CMSD2836 CMSD2838

# SURFACE MOUNT DUAL SILICON SWITCHING DIODES





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### **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSD2836 and CMSD2838 are ultra-high speed silicon switching diodes manufactured by the epitaxial planar process, in an epoxy molded SUPERmini™ surface mount package, designed for high speed switching applications.

The following configurations are available:

CMSD2836 DUAL, COMMOM ANODE MAI
CMSD2838 DUAL, COMMON CATHODE MAI

MARKING CODE: A2C MARKING CODE: A6C

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Average Forward Current	IO	200	mA
Peak Forward Current, tp=1.0s	$I_{FM}$	300	mA
Power Dissipation	$P_{D}$	275	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{JA}$	455	°C/W

## **ELECTRICAL CHARACTERISTICS PER DIODE**: (T<sub>A</sub>=25°C unless otherwise noted)

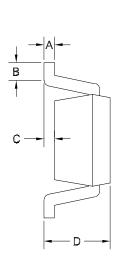
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{R}$	V <sub>R</sub> =50V			100	nA
$BV_R$	I <sub>R</sub> =100μA	75			V
٧ <sub>F</sub>	I <sub>F</sub> =10mA			1.0	V
٧ <sub>F</sub>	I <sub>F</sub> =50mA			1.0	V
٧ <sub>F</sub>	I <sub>F</sub> =100mA			1.2	V
C <sub>T</sub>	$V_R=0$ , f=1.0MHz		1.5	4.0	pF
t <sub>rr</sub>	$I_R = I_F = 10$ mA, $I_{rr} = 1.0$ mA, $R_L = 100$ $\Omega$			4.0	ns

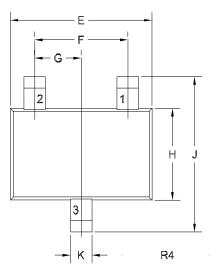
CMSD2836 CMSD2838

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## **SOT-323 CASE - MECHANICAL OUTLINE**

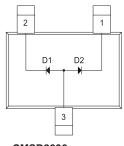




DIMENSIONS								
	INCHES		MILLIMETERS					
SYMBOL	MIN	MAX	MIN	MAX				
Α	0.002	0.008	0.05	0.20				
В	0.004	-	0.10	-				
С	-	0.004	-	0.10				
D	0.031	0.043	0.80	1.10				
E	0.071	0.087	1.80	2.20				
F	0.051		1.30					
G	0.026		0.65					
Н	0.045	0.053	1.15	1.35				
J	0.079	0.094	2.00	2.40				
K	0.008	0.016	0.20	0.40				

SOT-323 (REV: R4)

## **PIN CONFIGURATIONS**

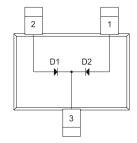


# CMSD2836

# LEAD CODE:

- 1) Cathode D2
- 2) Cathode D1
- 3) Anode D1, D2

**MARKING CODE: A2C** 



## CMSD2838

## **LEAD CODE:**

- 1) Anode D2
- 2) Anode D1
- 3) Cathode D1, D2

**MARKING CODE: A6C** 

## **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 (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
- 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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