



Micro Commercial Components



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 130 W Cochran St, Unit B
 Simi Valley, CA 93065
 Tel:818-701-4933

ESDLC0554P3

ESD Protection Device

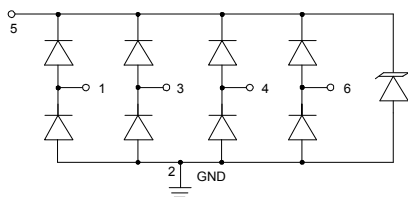
Features

- Operating voltage Voltage: 5.5 V
- Low clamping voltage
- IEC61000-4-5 (Lightning) 11A (8/20µs)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

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

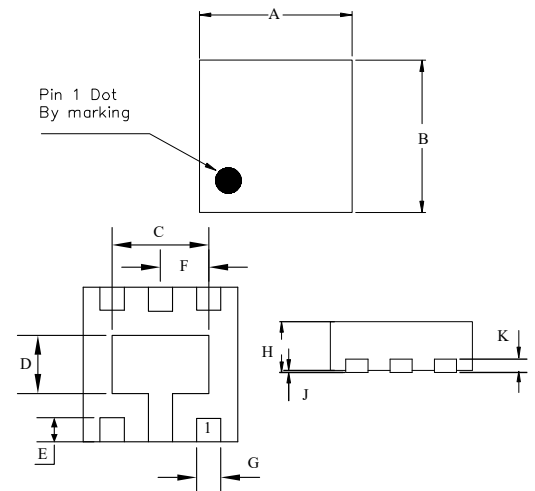
Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Contact Air	V_{ESD}	± 30 ± 30	KV
Peak Pulse Power (8/20µs)	Ppk	240	W
Peak Pulse Current (8/20µs)	IPP	11	A



Circuit Diagram

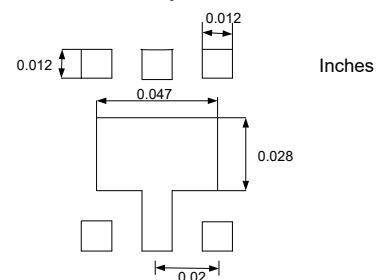
Marking: 55P

DFN1616-6L



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN		MIN		
A	0.061	0.065	1.55	1.65	
B	0.061	0.065	1.55	1.65	
C	0.034	0.043	0.85	1.10	
D	0.018	0.028	0.45	0.70	
E	0.008	0.012	0.20	0.30	
F	0.020 REF.		0.50 REF.		
G	0.008	0.012	0.20	0.30	
H	0.020	0.024	0.50	0.60	
J	0.000	0.002	0.00	0.05	
K	0.006 REF.		0.15 REF.		

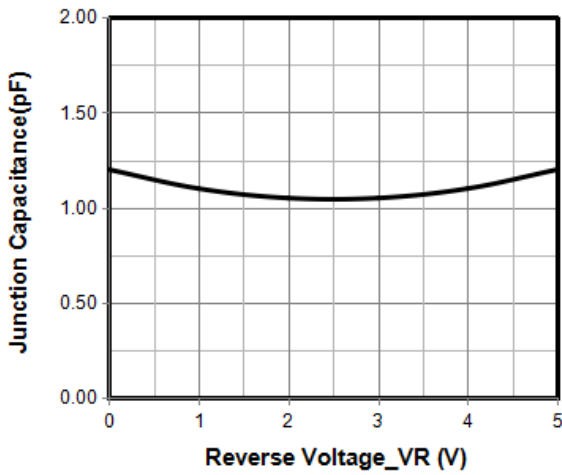
Suggested Solder Pad Layout



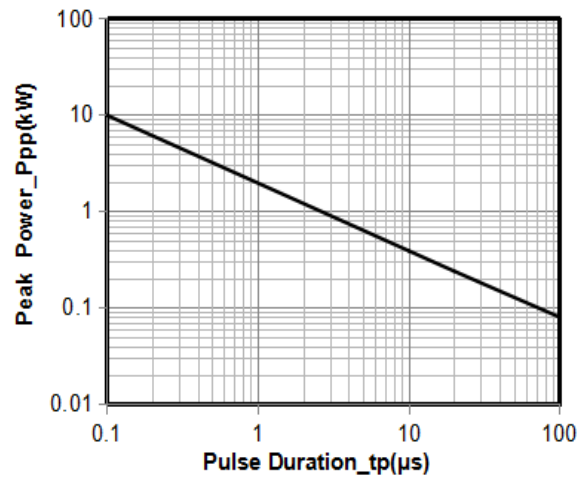
Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V_{RWM}			5.5	V	Pin 5 to ground
Breakdown Voltage	V_{BR}	6			V	$I_T = 1\text{mA}$, pin 5 to ground
Reverse Leakage Current	I_R			0.1	μA	$V_{RWM} = 5.5\text{V}$, pin 5 to ground
Clamping Voltage	V_C			10	V	$I_{PP} = 1\text{A}$ (8 x 20 μs pulse), any I/O pin to ground
Clamping Voltage	V_C			22	V	$I_{PP} = 11\text{A}$ (8 x 20 μs pulse), any I/O pin to ground
Junction Capacitance	C_J			2	pF	$V_R = 0\text{V}$, $f = 1\text{MHz}$, between I/O pins
Junction Capacitance	C_J			1	pF	$V_R = 0\text{V}$, $f = 1\text{MHz}$, any I/O pin to ground

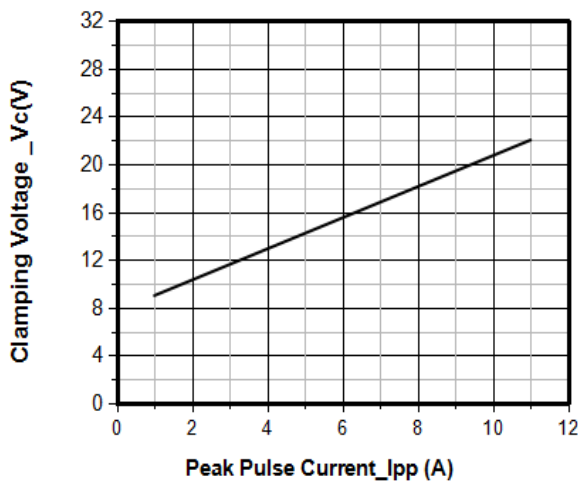
Typical Performance Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise Specified)



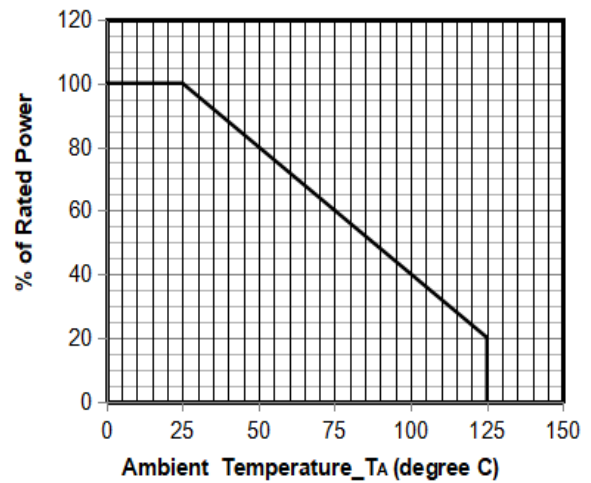
Junction Capacitance vs. Reverse Voltage



Peak Pulse Power vs. Pulse Time



Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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