# SURFACE MOUNT SILICON SCHOTTKY DIODE



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### **DESCRIPTION:**

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

**MARKING CODE: S1** 



SOD-323 CASE

**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C unless otherwise noted)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
Average Forward Current	IO	100	mA
Peak Forward Surge Current, tp=10ms	I <sub>FSM</sub>	750	mA
Power Dissipation	$P_{D}$	250	mW
Power Dissipation (T <sub>L</sub> =25°C)	$P_{D}$	833	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
Thermal Resistance	$\Theta_{\sf JL}$	150	°C/W

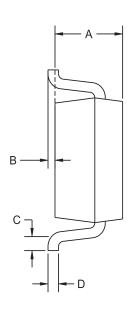
<b>ELECTRICAL CHARACTERISTICS:</b> (T <sub>A</sub> =25°C)
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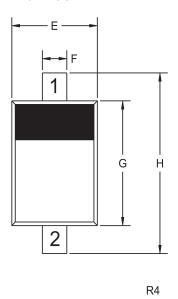
SYMBOL I <sub>R</sub>	TEST CONDITIONS VR=25V	MIN	TYP	<b>MAX</b> 1.0	<b>UNITS</b> μΑ
$BV_R$	I <sub>F</sub> =100μA	30			V
$V_{F}$	I <sub>F</sub> =2.0mA		0.29		V
$V_{F}$	I <sub>F</sub> =15mA		0.37		V
VF	I <sub>F</sub> =50mA		0.44	0.55	V
$V_{F}$	I <sub>F</sub> =100mA		0.51	0.80	V
$C_{,J}$	V <sub>R</sub> =1.0V, f=1.0MHz		7.0		pF

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





#### LEAD CODE:

- 1) Cathode
- 2) Anode

**MARKING CODE: S1** 

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.031	0.039	0.80	1.00			
В	0.000	0.004	0.00	0.10			
С	0.008	ı	0.20	-			
D	0.004	0.007	0.11	0.19			
Е	0.045	0.053	1.15	1.35			
F	-	0.014	-	0.35			
G	0.063	0.071	1.60	1.80			
Н	0.094	0.102	2.40	2.60			

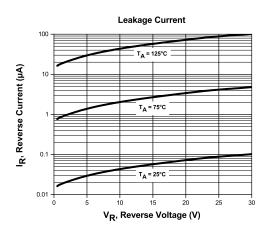
SOD-323 (REV: R4)

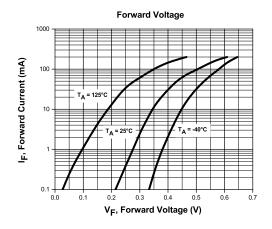
R9 (11-February 2016)

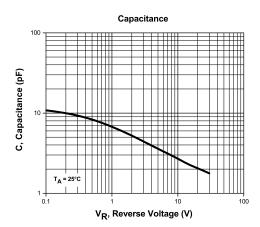
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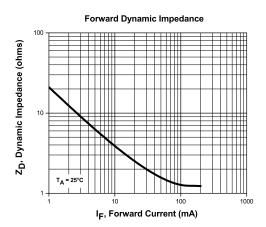


#### TYPICAL ELECTRICAL CHARACTERISTICS





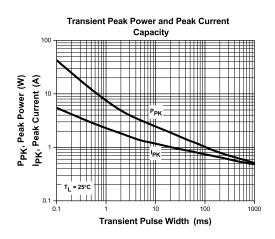


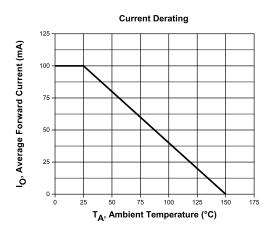


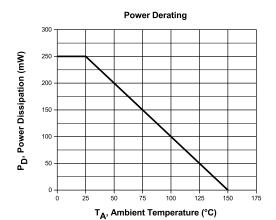
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#### TYPICAL ELECTRICAL CHARACTERISTICS









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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**

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- · Online technical data and parametric search
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- · 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: www.centralsemi.com/wwreps

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