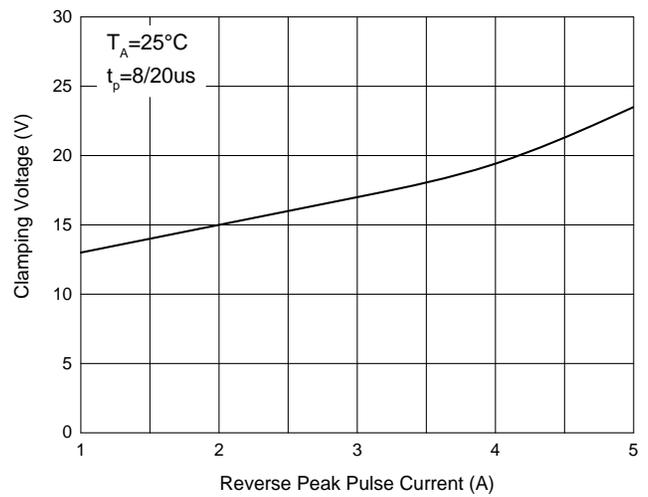


Fig. 4 - Clamping Voltage Characteristics



## Ordering Information

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

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