## SURFACE MOUNT SILICON HIGH CURRENT SCHOTTKY DIODE



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### **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMDSH2-3 is a silicon Schottky diode, manufactured in a SOD-323 surface mount package, designed for applications requiring a low forward voltage drop.

**MARKING CODE: S2** 



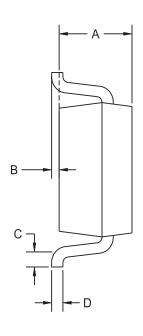
MAXIMUM RATINGS: (T <sub>A</sub> =25°C) Peak Repetitive Reverse Voltage		SYMBOL V <sub>RRM</sub>	3	0	UNITS V
Continuous Forward Current		l <sub>F</sub>	200		mA
Peak Forward Surge Current, tp=10ms		I <sub>FSM</sub>	1.0		Α
Power Dissipation		$P_{D}$	250		mW
Operating and Storage Junction Temperature		T <sub>J</sub> , T <sub>stg</sub>	-65 to +150		°C
Thermal Resistance		$\Theta_{\sf JA}$	500		°C/W
ELECTRICA SYMBOL	AL CHARACTERISTICS: (T <sub>A</sub> =25°C) TEST CONDITIONS V <sub>R</sub> =30V	MIN	<b>TYP</b> 19	<b>MAX</b> 50	<b>UNITS</b> μΑ
BVR	I <sub>R</sub> =100μA	30			V
$V_{F}$	I <sub>F</sub> =2.0mA		0.186		V
$V_{F}$	I <sub>F</sub> =15mA		0.245		V
$V_{F}$	I <sub>F</sub> =100mA		0.35		V
$V_{F}$	I <sub>F</sub> =200mA		0.42	0.55	V
CJ	V <sub>R</sub> =10V, f=1.0MHz		6.0		pF

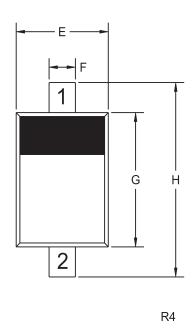
R4 (13-November 2015)

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## **SOD-323 CASE - MECHANICAL OUTLINE**





### LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: S2

DIMENSIONS							
INCHES		MILLIMETERS					
MIN	MAX	MIN	MAX				
0.031	0.039	0.80	1.00				
0.000	0.004	0.00	0.10				
0.008	-	0.20	-				
0.004	0.007	0.11	0.19				
0.045	0.053	1.15	1.35				
-	0.014	-	0.35				
0.063	0.071	1.60	1.80				
0.094	0.102	2.40	2.60				
	INC MIN 0.031 0.000 0.008 0.004 0.045 - 0.063	INCHES   MIN   MAX   0.031   0.039   0.000   0.004   0.008   - 0.004   0.007   0.045   0.053   - 0.014   0.063   0.071	INCHES   MILLIM   MIN   MAX   MIN   0.031   0.039   0.80   0.000   0.004   0.000   0.008   -   0.20   0.004   0.007   0.11   0.045   0.053   1.15   -   0.014   -   0.063   0.071   1.60				

SOD-323 (REV: R4)

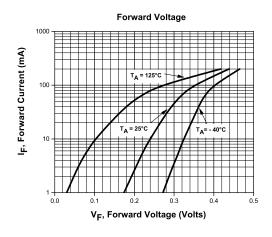
R4 (13-November 2015)

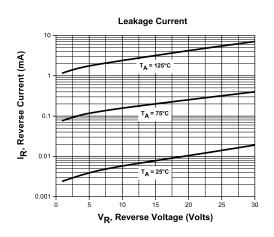
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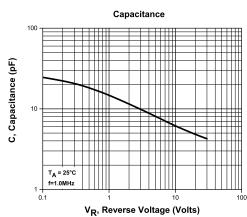
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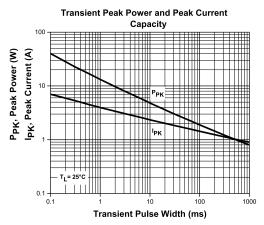


### TYPICAL ELECTRICAL CHARACTERISTICS









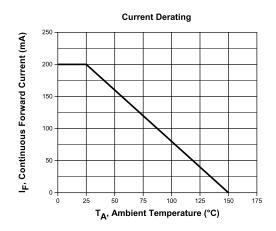
R4 (13-November 2015)

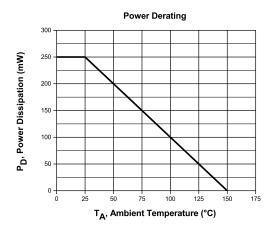
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## SURFACE MOUNT SILICON HIGH CURRENT SCHOTTKY DIODE



### TYPICAL ELECTRICAL CHARACTERISTICS





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#### 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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