



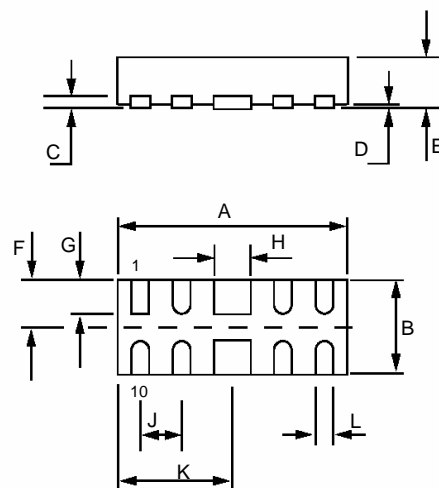
Micro Commercial Components

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ESDLC5V0DFN10

5 Volts ESD Protection Device

DFN-10



| DIMENSIONS | | | | | |
|------------|---------|-------|--------|-------|------|
| DIM | INCHES | | MM | | NOTE |
| | MIN | MAX | MIN | MAX | |
| A | .0094 | 0.102 | 2.40 | 2.60 | |
| B | .035 | .043 | 0.90 | 1.10 | |
| C | .005 | | 0.13 | | |
| D | .000 | .002 | 0.00 | 0.05 | |
| E | .020 | .026 | 0.50 | 0.65 | |
| F | .017 | .022 | 0.45 | 0.55 | |
| G | .012 | .017 | 0.30 | 0.425 | |
| H | .014 | .018 | 0.35 | 0.45 | |
| J | .020BSC | | 0.5BSC | | |
| K | .047 | .056 | 1.20 | 1.30 | |
| L | .006 | .010 | 0.15 | 0.25 | |

Features

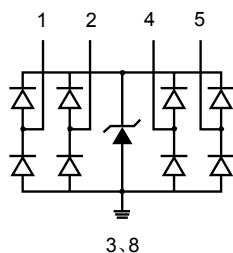
- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Small package saves board space
- Protects four(4) I/O lines
- Low clamping voltage
- 150W peak pulse power (tp=8/20us)
- Low capacitance
- Can handle multiple ESD strikes

Maximum Ratings

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

| Parameter | Symbol | Limits | unit |
|------------------------------------|--------|---------------------|------|
| IEC61000-4-2(ESD) Air Contact | | ± 15 ± 8 | KV |
| IEC61000-4-5 (lightning): @ 8/20us | | 24 | A |
| Peak Pulse Power: @ 8/20us | Ppp | 150 | W |

Pin Configuration



| Pin | Identification |
|----------|--|
| 1,2,4,5 | Input lines |
| 6,7,9,10 | Output Lines (No Internal Connection) |
| 3,8 | Ground |

Electrical characteristics per line@25°C(unless otherwise specified)

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Units |
|---------------------------|-----------|--------------------------------|------|------|------|---------|
| Reverse stand-off voltage | V_{RWM} | | | | 5 | V |
| Reverse Breakdown voltage | V_{BR} | $I_t = 1mA$ | 6 | | | V |
| Reverse Leakage Current | I_R | $V_{RWM} = 5V$ $T=25^{\circ}C$ | | | 1 | μA |
| Junction Capacitance | C_j | $V_R=0V$ $f = 1MHz$ | | 0.5 | 0.9 | pF |
| Clamping voltage | V_C | $I_{pp}=1A$ | | | 12.5 | V |
| Clamping voltage | V_C | $I_{pp}=5A$ | | | 28.0 | V |

