# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



#### CMDSH05-4

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



www.centralsemi.com

The CENTRAL SEMICONDUCTOR CMDSH05-4 is a 40 Volt Schottky diode packaged in a space saving surface mount SOD-323 case. This device has been designed for applications requiring a low forward voltage drop.

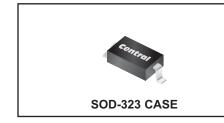
#### MARKING CODE: C55

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	40	V
Continuous Forward Current	١ <sub>F</sub>	500	mA
Peak Repetitive Forward Current, tp≤1.0ms	IFRM	3.5	А
Peak Forward Surge Current, tp=8.0ms	IFSM	10	А
Power Dissipation	PD	250	mW
Operating and Storage Junction Temperature	TJ, T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	Θ <sub>JA</sub>	500	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
IR	V <sub>R</sub> =10V			30	μA
IR	V <sub>R</sub> =30V		60	100	μA
I <sub>R</sub>	V <sub>R</sub> =30V, T <sub>A</sub> =85°C		2.5		mA
IR	V <sub>R</sub> =30V, T <sub>A</sub> =100°C		6.0		mA
BVR	Ι <sub>R</sub> =500μΑ	40			V
V <sub>F</sub>	Ι <sub>F</sub> =100μΑ			0.13	V
V <sub>F</sub>	I <sub>F</sub> =1.0mA			0.21	V
VF	I <sub>F</sub> =10mA			0.27	V
VF	I <sub>F</sub> =100mA			0.35	V
VF	I <sub>F</sub> =500mA			0.47	V
Сј	V <sub>R</sub> =1.0V, f=1.0MHz			50	pF

R4 (8-January 2018)

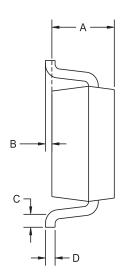


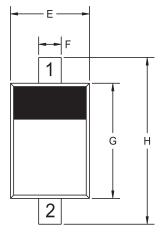


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SURFACE MOUNT SILICON LOW V<sub>F</sub> SCHOTTKY DIODE

#### SOD-323 CASE - MECHANICAL OUTLINE





R4

#### LEAD CODE: 1) Cathode 2) Anode

MARKING CODE: C55

DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
A	0.031	0.039	0.80	1.00		
В	0.000	0.004	0.00	0.10		
С	0.008	-	0.20	-		
D	0.004	0.007	0.11	0.19		
E	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)						

R4 (8-January 2018)

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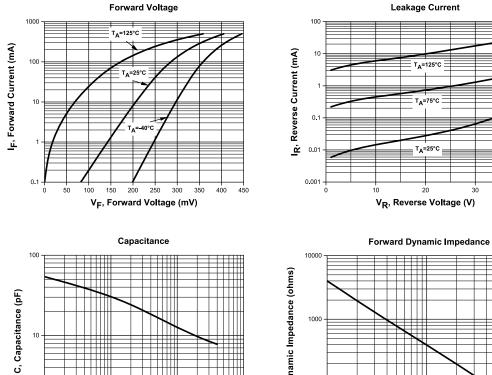


SURFACE MOUNT SILICON LOW V<sub>F</sub> SCHOTTKY DIODE



30

40



#### **TYPICAL ELECTRICAL CHARACTERISTICS**

Z<sub>D</sub>, Dynamic Impedance (ohms) 1000 100 T<sub>A</sub>=25°C T<sub>A</sub>=25°C 10 100 10 100 V<sub>R</sub>, Reverse Voltage (V) IF, Forward Current (mA)

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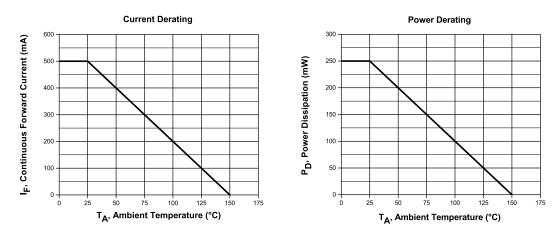
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R4 (8-January 2018)





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



#### TYPICAL ELECTRICAL CHARACTERISTICS

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### 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

#### 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

· Custom product packing

Custom bar coding for shipments

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

#### REQUESTING PRODUCT PLATING

- If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when 1. 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

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