

Central Semiconductor Corp.

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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

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)	^Р РК	66	W
Electrical Fast Transient (IEC 61000-4-4) (5x50ns)	EFT	40	А
ESD Voltage (IEC 61000-4-2, Air)	VESD	15	kV
ESD Voltage (IEC 61000-4-2, Contact)	VESD	8.0	kV
Operating and Storage Junction Temperature	TJ, T _{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS: (T_A=25°C) V_F=1.2V MAX @ I_F=20mA

Maximum Reverse Stand-off Voltage		down tage	Test Current	Maximum Reverse Leakage Current	Clam Volt	mum iping tage 0µs)	TLP Cla Volt	ical amping tage te 1)	Typical Dynamic Resistance (Note 1)	Typical Junction Capacitance @ 0V Bias
V _{RWM}	VBR	@ I _T	ΙT	IR @ VRWM	V _C @	D IPP	V _{CL} @	D IPP	R _{DYN}	CJ
v	MIN V	MAX V	mA	μA	v	А	v	А	Ω	pF
4.0	5.7	6.7	5.0	0.1	12	5.5	3.0	4.9	0.53	35
4.0	4.0 5.7 6.7 5.0 0.1	12 5	5.5	6.0	10.5	0.33	55			

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

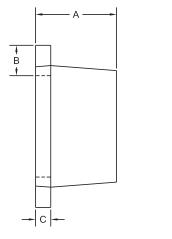
R4 (20-October 2015)



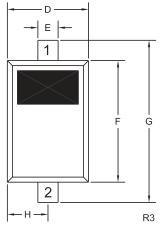
CMOTVS5V7

SURFACE MOUNT SILICON UNI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR

SOD-523 CASE - MECHANICAL OUTLINE



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LEAD CODE:	
1) Cathode	
2) Anode	

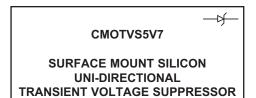
MARKING CODE: 57

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	0.0	016	0.4	40	

SOD-523 (REV: R3)

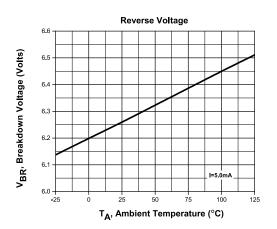
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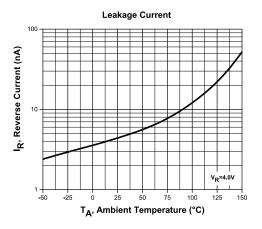


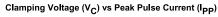


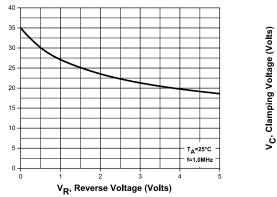
TYPICAL ELECTRICAL CHARACTERISTICS

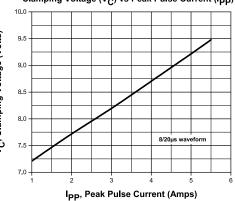


Capacitance









R4 (20-October 2015)

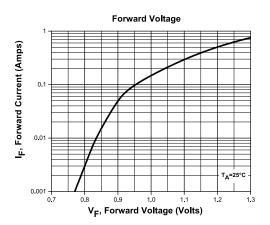
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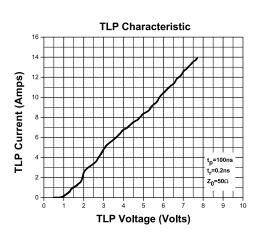
C, Capacitance (pF)

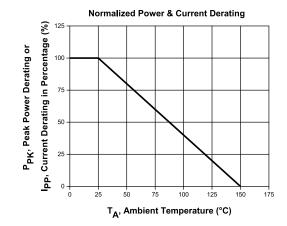




TYPICAL ELECTRICAL CHARACTERISTICS







125 Peak Value I _{PP} Rise Time = 8µs I_{pp}, Peak Pulse Current (%) 100 75 · Half of Peak Value I PP/2 (50% decay) Fall Time = 20µs 50 · 25 0 -10 20 40 50 ò 30 60 Time (µs)

8x20µs Pulse Current Waveform

R4 (20-October 2015)

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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

DESIGNER SUPPORT/SERVICES

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

- Free quick 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

· Custom product packing

- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

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

CONTACT US

Corporate Headquarters & Customer Support Team

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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.