

Features

- For sensitive ESD protection
- Excellent clamping capability
- Low leakage
- ESD rating of class 3(>16KV)per Human Body Mode
- Fast response ,response time less than 1ns.
- Lead Free Finish/RoHS Compliant ("P" Suffix designates

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Mechanical Characteristics

- JEDEC SOD-923 package
- Molding compound flammability rating: UL 94V-0

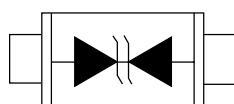
Applications

- USB 2.0
- HDMI 1.3
- SATA and eSATA
- DVI
- IEEE 1394
- PCI Express
- Portable Electronics
- Notebooks

Ordering Information

| Part Number | Qty per Reel | Reel Size |
|---------------|--------------|-----------|
| ESD5V0B05-923 | 8000 | 7" |

Pin Configuration



PROTECTION PRODUCTS

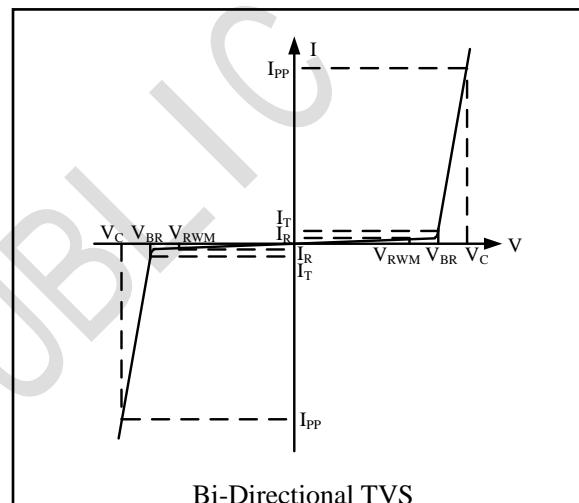
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Absolute Maximum Rating

| Parameter | Symbol | Limits | unit |
|----------------------------------|-----------------|---------------------|------|
| IEC61000-4-2(ESD) Air Contact | | ± 15 ± 8 | kV |
| ESD Voltage per human body mode | | 16 | kV |
| Peak Pulse Power(8/20us) | P _{pp} | 80 | W |

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

| Symbol | Parameter |
|------------------|--|
| V _{RWM} | Nominal Reverse Working Voltage |
| I _R | Reverse Leakage Current @ V _{RWM} |
| V _{BR} | Reverse Breakdown Voltage @ I _T |
| I _T | Test Current for Reverse Breakdown |
| V _C | Clamping Voltage @ I _{PP} |
| I _{PP} | Maximum Peak Pulse Current |
| C _{ESD} | Parasitic Capacitance |
| V _R | Reverse Voltage |
| f | Small Signal Frequency |



| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Units |
|-------------------------|------------------|-----------------------------|------|------|------|-------|
| Working Voltage | V _{RWM} | | | | 5 | V |
| Breakdown Voltage | V _{BR} | I _T =1mA | 5.6 | 6.7 | 7.8 | V |
| Reverse Leakage Current | I _R | V _{RWM} =5V | | | 1 | μA |
| Junction Capacitance | C _j | V _R =0V f = 1MHz | | 0.5 | | pF |

PROTECTION PRODUCTS
 Typical characteristics

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Fig1. 8/20 μ s Pulse Waveform

