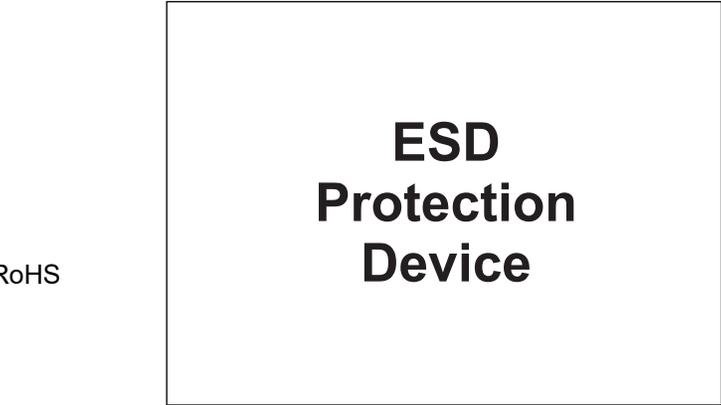


**Features**

- Bi-Directional ESD Protection
- Low Clamping Voltage
- Moisture Sensitivity Level 1
- 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 +150°C
- Storage Temperature Range: -55°C to +150°C

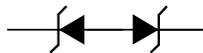


MCC Part Number	Device Marking
ESDLC5V0L2B	H1

IEC61000-4-2(ESD)	Air Contact	±30KV ±30KV
IEC61000-4-5(Surge) @8/20us	I <sub>PP</sub>	5A
Peak pulse power(tp=8/20us)	P <sub>PP</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.

**Internal Structure**



**DFN1006-2L**

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.037	0.041	0.95	1.05	
B	0.022	0.026	0.55	0.65	
C	0.016	0.020	0.40	0.50	
C1	-----	0.002	-----	0.05	
D	0.001	0.003	0.02	0.08	
E	0.026		0.65		TYP.
F	0.008	0.012	0.20	0.30	
G	0.018	0.022	0.45	0.55	

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1\text{mA}$	5.6			V
Reverse Leakage Current	$I_R$	$V_{RWM}=5\text{V}$			0.5	$\mu\text{A}$
Clamping Voltage <sup>(Note 2)</sup>	$V_C$	$I_{PP}=8\text{A}, t_p=100\text{ns}$		9		V
Clamping Voltage <sup>(Note 2)</sup>	$V_C$	$I_{PP}=16\text{A}, t_p=100\text{ns}$		10		V
Clamping Voltage	$V_C$	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$		7	9	V
Clamping Voltage	$V_C$	$I_{PP}=5\text{A}, t_p=8/20\mu\text{s}$			15	V
Junction Capacitance	$C_J$	$V_R=0\text{V}, f=1\text{MHz}$	8	10	15	pF

Note:

 2. TLP Parameter:  $Z_0=50\Omega$ ,  $t_p=100\text{ns}$ ,  $t_r=2\text{ns}$ , Averaging Window from 60ns to 80ns.  $R_{DYN}$  is Calculated from 4A to 16A.

### Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

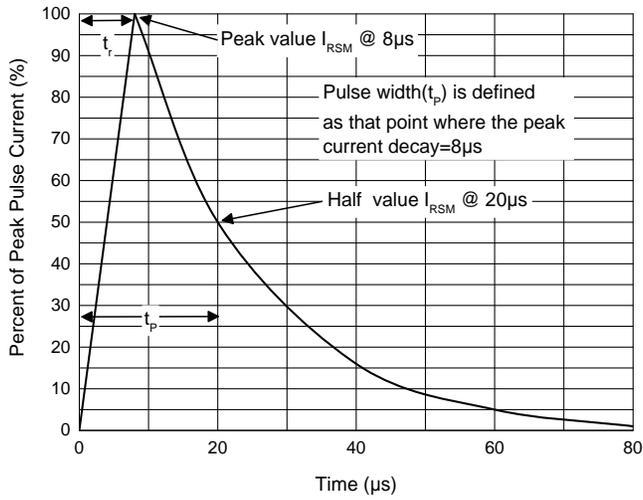


Fig. 2 - Pulse Derating Curve

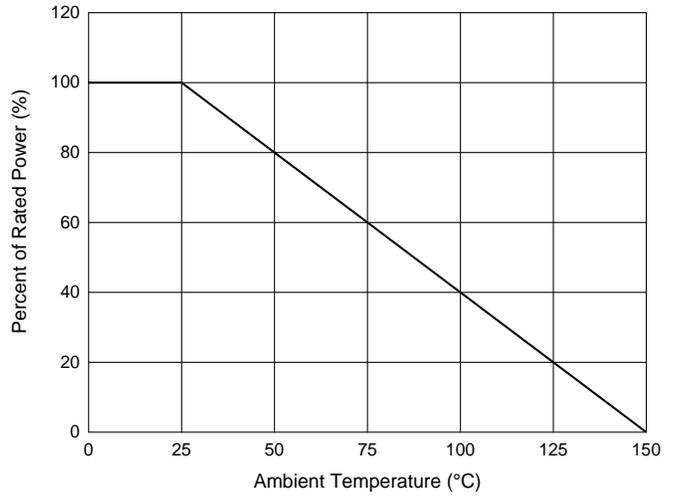
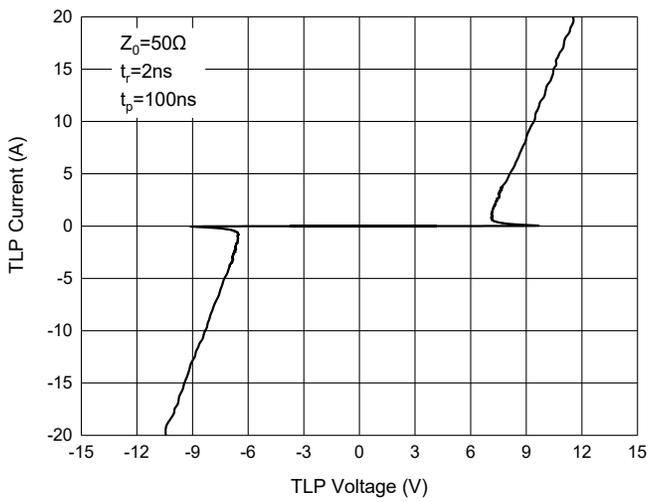


Fig. 3 - TLP Measurement



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

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