



Micro Commercial Components

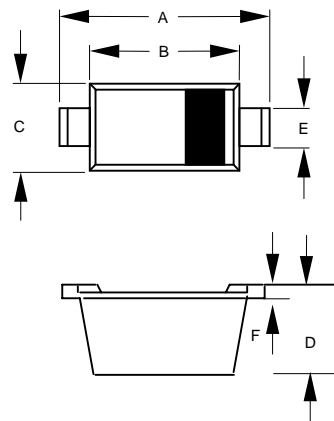


Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

ESD3V3D7
Thru
ESD12VD7

3.3V~12Volts
ESD Protection
Devices

SOD723



Features

- Halogen free available upon request by adding suffix "-HF"
For sensitive ESD protection
Excellent clamping capability
Low leakage
ESD rating of class 3(>16KV)per Human Body Mode
For space saving application
Fast response ,response time less than 1ns.
Epoxy meets UL 94 V-0 flammability rating
Moisture Sensivity Level 1
Lead Free Finish/RoHS Compliant /Halogen-Free Version available("P" Suffix designates RoHS Compliant. HF suffix designates Halogen-Free. See ordering information)

Maximum Ratings

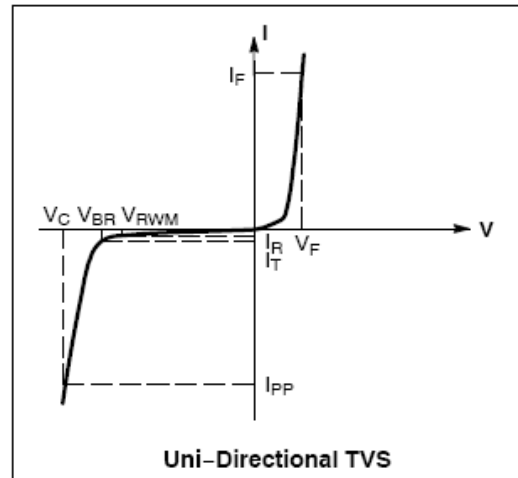
- Operating Junction &Storage Temperature: -55°C to +150°C
Maximum Thermal Resistance: 833°C/W Junction To Ambient

Table with 5 columns: Parameter, Symbol, Limits, unit. Rows include IEC61000-4-2(ESD) Air Contact, ESD Voltage per human body mode per machine mode, and Power Dissipation.

Table titled DIMENSIONS with columns for DIM, INCHES (MIN, MAX), MM (MIN, MAX), and NOTE. Rows A-F correspond to dimensions in the diagram.

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

| Symbol | Parameter |
|-----------|--|
| I_{PP} | Maximum Reverse Peak Pulse Current |
| V_C | Clamping Voltage @ I_{PP} |
| V_{RWM} | Working Peak Reverse Voltage |
| I_R | Maximum Reverse Leakage Current @ V_{RWM} |
| V_{BR} | Breakdown Voltage @ I_T |
| I_T | Test Current |
| I_F | Forward Current |
| V_F | Forward Voltage @ I_F |
| P_{pk} | Peak Power Dissipation |
| C | Max. Capacitance @ $V_R=0$ and $f=1\text{MHz}$ |



ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted, $V_F = 0.9\text{ V Max.}$ @ $I_F = 10\text{mA}$ for all types)

| Device | Device Marking | V_{RWM} (V) | I_R (μA) @ V_{RWM} | V_{BR} (V) @ I_T (Note 2) | I_T | I_{PP} (A) * | V_C (V) @Max I_{PP} * | P_{pk} * (W) | C (pF) |
|----------|----------------|---------------|-------------------------------------|-------------------------------|-------|----------------|---------------------------|----------------|--------|
| | | Max | Max | Min | mA | Max | Max | Max | Typ |
| ESD3V3D7 | E0 | 3.3 | 2.5 | 5.0 | 1.0 | 10.4 | 11.9 | 113 | 80 |
| ESD5V0D7 | E2 | 5.0 | 1.0 | 6.2 | 1.0 | 8.8 | 13.3 | 117 | 65 |
| ESD12VD7 | E3 | 12 | 1.0 | 13.5 | 1.0 | 5.4 | 23.7 | 128 | 30 |

+Surge current waveform per Figure 1.

