

SURFACE MOUNT DUAL, IN SERIES SILICON SWITCHING DIODES





www.centralsemi.com

## DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMUD7000 type is an ultra-high speed silicon switching diode manufactured by the epitaxial planar process, in an epoxy molded ULTRAmini<sup>™</sup> surface mount package, connected in a series configuration, designed for high speed switching applications.

#### MARKING CODE: CC5

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Average Forward Current	ΙO	200	mA
Peak Forward Current, tp=1.0s	<sup>I</sup> FM	500	mA
Power Dissipation	PD	250	mW
Operating and Storage Junction Temperature	ТЈ, Т <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	Θ <sub>JA</sub>	500	°C/W

#### ELECTRICAL CHARACTERISTICS PER DIODE: (TA=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =50V			300	nA
I <sub>R</sub>	V <sub>R</sub> =50V, T <sub>A</sub> =125°C			100	μΑ
I <sub>R</sub>	V <sub>R</sub> =100V			500	nA
BVR	I <sub>R</sub> =100μA	100			V
VF	I <sub>F</sub> =1.0mA	0.55		0.70	V
VF	I <sub>F</sub> =10mA	0.67		0.82	V
VF	I <sub>F</sub> =100mA	0.75		1.10	V
CT	V <sub>R</sub> =0, f=1.0MHz		1.5	2.6	pF
t <sub>rr</sub>	$I_R=I_F=10$ mA, $I_{rr}=1.0$ mA, $R_L=100\Omega$		2.0	4.0	ns

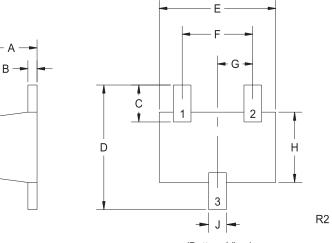
R4 (9-February 2010)



#### CMUD7000

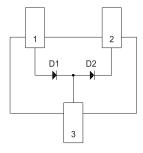
#### SURFACE MOUNT DUAL, IN SERIES SILICON SWITCHING DIODES

### SOT-523 CASE - MECHANICAL OUTLINE



(Bottom View)

**PIN CONFIGURATION** 



DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
А	0.023	0.031	0.58	0.78		
В	0.002	0.008	0.04	0.20		
С	0.013	0.021	0.34	0.54		
D	0.059	0.067	1.50	1.70		
E	0.059	0.067	1.50	1.70		
F	0.035	0.043	0.90	1.10		
G	0.020		0.50			
Н	0.031	0.039	0.78	0.98		
J	0.010	0.014	0.25	0.35		
SOT-523 (REV: R2)						

LEAD CODE: 1) Anode D1 2) Cathode D2 3) Cathode D1, Anode D2

MARKING CODE: CC5

R4 (9-February 2010)

www.centralsemi.com

## 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 (2<sup>nd</sup> 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).
- 2. 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

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA Main Tel: (631) 435-1110 Main Fax: (631) 435-1824 Support Team Fax: (631) 435-3388 www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

Worldwide Distributors: www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <u>www.centralsemi.com/terms</u>

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Diodes - General Purpose, Power, Switching category:

Click to view products by Central Semiconductor manufacturer:

Other Similar products are found below :

MCL4151-TR3 MMBD3004S-13-F RD0306T-H RD0506LS-SB-1H RGP30G-E373 DSE010-TR-E BAQ333-TR BAQ335-TR BAQ33-GS18 BAS1602VH6327XT BAV17-TR BAV19-TR BAV301-TR BAW27-TAP HSC285TRF-E NSVBAV23CLT1G NTE525 1SS181-TP 1SS184-TP 1SS193,LF 1SS193-TP 1SS400CST2RA SBAV99LT3G SDAA13 LL4448-GS18 SHN2D02FUTW1T1G LS4150GS18 LS4151GS08 SMMBD7000LT3G FC903-TR-E 1N4449 1N4934-E3/73 1SS226-TP APT100DL60HJ RFUH20TB3S RGP30G-E354 RGP30M-E3/73 D291S45T MCL4151-TR BAS 16-02V H6327 BAS 21U E6327 BAS 28 E6327 BAS33-TAP BAS 70-02V H6327 BAV300-TR BAV303-TR3 BAW27-TR BAW56DWQ-7-F BAW56M3T5G BAW75-TAP