

### Features

- 5700W peak pulse power (8/20μs)
- Low leakage: nA level
- Operating voltage: 15V
- Ultra low clamping voltage
- One power line protects
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    - Air discharge:  $\pm 30\text{kV}$
    - Contact discharge:  $\pm 30\text{kV}$
  - IEC61000-4-5 (Lightning) 180A (8/20uS)
- RoHS Compliant

### Applications

- Cell phone handsets and accessories
- Personal digital assistants (PDA's)
- Notebooks, desktops, and servers
- Portable instrumentation
- Cordless phones
- Digital cameras
- Peripherals
- MP3 players

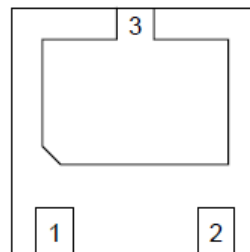
### Mechanical Characteristics

- Package: DFN2020-3
- Case Material: "Green" Molding Compound
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 3,000pcs
- Device Marking: 15P

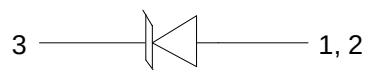
### Absolute Maximum Ratings (T<sub>amb</sub>=25°C unless otherwise specified)

| Parameter                       | Symbol           | Value       | Unit |
|---------------------------------|------------------|-------------|------|
| Peak Pulse Power (8/20μs)       | Ppk              | 5700        | W    |
| Peak Pulse Current (8/20μs)     | I <sub>PP</sub>  | 180         | A    |
| ESD per IEC 61000-4-2 (Air)     | V <sub>ESD</sub> | ±30         | kV   |
| ESD per IEC 61000-4-2 (Contact) |                  | ±30         |      |
| Operating Temperature Range     | T <sub>J</sub>   | -55 to +125 | °C   |
| Storage Temperature Range       | T <sub>stg</sub> | -55 to +150 | °C   |

### Dimensions DFN2020-3



### Pin Configuration



## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

| Parameter               | Symbol           | Test Condition                           | Min  | Typ  | Max | Unit |
|-------------------------|------------------|------------------------------------------|------|------|-----|------|
| Reverse Working Voltage | V <sub>RWM</sub> |                                          |      |      | 15  | V    |
| Breakdown Voltage       | V <sub>BR</sub>  | I <sub>T</sub> = 1mA                     | 15.5 |      |     | V    |
| Reverse Leakage Current | I <sub>R</sub>   | V <sub>RWM</sub> = 15V                   |      |      | 1.0 | μA   |
| Clamping Voltage        | V <sub>C</sub>   | I <sub>PP</sub> = 180A (8 x 20 μs pulse) |      |      | 32  | V    |
| Junction Capacitance    | C <sub>J</sub>   | V <sub>R</sub> = 0V, f = 1MHz            |      | 1200 |     | pF   |

## Ratings and Characteristic Curves (T<sub>A</sub>=25°C unless otherwise noted)

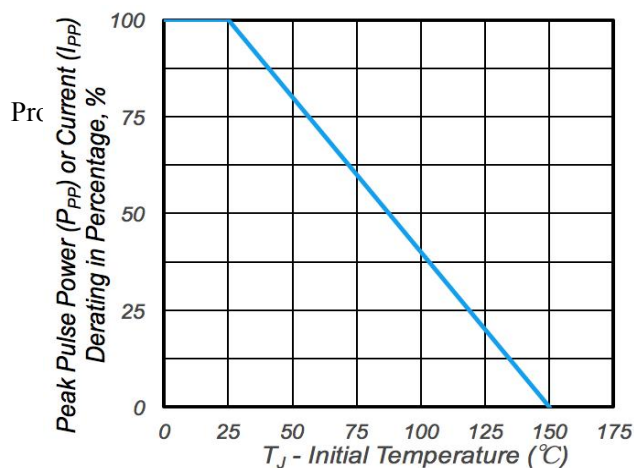
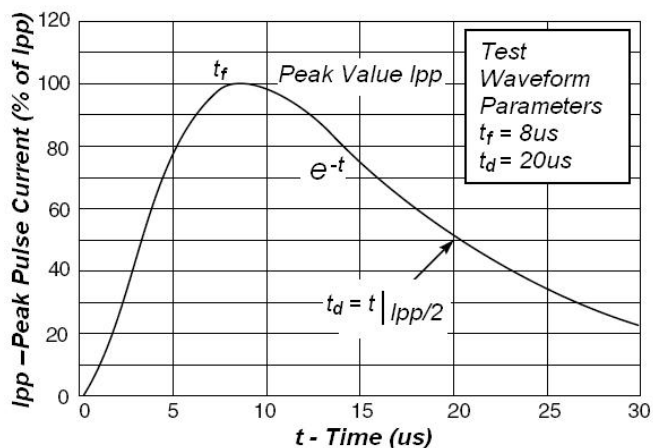
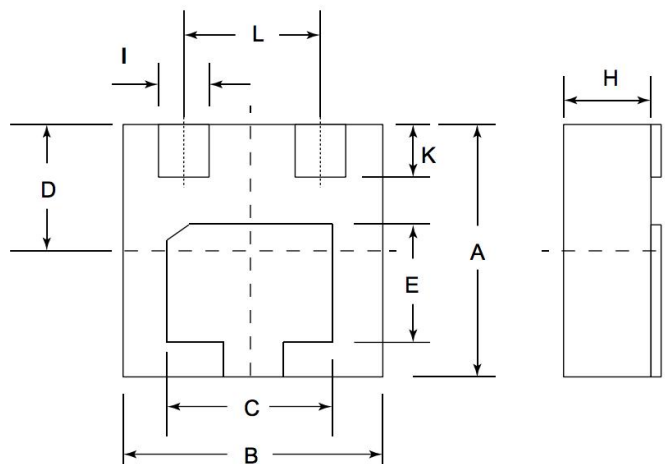


Fig.1 Pulse Waveform

Fig.2 Pulse Derating Curve

## DFN2020-3 Package Outline Drawing



| Dim | Millimeters |      |
|-----|-------------|------|
|     | Min         | Max  |
| A   | 1.90        | 2.10 |
| B   | 1.90        | 2.10 |
| C   | 1.40        | 1.60 |
| D   | 0.95        | 1.05 |
| E   | 0.90        | 1.10 |
| H   | -----       | 0.65 |
| L   | 1.3 (TYP)   |      |
| I   | 0.25        | 0.35 |
| K   | 0.35        | 0.45 |
|     |             |      |

### NOTICE

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