## SURFACE MOUNT SILICON HIGH CURRENT LOW V<sub>F</sub> SCHOTTKY DIODE



www.centralsemi.com

# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMOSH2-4L is a high current, low  $V_F$  silicon Schottky diode in an SOD-523 surface mount package. This device offers a  $V_F$  as low as 0.33 volts and is designed for small signal general purpose applications where size and low loss is required.

**MARKING CODE: 4L** 



SOD-523 CASE

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Continuous Forward Current	I <sub>F</sub>	200	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	350	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

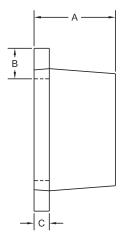
ELECTRICAL CHARACTERISTICS: (T<sub>A</sub>=25°C unless otherwise noted)

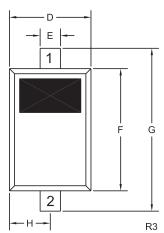
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{R}$	V <sub>R</sub> =20V		11	50	μΑ
$BV_R$	I <sub>R</sub> =100μA	40	53		V
VF	I <sub>F</sub> =10mA		0.24	0.325	V
VF	I <sub>F</sub> =100mA		0.35	0.4	V
VF	I <sub>F</sub> =200mA		0.42	0.5	V
CJ	V <sub>R</sub> =4.0V, f=1.0MHz		8.5	10	pF
t <sub>rr</sub>	$I_F = I_R = 10$ mA, $I_{rr} = 1.0$ mA, $R_L = 100$ $\Omega$		4.0	5.0	ns

## SURFACE MOUNT SILICON **HIGH CURRENT** LOW V<sub>F</sub> SCHOTTKY DIODE



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





# LEAD CODE:

- 1) Cathode 2) Anode

MARKING CODE: 4L

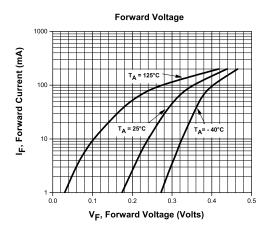
DIMENSIONS							
	INCHES		MILLIMETER				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.020	0.031	0.50	0.80			
В	0.008	0.016	0.20	0.40			
С	0.002	0.008	0.05	0.20			
D	0.028	0.035	0.70	0.90			
E	0.008	0.014	0.20	0.35			
F	0.039	0.055	1.00	1.40			
G	0.055	0.071	1.40	1.80			
Н	0.016		0.4	40			

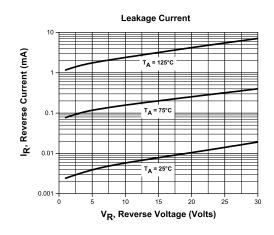
SOD-523 (REV: R3)

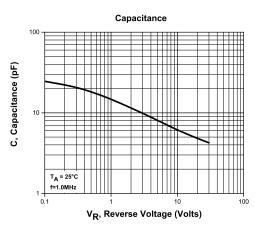


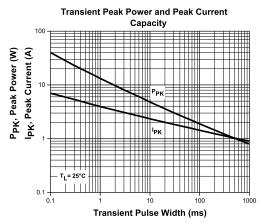


### TYPICAL ELECTRICAL CHARACTERISTICS





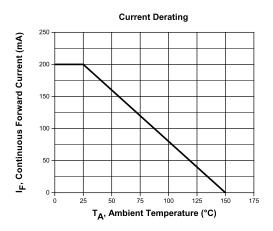


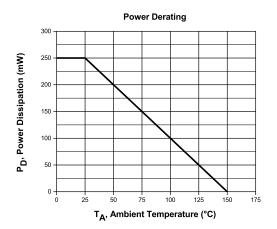






### TYPICAL ELECTRICAL CHARACTERISTICS





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

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>

www.centralsemi.com (001)