## 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	l <sub>F</sub>	100	mA
Peak Repetitive Forward Current	IFRM	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	$\Theta_{JA}$	357	°C/W

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

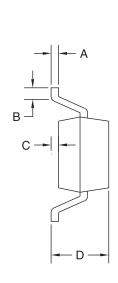
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{R}$	V <sub>R</sub> =25V		90	500	nA
$I_{R}$	V <sub>R</sub> =25V, T <sub>A</sub> =100°C		25	100	μΑ
$BV_R$	I <sub>R</sub> =100μA	30			V
$V_{F}$	I <sub>F</sub> =2.0mA		0.29	0.33	V
$V_{F}$	I <sub>F</sub> =15mA		0.40	0.45	V
$V_{F}$	I <sub>F</sub> =100mA		0.74	1.00	V
$C_T$	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, $R_L=100$ Ω			5.0	ns

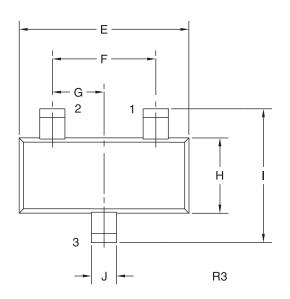
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# **SURFACE MOUNT** DUAL, COMMON CATHODE SILICON SCHOTTKY DIODES

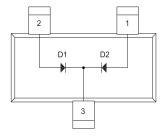


# **SOT-23 CASE - MECHANICAL OUTLINE**





# PIN CONFIGURATION



# **LEAD CODE:**

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

MARKING CODE: DB2G

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.003	0.007	0.08	0.18			
В	0.006	ı	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)

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

## **CONTACT US**

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