2. V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C .

TYPICAL CHARACTERISTICS

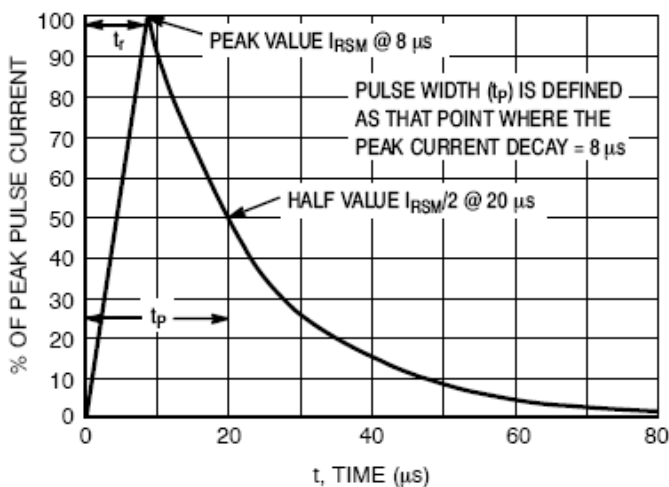


Figure 1. 8 x 20 μs Pulse Waveform

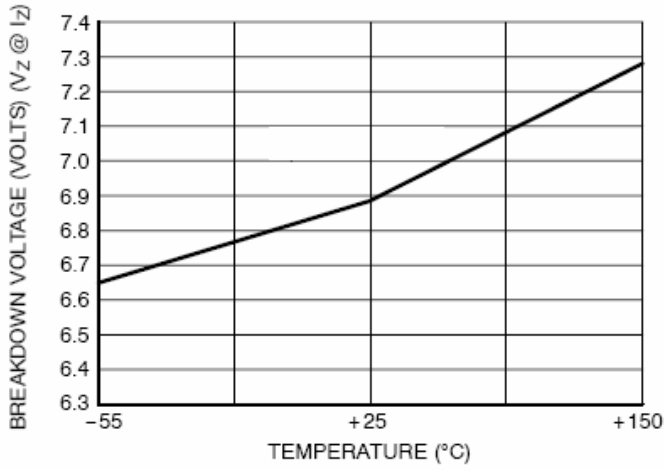


Figure 2. Typical Breakdown Voltage versus Temperature

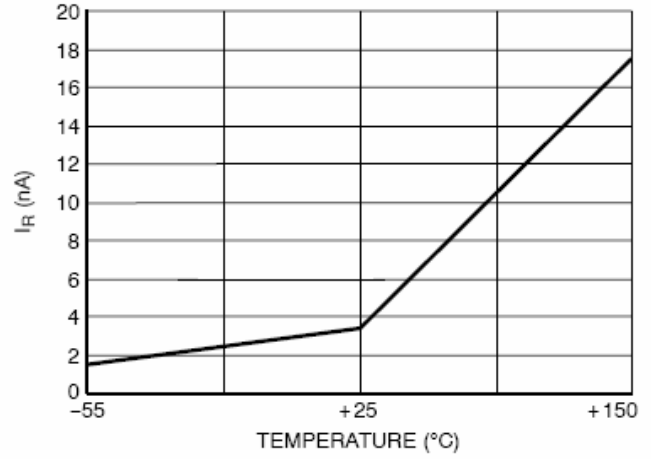


Figure 3. Typical Leakage Current versus Temperature



Micro Commercial Components

Ordering Information :

| Device | Packing |
|-------------------|-------------------------------------|
| Part Number-TP | Tape&Reel: 8Kpcs/Reel |
| Part Number-TP-HF | Tape&Reel: 8Kpcs/Reel; Halogen free |

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com

AMEYA360

Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit www.ameya360.com

Contact Us :

➤ Address :

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd
Minhang District, Shanghai , China

➤ Sales :

Direct +86 (21) 6401-6692

Email amall@ameya360.com

QQ 800077892

Skype [ameyasales1](#) [ameyasales2](#)

➤ Customer Service :

Email service@ameya360.com

➤ Partnership :

Tel +86 (21) 64016692-8333

Email mkt@ameya360.com