



Micro Commercial Components  
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## Features

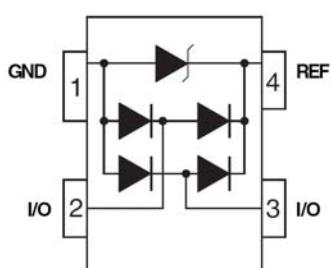
- Halogen free available upon request by adding suffix "-HF"
- 500 Watts Peak Power per Line ( $t_p = 8/20\mu s$ )
- ESD Protection > 25 kilivolts
- Low Clamping Voltage
- Unidirectional Configuration
- Protects 2 I/O Ports & Power Supply
- Low Capacitance
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

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

| Parameter                            | Symbol   | Limits | unit |
|--------------------------------------|----------|--------|------|
| Peak Pulse Power ( $t_p=8/20\mu s$ ) | $P_{pp}$ | 500    | W    |
| Peak Forward voltage@1A              | $V_F$    | 1.5    | V    |

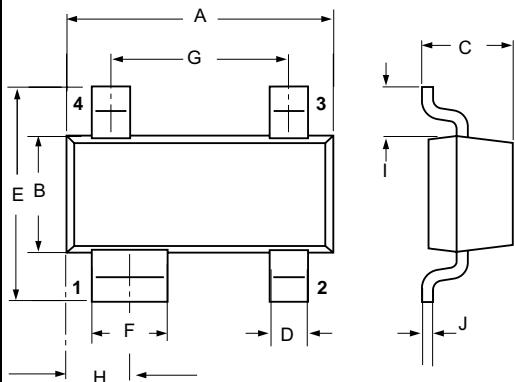
## Pin Configuration



**ESD5V0T143-4U**

**5 Volts  
ESD Protector**

## SOT-143

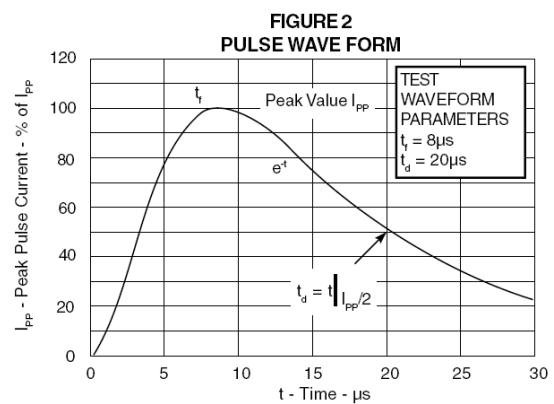
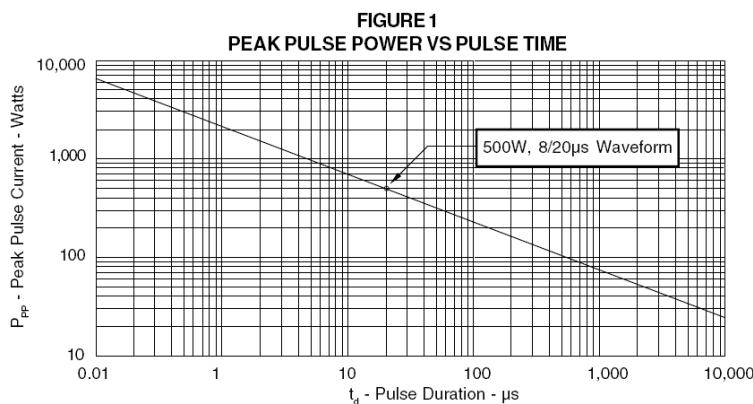


| DIM | DIMENSIONS |      |      |      | NOTE |
|-----|------------|------|------|------|------|
|     | INCHES     |      | MM   |      |      |
|     | MIN        | MAX  | MIN  | MAX  |      |
| A   | .110       | .120 | 2.80 | 3.04 |      |
| B   | .047       | .055 | 1.20 | 1.39 |      |
| C   | .033       | .045 | 0.84 | 1.14 |      |
| D   | .015       | .020 | 0.39 | 0.50 |      |
| E   | .083       | .098 | 2.11 | 2.48 |      |
| F   | .031       | .037 | 0.79 | 0.93 |      |
| G   | .070       | .080 | 1.78 | 2.03 |      |
| H   | .028       | .033 | 0.72 | 0.83 |      |
| I   | .018       | .024 | 0.46 | 0.60 |      |
| J   | .003       | .006 | 0.08 | 0.15 |      |

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 | $V_{BR}$  | $I_t = 1\text{mA}$                               | 6    |      |      | V             |
| Reverse Leakage Current   | $I_R$     | $V_{RWM} = 5\text{V} T=25^\circ\text{C}$         |      |      | 5    | $\mu\text{A}$ |
| Clamping Voltage          | $V_c$     | $I_{PP} = 1\text{A} \quad t_p = 8/20\mu\text{s}$ |      |      | 9.8  | V             |
| Clamping Voltage          | $V_c$     | $I_{PP}=28\text{A} \quad t_p = 8/20\mu\text{s}$  |      |      | 20.0 | V             |
| Junction Capacitance      | $C_j$     | $V_R=0\text{V} \quad f = 1\text{MHz}$            |      | 3    |      | pF            |

## Typical Characteristics



<sup>TM</sup>

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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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