

Features

- Protects Up to 8 Lines
- Ultra Low Clamping Voltage
- Ultra Low Leakage
- Low Capacitance
- 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

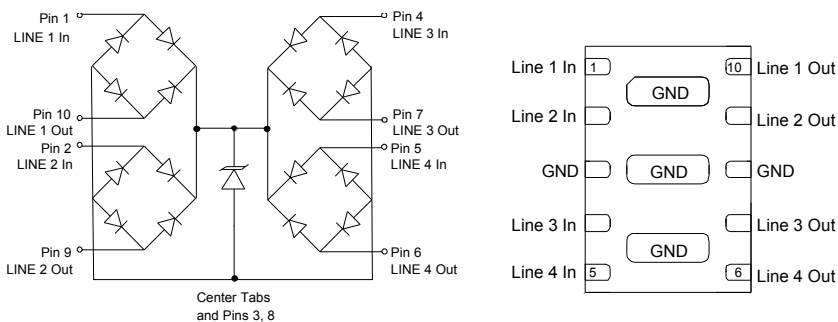
| MCC Part Number | Device Marking |
|-----------------|----------------|
| ESDLC3374P9 | 3374N |

| | | |
|----------------------------|-----------------|----------------|
| IEC61000-4-2(ESD) | Air Contact | ±30KV ±30KV |
| Peak Pulse Current(8/20µs) | I _{PP} | 40A |
| Peak Pulse Power (8/20µs) | P _{PK} | 1000W |

Note:

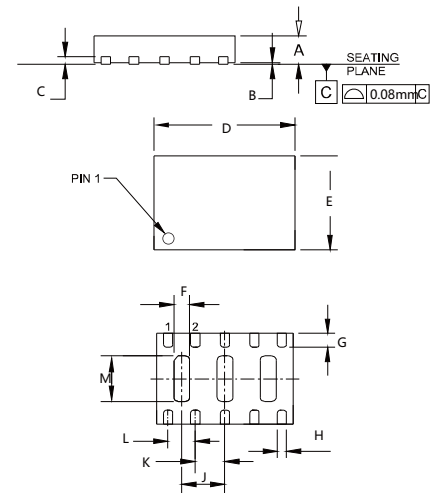
1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Circuit and Pin Schematic



ESD Protection Device

DFN3020-10



DIMENSIONS

| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | 0.020 | 0.026 | 0.50 | 0.65 | |
| B | 0.000 | 0.002 | 0.00 | 0.05 | |
| C | 0.006 | | 0.15 | | TYP. |
| D | 0.114 | 0.122 | 2.90 | 3.10 | |
| E | 0.075 | 0.083 | 1.90 | 2.10 | |
| F | 0.010 | 0.018 | 0.25 | 0.45 | |
| G | 0.010 | 0.014 | 0.25 | 0.35 | |
| H | 0.006 | 0.010 | 0.15 | 0.25 | |
| J | 0.037 | | 0.95 | | TYP. |
| K | 0.020 | | 0.65 | | TYP. |
| L | 0.024 | | 0.60 | | TYP. |
| M | 0.037 | 0.041 | 0.95 | 1.05 | |

Electrical Characteristics @ 25°C (Unless Otherwise Specified)

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Units |
|-------------------------|-----------|---|------|------|------|---------|
| Reverse Working Voltage | V_{RWM} | | | | 3.3 | V |
| Punch-Through Voltage | V_{PT} | $I_T=2\mu A$ | 3.5 | | | V |
| Snap-Back Voltage | V_{SB} | $I_{SB}=50mA$ | 2.8 | | | V |
| Reverse Leakage Current | I_R | $V_{RWM}=3.3V$ | | | 0.5 | μA |
| Clamping Voltage | V_C | $I_{PP}=1A, t_p=8/20\mu s,$ Any I/O Pin to Ground | | | 5.5 | V |
| Clamping Voltage | V_C | $I_{PP}=10A, t_p=8/20\mu s,$ Any I/O Pin to Ground | | | 10.5 | V |
| Clamping Voltage | V_C | $I_{PP}=25A, t_p=8/20\mu s,$ Any I/O Pin to Ground | | | 18 | V |
| Clamping Voltage | V_C | $I_{PP}=40A, t_p=8/20\mu s,$ Line to Line (Two I/O Pins Connected Together on Each Line) | | | 25 | V |
| Junction Capacitance | C_J | $V_R=0V, f=1MHz,$ Between I/O Pins | | 1.7 | 2.5 | pF |
| Junction Capacitance | C_J | $V_R=0V, f=1MHz,$ Any I/O Pin to Ground | | 3.8 | 5 | pF |

Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

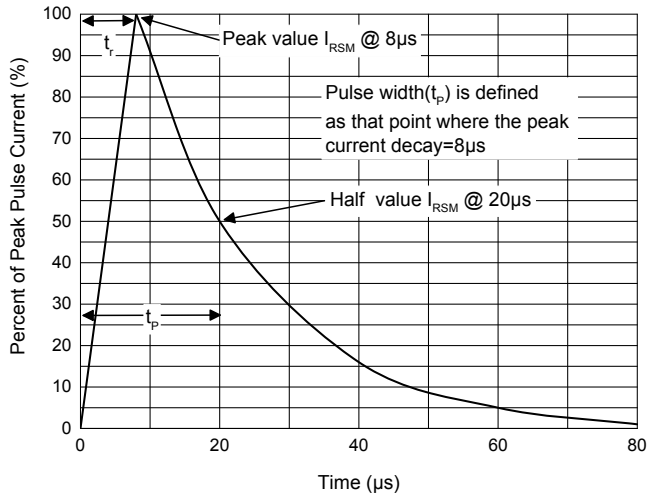


Fig. 2 - Non-Repetitive Peak Pulse Power

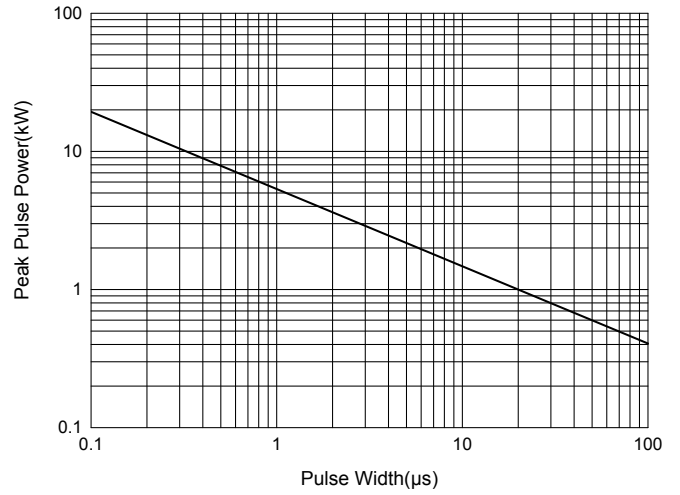


Fig. 3 - Capacitance Characteristics

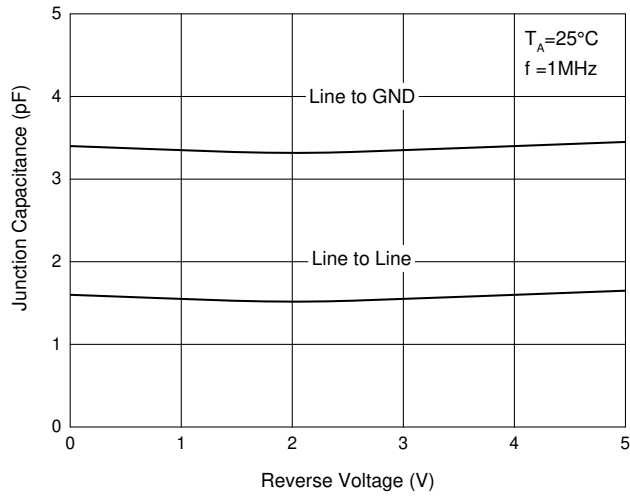


Fig. 4 - Clamping Voltage Characteristics

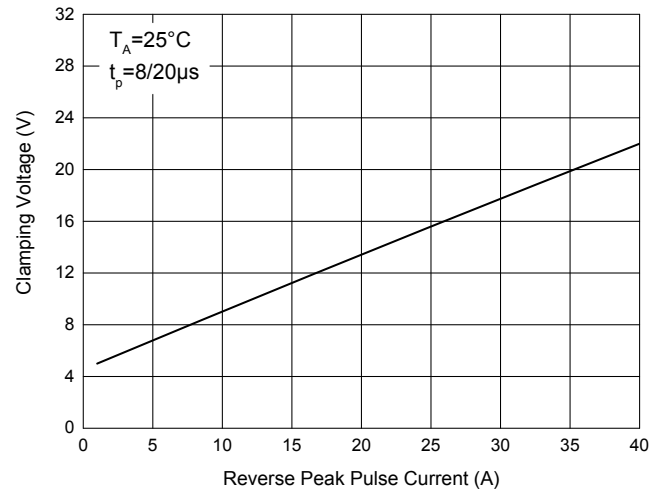
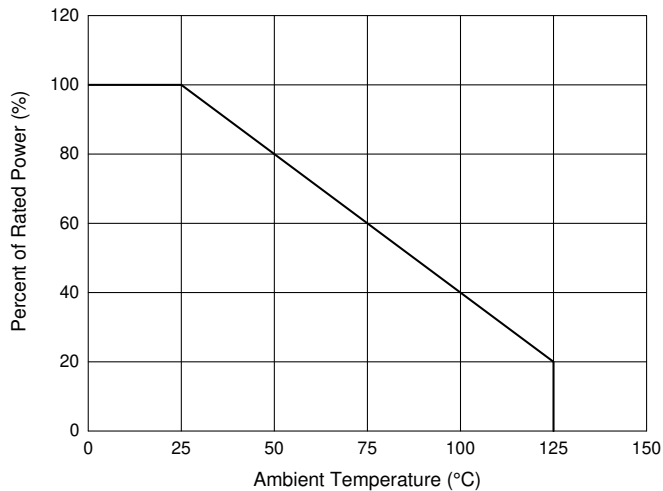


Fig. 5 - Pulse Derating Curve



Ordering Information

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

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