

#### **Features**

- · Chip Scale Package
- · Protects one Data or Power Line
- · Ultra Low Leakage
- Low Clamping Voltage
- · Halogen Free
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

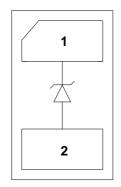
# **Maximum Ratings**

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

MCC Part Number	Device Marking		
CSP3V3L	3V		

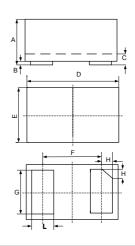
IEC61000-4-2(ESD)	Air Contact	±30KV ±30KV	
Peak Pulse Current(8/20μs)	I <sub>PP</sub>	65A	
Peak Pulse Power (8/20µs)	P <sub>PK</sub>	600W	

## **Circuit and Pin Schematic**



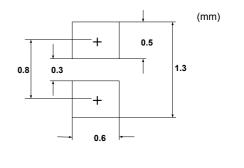
# ESD Protection Device

# CSP1006-2



DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	INOTE	
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	550	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



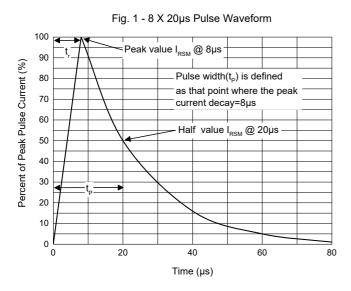


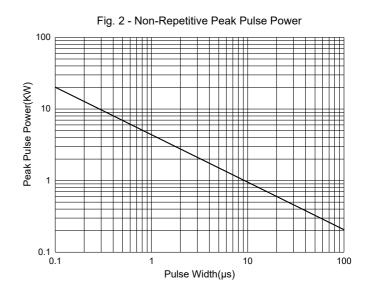
# Electrical Characteristics @ 25°C (Unless Otherwise Specified)

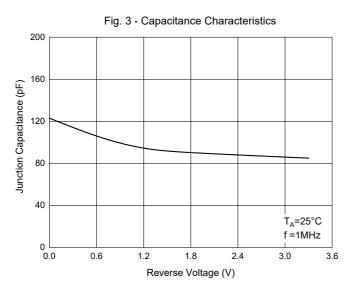
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Working Voltage	V <sub>RWM</sub>				3.3	V
Reverse Breakdown Voltage	$V_{BR}$	I <sub>T</sub> =1mA	3.6	4.2	5.5	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =3.3V			0.5	μA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	0.6	1.0	1.5	V
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =30A, t <sub>P</sub> =8/20μs		7.5	8.5	V
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =65A, t <sub>P</sub> =8/20μs		9	10.5	V
Junction Capacitance	CJ	V <sub>R</sub> =0V, f=1MHz		120	150	pF

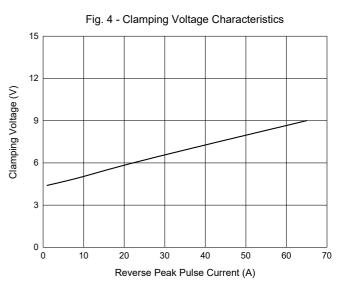


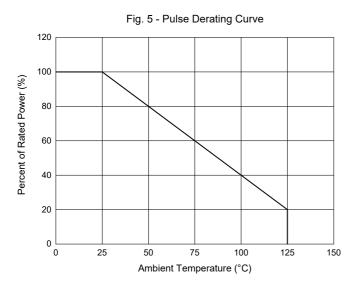
## **Curve Characteristics**













# **Ordering Information**

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

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