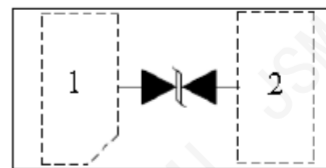


DESCRIPTION

PESD5V0H1BSF-JSM is a bidirectional TVS diode that utilizes leading monolithic silicon technology to provide fast response time and low ESD clamping voltage, making an ideal solution for protecting voltage sensitive data and power lines. This device complies with the IEC 61000-4-2 (ESD) standard, supporting ****±20 kV air discharge**** and ****±15 kV contact discharge****. It is housed in an ultra-compact, lead-free 0201 package (dimensions: 0.6×0.3×0.3 mm).

The PESD5V0H1BSF-JSM compact size and high ESD surge protection make it a superior choice for safe guarding portable applications such as mobile phones, digital cameras audio players, and similar devices.



DFN0603

FEATURES

- ◆ Ultra small package: 0.6x0.3x0.3mm
- ◆ Ultra low capacitance: 0.35pF typica 1
- ◆ Ultra low leakage: nA level
- ◆ Low operating voltage: 5V
- ◆ Low clamping voltage
- ◆ 2-pin leadless package
- ◆ Complies with following standards:- IEC 61000-4-2 (ESD) immunity test
- ◆ Air discharge: ±20kV
- ◆ Contact discharge: ±15kV
- ◆ RoHS Compliant
- ◆ Lead Finish: NiPdAu

APPLICATIONS

- ◆ Smart phones
- ◆ Display Ports
- ◆ MDDI Ports
- ◆ USB Ports
- ◆ igital Video Interface (DVI)
- ◆ PCI Express and Serial SATA Ports

MECHANICAL DATA

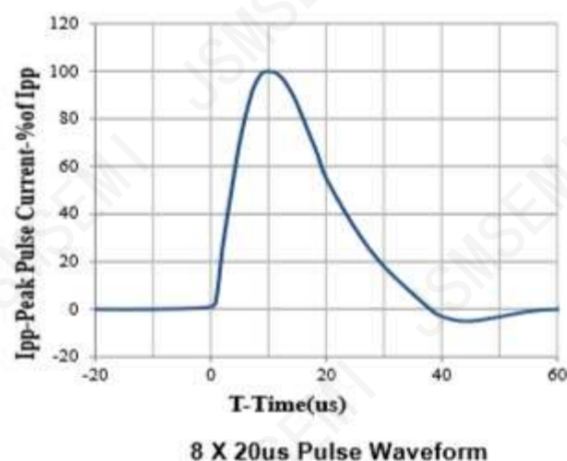
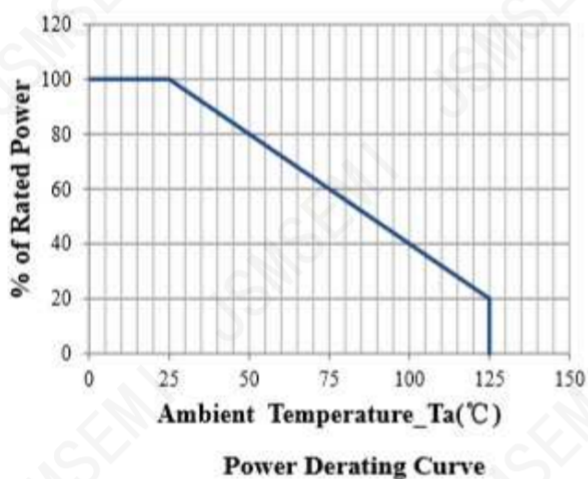
- ◆ Flammability Rating: UL 94V-0
- ◆ Packaging: Tape and Reel
- ◆ High temperature soldering guaranteed: 260°C/10s
- ◆ Reel size: 7 inch

ABSOLUTE MAXIMUM RATING

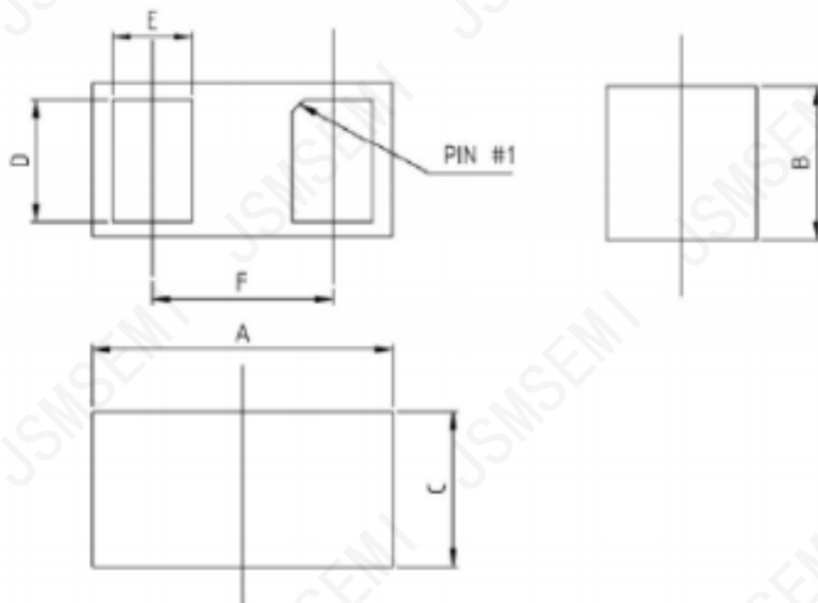
| Symbol | Parameter | Value | Units |
|-----------|--|------------|-------|
| V_{ESD} | ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact) | ±20 ±15 | kV |
| P_{PP} | Peak Pulse Power (8/20μs) | 80 | W |
| T_{OPT} | Operating Temperature | -55~125 | °C |
| T_{STG} | Storage Temperature | -55~150 | °C |

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C)

| Symbol | Parameter | Test Condition | Min | Typ | Max | Units |
|------------------|---------------------------|---|-----|------|-----|-------|
| V _{RWM} | Reverse Working Voltage | | | | 5.0 | V |
| V _{BR} | Reverse Breakdown Voltage | I _T = 1mA | 6.0 | | | V |
| I _R | Reverse Leakage Current | V _{RWM} = 5V | | | 0.1 | nA |
| V _C | Clamping Voltage | I _{PP} = 1A, t _p = 8/20μs | | | 12 | V |
| C _J | Junction Capacitance | V _R = 0V, f = 1MHz | | 0.35 | | pF |

ELECTRICAL CHARACTERISTICS CURVE


DFN0603 PACKAGE OUTLINE DIMENSIONS



| Dimensions In Millimeterer | | | |
|-------------------------------|------|------|------|
| Symbol | MIN | TYP | MAX |
| A | 0.58 | 0.60 | 0.65 |
| B | 0.28 | 0.30 | 0.35 |
| C | 0.28 | 0.30 | 0.34 |
| D | 0.20 | 0.24 | 0.26 |
| E | 0.13 | 0.16 | 0.19 |
| F | - | 0.36 | - |

Revision History

| Rev. | Change | Date |
|------|-----------------|-----------|
| V1.0 | Initial version | 6/27/2021 |
| | | |

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For additional information please contact Kevin@jsmsemi.com or visit www.jsmsemi.com