CMOTVS5V7

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SURFACE MOUNT SILICON UNI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR



www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMOTVS5V7 is a Transient Voltage Suppressor (TVS) with exceptionally low leakage current characteristics. Packaged in the SOD-523 surface mount case, this space saving device is designed to protect sensitive equipment against ESD damage.

MARKING CODE: 57



SOD-523 CASE

APPLICATIONS:

- User interface protection
- Power rail protection
- Voltage clamping

FEATURES:

- · Low leakage current
- Space saving SOD-523 package

| MAXIMUM RATINGS: (T _A =25°C) | SYMBOL | | UNITS |
|--|-----------------------------------|-------------|-------|
| Peak Power Dissipation (8x20µs) | P_{PK} | 66 | W |
| Electrical Fast Transient (IEC 61000-4-4) (5x50ns) | EFT | 40 | Α |
| ESD Voltage (IEC 61000-4-2, Air) | V_{ESD} | 15 | kV |
| ESD Voltage (IEC 61000-4-2, Contact) | V_{ESD} | 8.0 | kV |
| Operating and Storage Junction Temperature | T _J , T _{stq} | -55 to +150 | °C |

ELECTRICAL CHARACTERISTICS: (TA=25°C) VF=1.2V MAX @ IF=20mA

| Maximum Reverse Stand-off Voltage VRWM | | down tage | Test Current | Maximum Reverse Leakage Current I _R @ V _{RWM} | Clam Voli (8x2 | mum nping tage 0µs) ① Ipp | TLP Cla Volt (Not | ical amping age te 1) | Typical Dynamic Resistance (Note 1) RDYN | Typical Junction Capacitance @ 0V Bias CJ |
|--|--------------------|--------------|-----------------|---|----------------------|---------------------------------------|-------------------------|--------------------------------|--|---|
| V | MIN V | MAX V | mA | μA | V | A | V | A | Ω | pF |
| 4.0 | 5.7 | 6.7 | 5.0 | 0.1 | 12 5.5 | 3.0 | 4.9 | 0.53 | 35 | |
| 4.0 | 5.7 6.7 5.0 0.1 12 | | 12 | 12 5.5 | 6.0 | 10.5 | 0.33 | 33 | | |

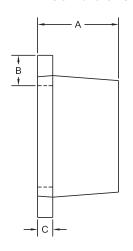
Note 1: Transmission Line Pulse (TLP) conditions: Z_0 =50 Ω , tp=100ns

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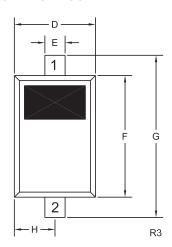


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SOD-523 CASE - MECHANICAL OUTLINE



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LEAD CODE:

- 1) Cathode 2) Anode
- **MARKING CODE: 57**

| DIMENSIONS | | | | | |
|-------------------|--------|-------|-------------|------|--|
| | INCHES | | MILLIMETERS | | |
| SYMBOL | MIN | MAX | MIN | MAX | |
| Α | 0.020 | 0.031 | 0.50 | 0.80 | |
| В | 0.008 | 0.016 | 0.20 | 0.40 | |
| С | 0.002 | 0.008 | 0.05 | 0.20 | |
| D | 0.028 | 0.035 | 0.70 | 0.90 | |
| E | 0.008 | 0.014 | 0.20 | 0.35 | |
| F | 0.039 | 0.055 | 1.00 | 1.40 | |
| G | 0.055 | 0.071 | 1.40 | 1.80 | |
| Н | 0.016 | | 0.40 | | |
| SOD-523 (REV: R3) | | | | | |

R4 (20-October 2015)

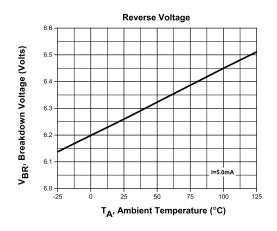


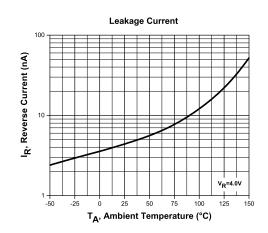
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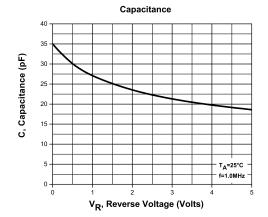


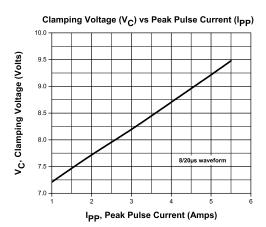
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TYPICAL ELECTRICAL CHARACTERISTICS









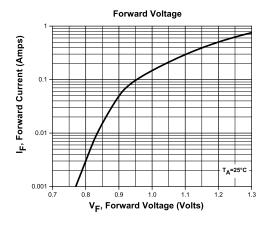


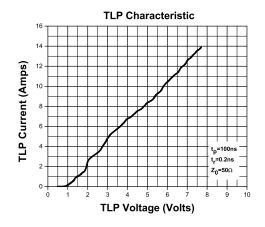
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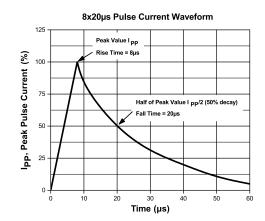


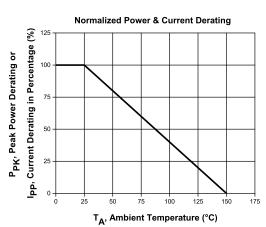
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TYPICAL ELECTRICAL CHARACTERISTICS









OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free guick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- · Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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Product End of Life Notification

| PDN ID: | PDN01236 |
|--------------------|----------|
| Notification Date: | 7/27/22 |
| Last Buy Date: | 1/27/23 |
| Last Shipment Date | 7/27/23 |

Summary: The CMOTVS5V7 TVS is discontinued and now classified as End Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Portfolio Management. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

* All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.

| Central Part Number | Suggested Replacement |
|---------------------|-----------------------|
| CMOTVS5V7 BK | N/A |
| CMOTVS5V7 TR | N/A |

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. If you would like assistance, please visit https://my.centralsemi.com/submit-inquiry?type=ER to submit an online inquiry.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.

CCC785 REV 002