## CMPSH-3CG

# SURFACE MOUNT DUAL, COMMON CATHODE SILICON SCHOTTKY DIODES



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# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPSH-3CG is a dual, common cathode Silicon Schottky diode designed for surface mount fast switching applications requiring a low forward voltage drop.

**MARKING CODE: DB2G** 



• Device is *Halogen Free* by design

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
Continuous Forward Current	ΙF	100	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	350	mA
Peak Forward Surge Current, tp=10ms	I <sub>FSM</sub>	750	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	$\Theta_{\sf JA}$	357	°C/W

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

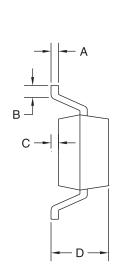
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{R}$	V <sub>R</sub> =25V		90	500	nA
$I_{R}$	V <sub>R</sub> =25V, T <sub>A</sub> =100°C		25	100	μΑ
$BV_R$	I <sub>R</sub> =100μA	30			V
VF	I <sub>F</sub> =2.0mA		0.29	0.33	V
VF	I <sub>F</sub> =15mA		0.40	0.45	V
VF	I <sub>F</sub> =100mA		0.74	1.00	V
C <sub>T</sub>	V <sub>R</sub> =1.0V, f=1.0MHz		7.0		pF
t <sub>rr</sub>	$I_F=I_R=10$ mA, $I_{rr}=1.0$ mA, $R_L=100\Omega$			5.0	ns

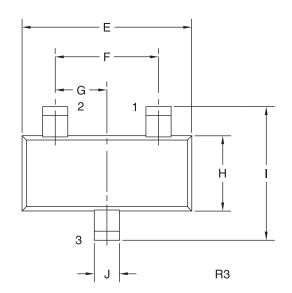
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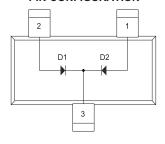


# **SOT-23 CASE - MECHANICAL OUTLINE**





## **PIN CONFIGURATION**



# LEAD CODE:

- 1) Anode D2
- 2) Anode D1

3) Cathode D1, D2

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			
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			
	0.083	0.098	2.10	2.49			
J	0.014	0.020	0.35	0.50			

SOT-23 (REV: R3)

MARKING CODE: DB2G

R1 (27-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**

## 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: <a href="https://www.centralsemi.com/wwreps">www.centralsemi.com/wwreps</a>

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