



ESDLC0502P2

5 Volts ESD Protection Device

Features

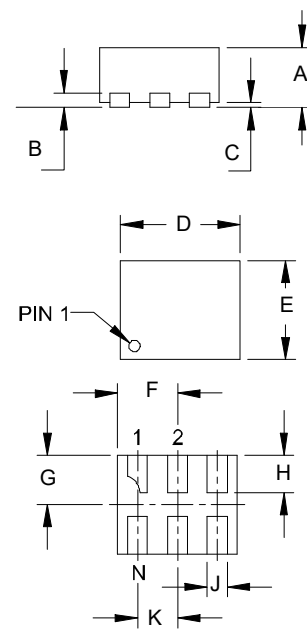
- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- 6-pin Leadless Package
- Up to 2-line protects
- Low Clamping Voltage
- Low Operating Voltage:5V

Maximum Ratings

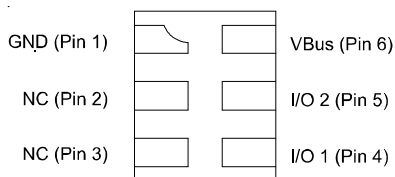
- Operating Junction Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C

| Parameter | Symbol | Limits | unit |
|------------------------------------|--------|------------|------|
| IEC61000-4-2(ESD) Air Contact | | ±30 ±25 | KV |
| IEC61000-4-4 (EFT): @ 5/50us | | 40 | A |
| IEC61000-4-5 (Lightning): @ 8/20us | | 5 | A |
| Peak Pulse Power: @ 8/20us | Ppp | 125 | W |

DFN1210-6



Pin Schematic



Marking Information

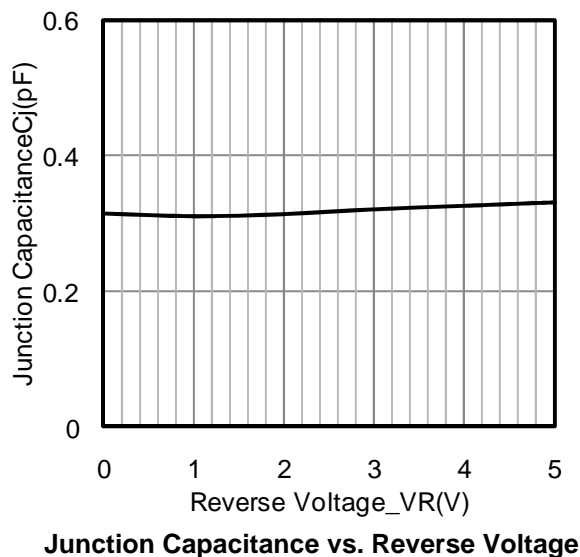


| DIM | INCHES | | MM | | NOTE |
|-----|---------|------|---------|-------|------|
| | MIN | MAX | MIN | MAX | |
| A | .020 | .026 | 0.50 | 0.65 | |
| B | .005 | | 0.13 | | |
| C | .000 | .002 | 0.00 | 0.05 | |
| D | .043 | .051 | 1.10 | 1.30 | |
| E | .035 | .043 | 0.90 | 1.10 | |
| F | .022 | .026 | 0.55 | 0.65 | |
| G | .018 | .022 | 0.45 | 0.55 | |
| H | .012 | .017 | 0.30 | 0.425 | |
| J | .006 | .010 | 0.15 | 0.25 | |
| K | 0.16BSC | | 0.40BSC | | |

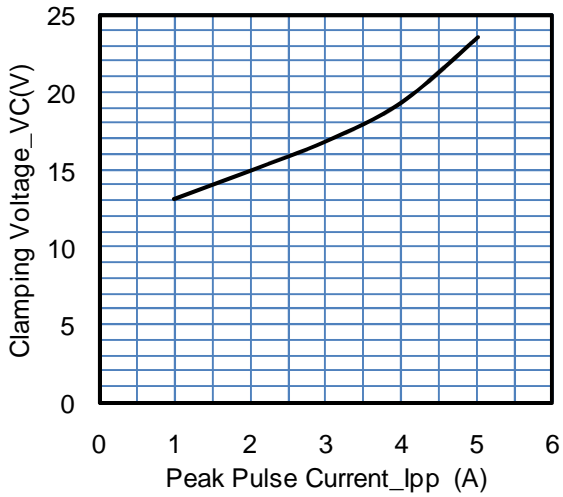
Electrical Characteristics (T_A=25°C unless otherwise specified)

