

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!



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# SURFACE MOUNT SILICON LOW V<sub>F</sub> SCHOTTKY RECTIFIERS 1 AMP, 30 THRU 60 VOLT



#### **FEATURES:**

- · Low package profile
- · High reverse voltage capability
- · Low leakage current

MAXIMUM RATINGS: (T<sub>A</sub>=25°C)
Peak Repetitive Reverse Voltage
Average Forward Current (T<sub>L</sub>=110°C)
Peak Forward Surge Current, tp=8.3ms
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance (Note 1)

<b>ELECTRICAL</b>	CHARACTERISTICS: (TA=25°C)
SYMBOL	TEST CONDITIONS
$I_R$	V <sub>R</sub> =Rated V <sub>RRM</sub>
VF	I <sub>F</sub> =0.7A
VF	I <sub>F</sub> =1.0A
CJ	V <sub>R</sub> =4.0V, f=1.0MHz

Note 1: FR-4 epoxy PCB with minimum copper pad area.



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# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMIDSH1-3, CMIDSH1-4, and CMIDSH1-6 are silicon Schottky rectifiers packaged in a space saving flat lead, low profile SOD-323FL case. These devices have been designed for applications requiring a low forward voltage drop.

MARKING CODES: CMIDSH1-3: C13

CMIDSH1-4: C14 CMIDSH1-6: C16

#### **APPLICATIONS:**

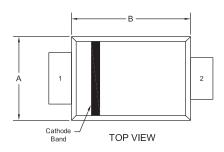
- DC-DC converters
- Voltage clamping
- Reverse polarity protection
- · General pupose rectification

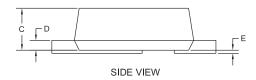
SYMBO		30	CMIDSH 40	<u> 11-4</u> <u>CM</u>	11DSH1-6 60	UNITS
lo	•		1.0			Α
I <sub>FSM</sub>			20			Α
$P_{D}$			308			mW
T <sub>J</sub> , T <sub>st</sub>	a		-65 to +	150		°C
$\Theta_{\sf JA}$	5		405			°C/W
CMIDSH1-3					DSH1-6	
TYP	MAX	TYP	MAX	TYP	MAX	UNITS
25	100	10	100	20	100	μΑ
0.41	0.45	0.43	0.52	0.48	058	V
0.44	0.52	0.46	0.58	0.53	0.68	V
70	-	51	-	45	-	pF

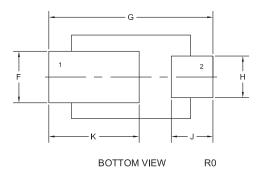
SURFACE MOUNT SILICON LOW V<sub>F</sub> SCHOTTKY RECTIFIERS 1 AMP, 30 THRU 60 VOLT



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







DIMENSIONS								
	INC	HES	MILLIMETERS					
SYMBOL	MIN	MAX	MIN	MAX				
Α	0.047	0.055	1.20	1.40				
В	0.068	0.077	1.75	1.95				
С	0.021	0.030	0.55	0.75				
D	0.004	0.008	0.10	0.20				
E	-	0.004	-	0.10				
F	0.025	0.038	0.65	0.95				
G	0.090	0.107	2.30	2.70				
Н	0.017	0.030	0.45	0.75				
J	0.015	0.032	0.40	0.80				
K	0.045	0.061	1.15	1.55				
K	0.045	0.061	1.15					

SOD-323FL (REV:R0)

# LEAD CODE:

- 1) Cathode
- 2) Anode

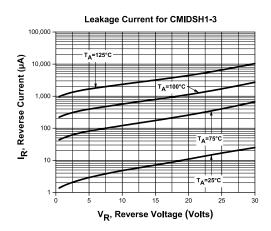
MARKING CODES: CMIDSH1-3: C13 CMIDSH1-4: C14

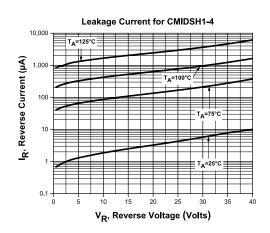
CMIDSH1-4: C14 CMIDSH1-6: C16

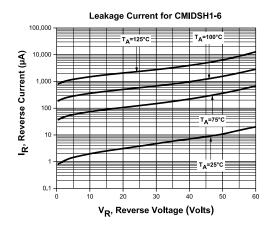
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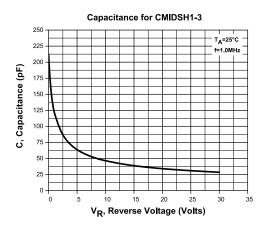


# TYPICAL ELECTRICAL CHARACTERISTICS





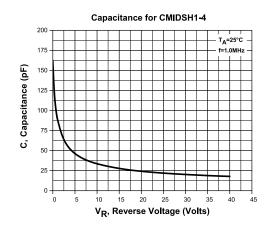


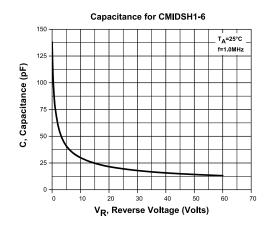


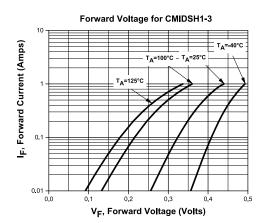


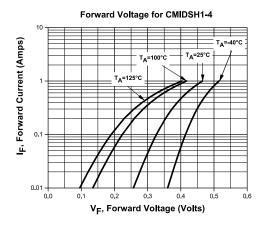


# TYPICAL ELECTRICAL CHARACTERISTICS





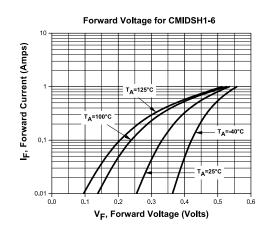


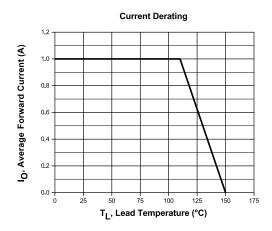


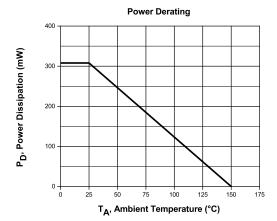




# TYPICAL ELECTRICAL CHARACTERISTICS







#### **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).
- 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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