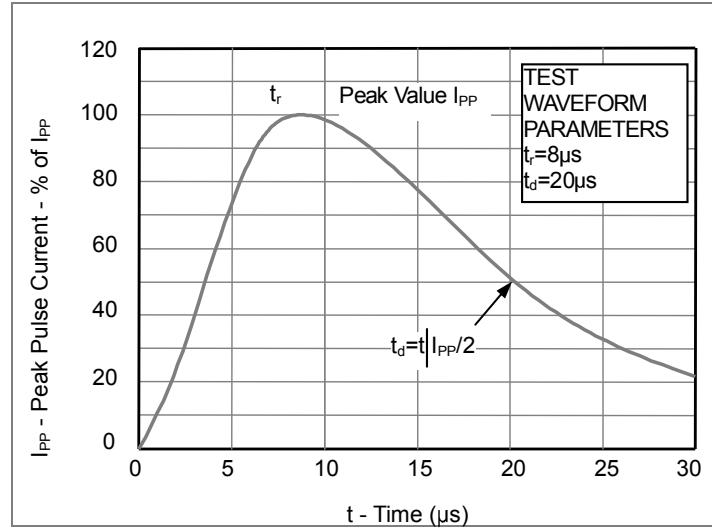


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

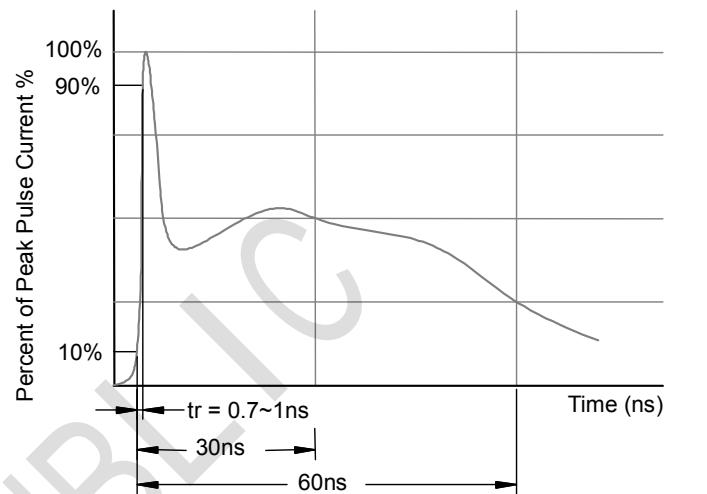
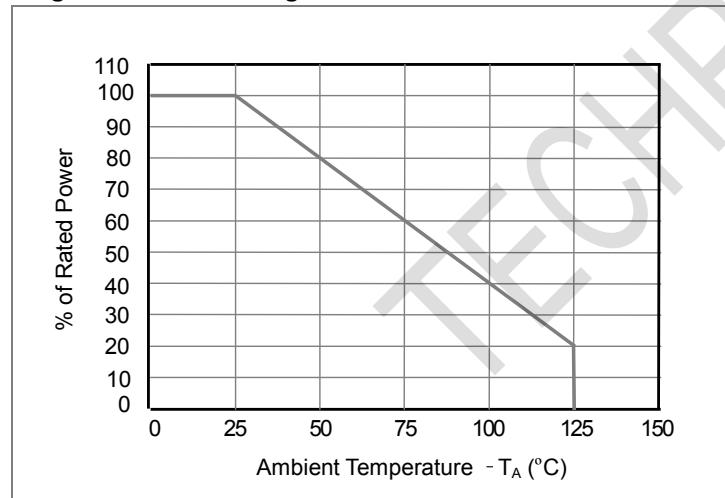
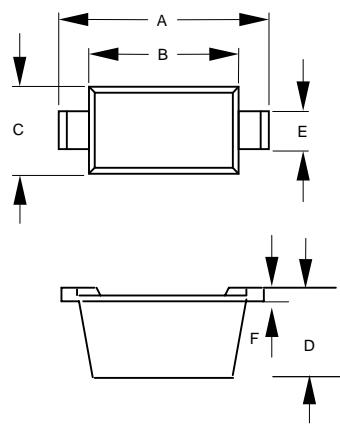


Fig3. Power Derating Curve

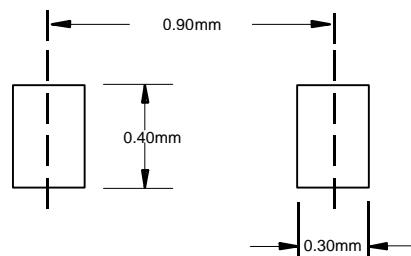


Outline Drawing - SOD-923



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .037 | .041 | 0.95 | 1.05 | |
| B | .030 | .033 | 0.75 | 0.85 | |
| C | .022 | .026 | 0.55 | 0.65 | |
| D | .014 | .017 | 0.36 | 0.43 | |
| E | .006 | .010 | 0.15 | 0.25 | |
| F | .003 | .007 | 0.07 | 0.17 | |

Land Pattern - SOD-923



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