| Parameter | Symbol | Min | Typ | Max | Unit | Test Condition |
|-------------------------|------------------|-----|-----|-----|------|--|
| Reverse Working Voltage | V _{RWM} | | | 5 | V | |
| Breakdown Voltage | V _{BR} | 6 | | | V | I _T = 1mA |
| Reverse Leakage Current | I _R | | | 0.5 | uA | V _{RWM} = 5V |
| Clamping Voltage | V _C | | | 15 | V | I _{PP} = 1A (8 x 20μs pulse), any I/O pin to ground |
| Clamping Voltage | V _C | | | 25 | V | I _{PP} = 5A (8 x 20μs pulse), any I/O pin to ground |
| Junction Capacitance | C _J | | 0.3 | 0.5 | pF | V _R = 0V, f = 1MHz, any I/O pin to ground |

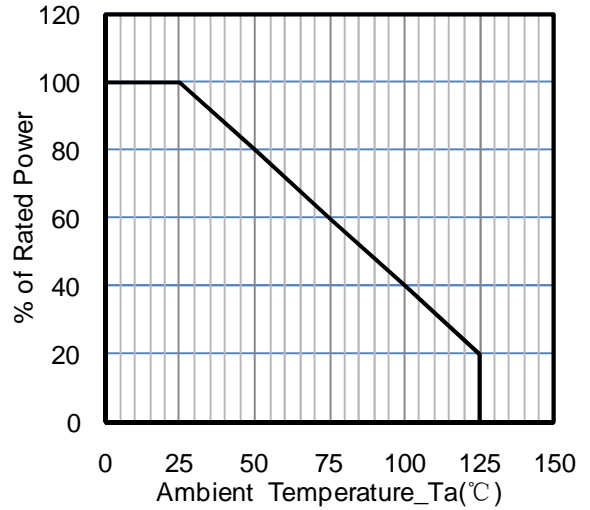
Typical Performance Characteristics (T_A=25°C unless otherwise Specified)



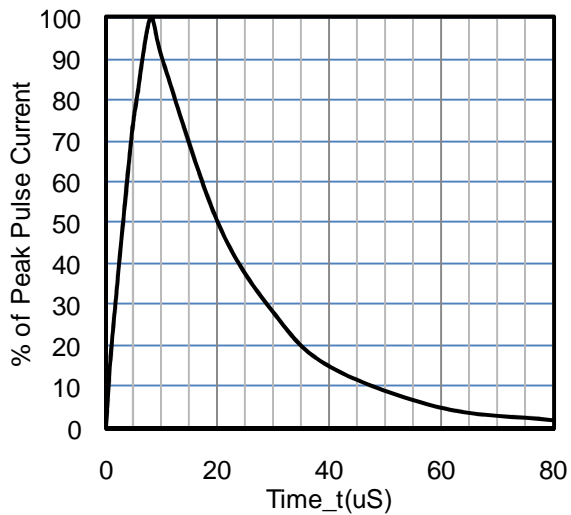
Typical Performance Characteristics (TA=25°C unless otherwise Specified)



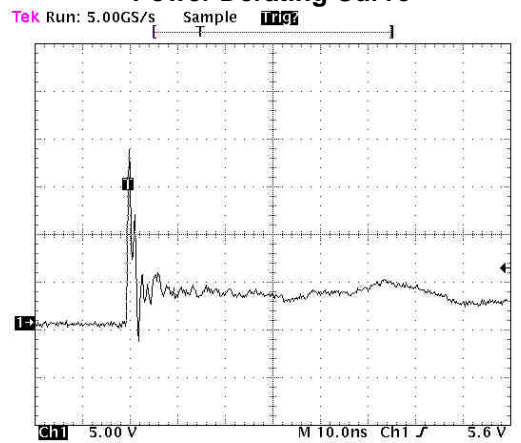
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



8 X 20us Pulse Waveform



ESD Clamping Voltage

8 kV Contact per IEC61000-4-2



Micro Commercial Components

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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