# SURFACE MOUNT SILICON SCHOTTKY DIODE



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# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMOSH-3 is a silicon Schottky diode, epoxy molded in an SOD-523 surface mount package, designed for fast switching applications requiring a low forward voltage drop.

**MARKING CODE: 53** 



SOD-523 CASE

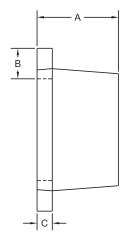
MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
Continuous Forward Current	l <sub>F</sub>	100	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	350	mA
Peak Forward Surge Current, tp=10ms	I <sub>FSM</sub>	750	mA
Power Dissipation	$P_{D}$	250	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	500	°C/W

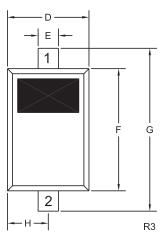
ELECTRICAL CHARACTERISTICS: (T <sub>A</sub> =25°C unless otherwise noted)								
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS			
$I_{R}$	V <sub>R</sub> =25V		90	500	nA			
$I_R$	V <sub>R</sub> =25V, T <sub>A</sub> =100°C		25	100	μΑ			
$BV_R$	I <sub>R</sub> =100μA	30			V			
$V_{F}$	I <sub>F</sub> =2.0mA		0.29	0.33	V			
$V_{F}$	I <sub>F</sub> =15mA		0.37	0.45	V			
$V_{F}$	I <sub>F</sub> =100mA		0.51	1.00	V			
CJ	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			

## SURFACE MOUNT SILICON **SCHOTTKY DIODE**



# **SOD-523 CASE - MECHANICAL OUTLINE**





## LEAD CODE:

- 1) Cathode 2) Anode

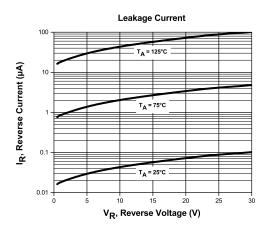
**MARKING CODE: 53** 

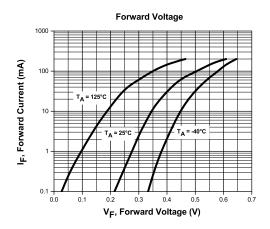
DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.020	0.031	0.50	0.80			
В	0.008	0.016	0.20	0.40			
С	0.002	0.008	0.05	0.20			
D	0.028	0.035	0.70	0.90			
E	0.008	0.014	0.20	0.35			
F	0.039	0.055	1.00	1.40			
G	0.055	0.071	1.40	1.80			
Н	0.016		0.40				
SOD-523 (REV: R3)							

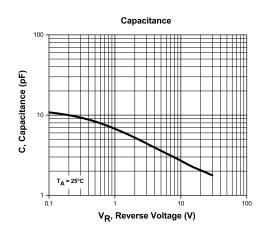
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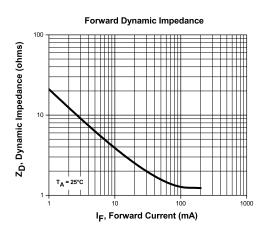


### TYPICAL ELECTRICAL CHARACTERISTICS





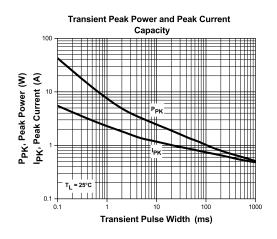


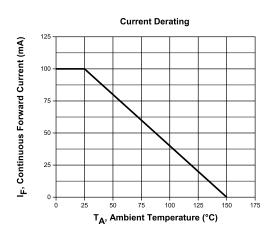


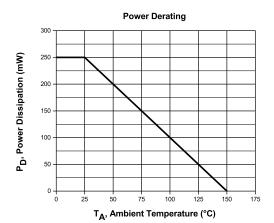
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### TYPICAL ELECTRICAL CHARACTERISTICS







#### **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: www.centralsemi.com/wwreps

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