Typical Characteristics

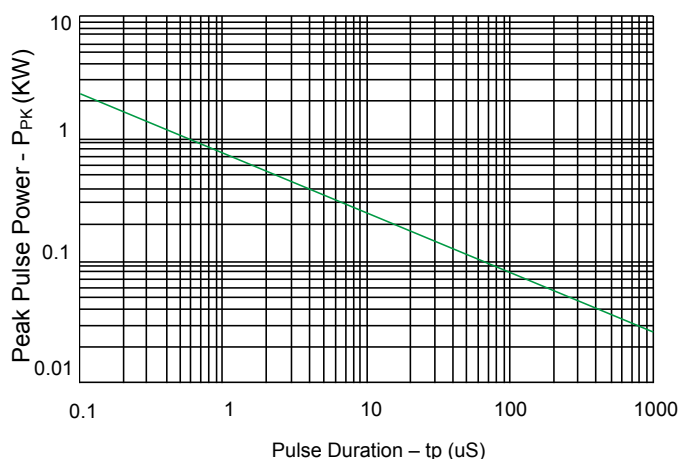


Fig1. Non-Repetitive Peak Pulse Power vs. Pulse time

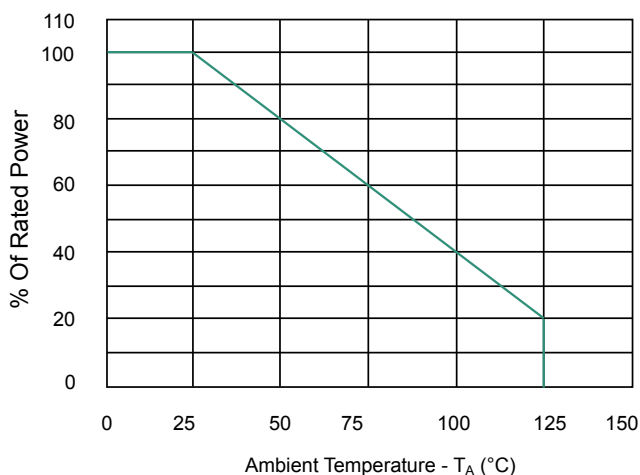


Fig2. Power Derating Curve

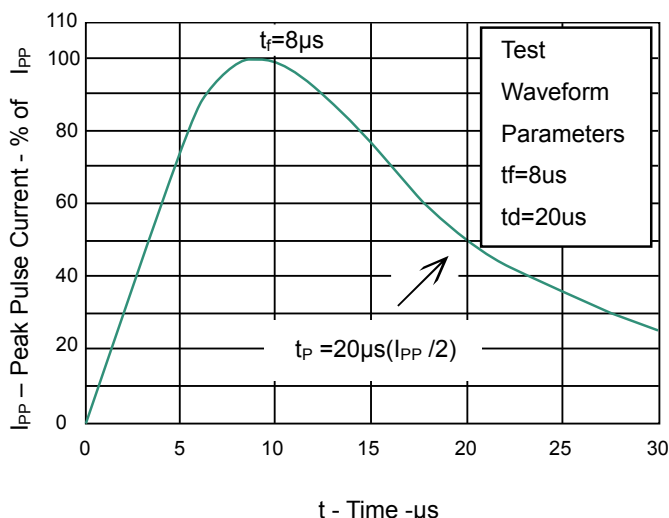


Fig 3. Pulse Waveform

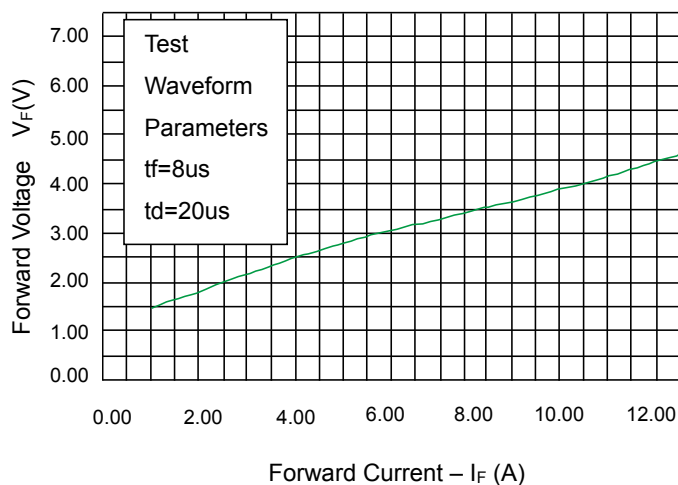


Fig.4 Forward Voltage vs. Forward Current



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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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