

#### **Features**

- · Chip Scale Package
- · Ultra Low Capacitance
- · Ultra Low Leakage
- 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		
CSPLC5V0LB	Н		

IEC61000-4-2(ESD)	Air Contact	±30KV ±30KV		
Peak Pulse Current(8/20µs)	I <sub>PP</sub>	18A		
Peak Pulse Power (8/20µs)	P <sub>PK</sub>	140W		

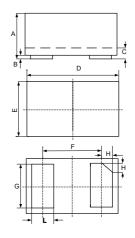
#### Note:

#### **Internal Structure**



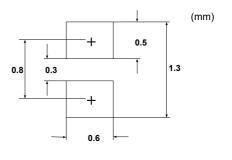
# ESD Protection Device

# CSP1006-2



DIMENSIONS					
DIM INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE
Α	0.018	0.022	0.45	0.55	
В	0.000	0.002	0.00	0.05	
С	0.005	0.007	0.12	0.18	
D	0.037	0.041	0.95	1.05	
Е	0.022	0.026	0.55	0.65	
F	0.0	)26	0.6	650	TYP.
G	0.018	0.022	0.45	0.55	
Н	0.003	0.007	0.07	0.17	
L	0.008	0.012	0.20	0.30	

#### SUGGESTED SOLDER PAD LAYOUT



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

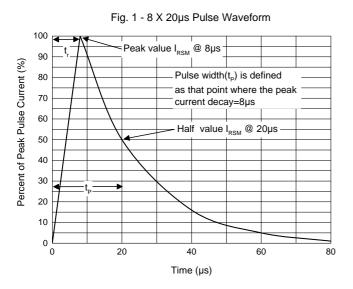


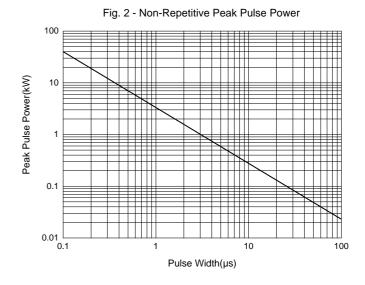
# Electrical Characteristics @ 25°C (Unless Otherwise Specified)

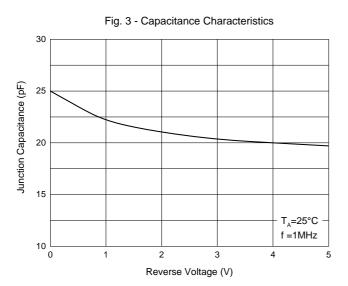
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Working Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	I <sub>T</sub> =1mA	6			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =5V			0.5	μA
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =1A, t <sub>P</sub> =8/20μs		6	9	V
Clamping Voltage	V <sub>C</sub>	$I_{PP}$ =18A, $t_{P}$ =8/20 $\mu$ s		7.5	9.5	V
Junction Capacitance	CJ	V <sub>R</sub> =0V, f=1MHz		25	30	pF

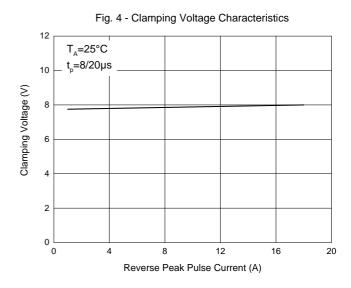


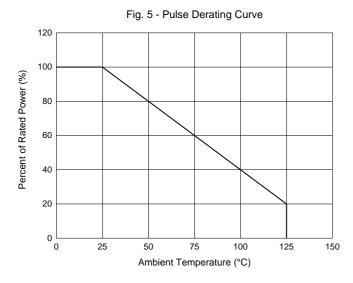
### **Curve Characteristics**

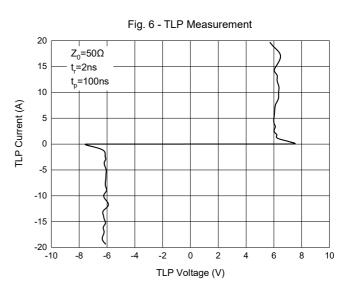














# **Ordering Information**

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

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