

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 CMPD2838	DUAL, COMMON ANODE DUAL, COMMON CATHODE	MARKING CODE: CA2 MARKING CODE: CA6		
MAXIMUM RA	<b>TINGS:</b> (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitiv	e Reverse Voltage	V <sub>RRM</sub>	75	V
Average Forward Current		Ι <sub>Ο</sub>	200	mA
Peak Forward Current		IFM	300	mA
Power Dissipat	lion	PD	350	mW
Operating and	Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resis	tance	$\Theta_{JA}$	357	°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			100	nA
вv <sub>R</sub>	Ι <sub>R</sub> =100μΑ	75			V
VF	I <sub>F</sub> =10mA			1.0	V
V <sub>F</sub>	I <sub>F</sub> =50mA			1.0	V
V <sub>F</sub>	I <sub>F</sub> =100mA			1.2	V
CT	V <sub>R</sub> =0, f=1.0MHz		1.5	4.0	pF
t <sub>rr</sub>	$I_{\mbox{\scriptsize R}} = I_{\mbox{\scriptsize F}} = 10 \mbox{\scriptsize mA}, \ \mbox{\scriptsize R}_{\mbox{\scriptsize L}} = 100 \mbox{\scriptsize \Omega}, \ \mbox{\scriptsize Rec.} \ \mbox{to} \ 1.0 \mbox{\scriptsize mA}$			4.0	ns

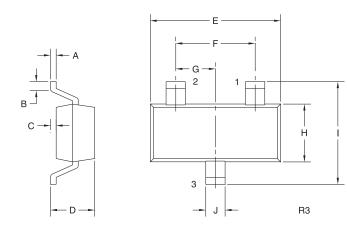
R6 (25-January 2010)





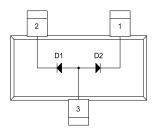
#### SURFACE MOUNT DUAL, SILICON SWITCHING DIODES

## SOT-23 CASE - MECHANICAL OUTLINE



DIMENSIONS								
	INCHES		MILLIMETERS					
SYMBOL	MIN	MAX	MIN	MAX				
А	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				
E	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				
ĺ	0.083	0.098	2.10	2.49				
J	0.014	0.020	0.35	0.50				
SOT-23 (REV: R3)								

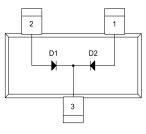
#### **PIN CONFIGURATIONS**



CMPD2836 LEAD CODE:

Cathode D2
Cathode D1
Anode D1, D2

MARKING CODE: CA2



CMPD2838

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

MARKING CODE: CA6

R6 (25-January 2010)

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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 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

· Custom product packing

Custom bar coding for shipments

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

## REQUESTING PRODUCT PLATING

- If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when 1. 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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Central Semiconductor: CMPD2838 TR PBFREE