

**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**

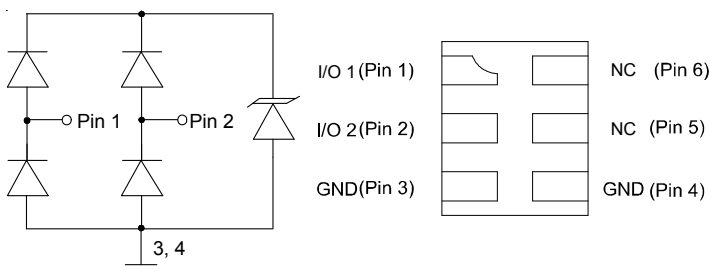
- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESDLC0502P6	0522P

IEC61000-4-2(ESD)	Air Contact	±25KV ±20KV
IEC61000-4-4 (EFT) @5/50ns		40A
Peak Pulse Current(8/20µs)	I <sub>PP</sub>	5A
Peak Pulse Power (8/20µs)	P <sub>PK</sub>	75W

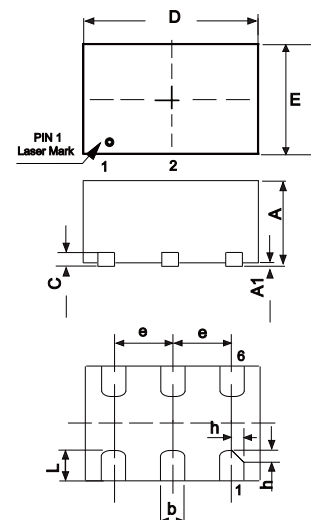
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

**Circuit and Pin Schematic**



**ESD Protection Device**

**DFN1610-6**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.028	0.032	0.70	0.80	
A1	0.000	0.002	0.00	0.05	
b	0.006	0.010	0.17	0.25	
c	0.006	0.010	0.15	0.25	
D	0.061	0.065	1.55	1.65	
E	0.035	0.043	0.90	1.10	
L	0.008	0.012	0.20	0.30	
e	0.020		0.50		TYP.
h	0.003	0.005	0.08	0.12	

**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			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 5V$			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	$V_C$	$I_{PP} = 5A, t_p = 8/20\mu s,$ Any I/O Pin to Ground			15	V
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz,$ Any I/O Pin to Ground			0.8	pF

## Curve Characteristics

Fig. 1 - 8 X 20 $\mu$ s Pulse Waveform

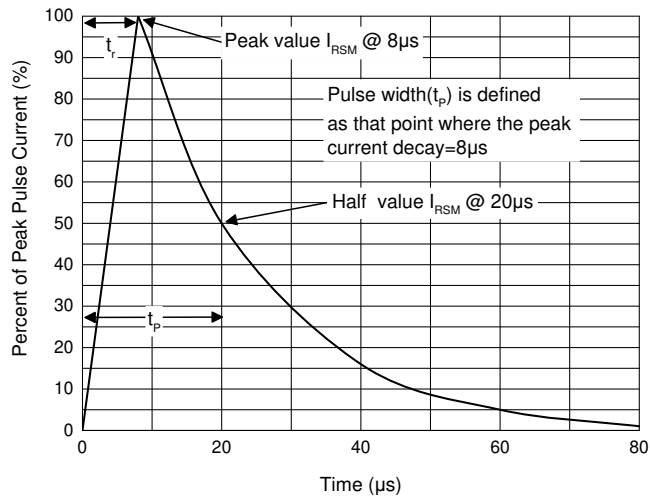


Fig. 2 - Pulse Derating Curve

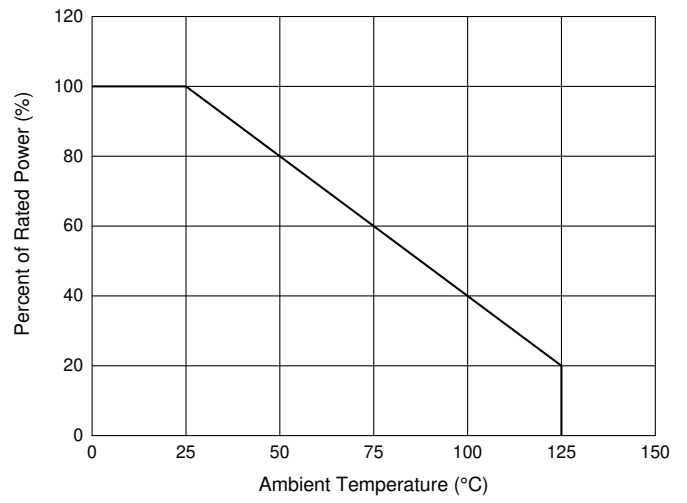


Fig. 3 - Capacitance Characteristics

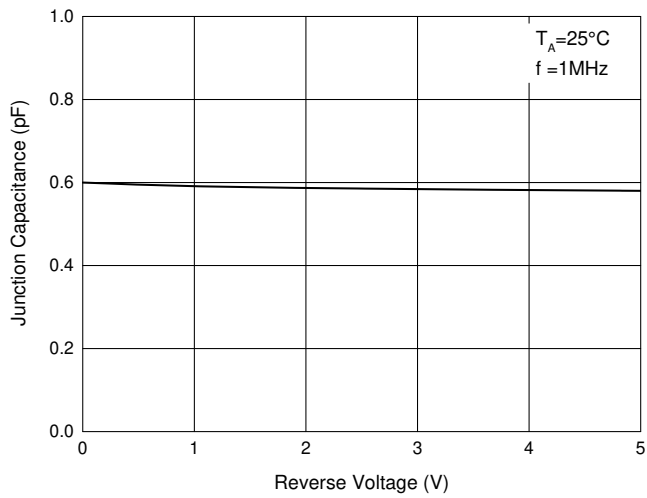
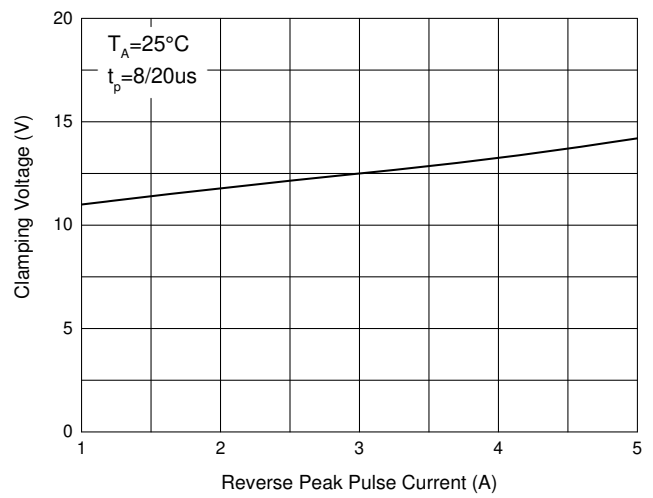


Fig. 4 - Clamping Voltage Characteristics



## Ordering Information

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

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