## CMPD2836 CMPD2838

# SURFACE MOUNT DUAL, SILICON SWITCHING DIODES



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## **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPD2836 and CMPD2838 types are ultra-high speed switching diodes manufactured by the epitaxial planar process, in an epoxy molded surface mount package, designed for high speed switching applications.



The following configurations are available:

CMPD2836 DUAL, COMMON ANODECMPD2838 DUAL, COMMON CATHODEMARKING CODE: CA6

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	I <sub>FM</sub>	300	mA
Power Dissipation	$P_{D}$	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{JA}$	357	°C/W

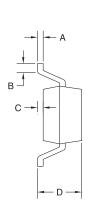
#### **ELECTRICAL CHARACTERISTICS PER DIODE:** (TA=25°C unless otherwise noted) **TEST CONDITIONS** UNITS SYMBOL MIN MAX $I_R$ $V_R = 50V$ 100 nΑ $BV_R$ I<sub>R</sub>=100μA 75 ٧ ٧F I<sub>F</sub>=10mA 1.0 $V_{\mathsf{F}}$ I<sub>F</sub>=50mA 1.0 I<sub>F</sub>=100mA $V_{\mathsf{F}}$ 1.2 V V<sub>R</sub>=0, f=1.0MHz 4.0 $C_{\mathsf{T}}$ 1.5 рF $I_R = I_F = 10 \text{mA}$ , $R_L = 100 \Omega$ , Rec. to 1.0 mA 4.0 ns $t_{rr}$

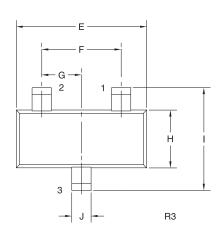
**CMPD2836 CMPD2838** 

**SURFACE MOUNT DUAL, SILICON SWITCHING DIODES** 



## **SOT-23 CASE - MECHANICAL OUTLINE**

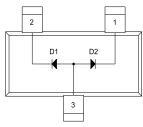




DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
Α	0.003	0.007	0.08	0.18		
В	0.006	-	0.15	-		
С	-	0.005	-	0.13		
D	0.035	0.043	0.89	1.09		
Е	0.110	0.120	2.80	3.05		
F	0.075		1.90			
G	0.037		0.95			
Н	0.047	0.055	1.19	1.40		
	0.083	0.098	2.10	2.49		
J	0.014	0.020	0.35	0.50		

SOT-23 (REV: R3)

## **PIN CONFIGURATIONS**



## CMPD2836

## LEAD CODE:

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

# MARKING CODE: CA2

## CMPD2838

## LEAD CODE:

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

3

**MARKING CODE: CA6** 

R6 (25-January 2010)

## **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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