

**CMDSH2-4L**

**SURFACE MOUNT SILICON  
HIGH CURRENT  
LOW  $V_F$  SCHOTTKY DIODE**



[www.centrasemi.com](http://www.centrasemi.com)



**SOD-323 CASE**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMDSH2-4L is a high current, low  $V_F$ , 40 Volt Schottky diode packaged in a space saving SOD-323 surface mount case. This device has been designed for small signal general purpose applications when small size and operational efficiency are prime requirements.

**MARKING CODE: S2L****MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Continuous Forward Current	$I_F$	200	mA
Peak Forward Surge Current, $t_p=1.0\text{ms}$	$I_{FSM}$	1.0	A
Power Dissipation	$P_D$	250	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\Theta_{JA}$	500	$^\circ\text{C/W}$

**SYMBOL**

$V_{RRM}$	40	V
$I_F$	200	mA
$I_{FSM}$	1.0	A
$P_D$	250	mW
$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
$\Theta_{JA}$	500	$^\circ\text{C/W}$

**UNITS****ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

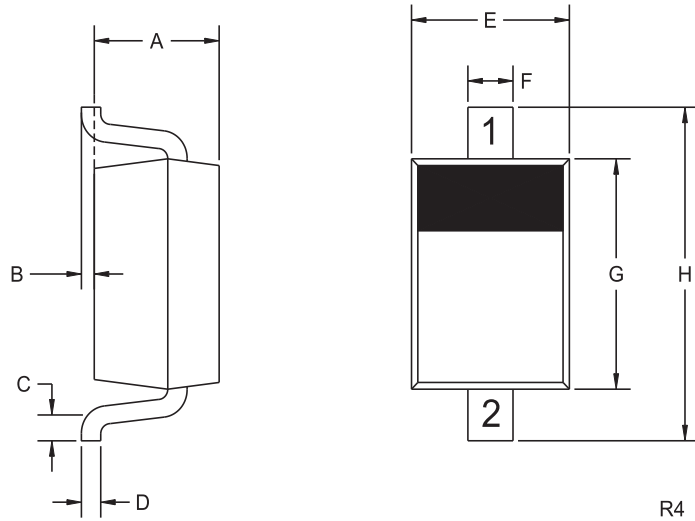
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=20\text{V}$		11	50	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	40	53		V
$V_F$	$I_F=10\text{mA}$		0.24	0.325	V
$V_F$	$I_F=100\text{mA}$		0.35	0.4	V
$V_F$	$I_F=200\text{mA}$		0.42	0.5	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$		8.5	10	pF
$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		4.0	5.0	ns

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SOD-323 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: S2L

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.031	0.039	0.80	1.00
B	0.000	0.004	0.00	0.10
C	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
H	0.094	0.102	2.40	2.60

SOD-323 (REV: R4)

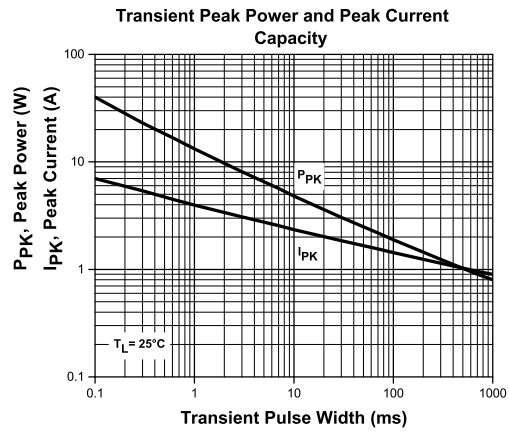
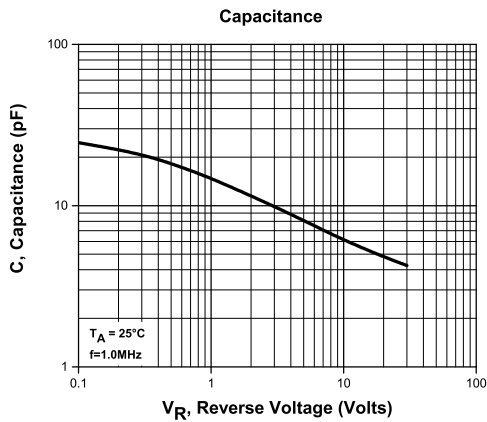
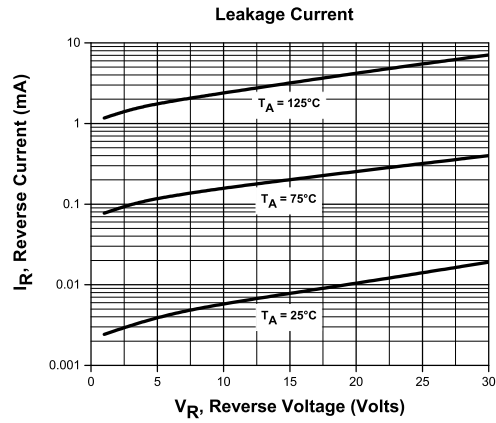
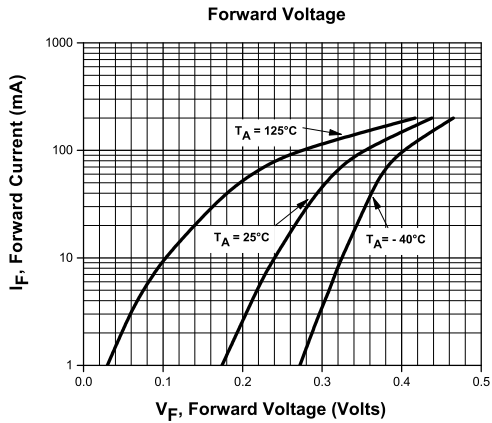
R3 (13-November 2015)

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### TYPICAL ELECTRICAL CHARACTERISTICS



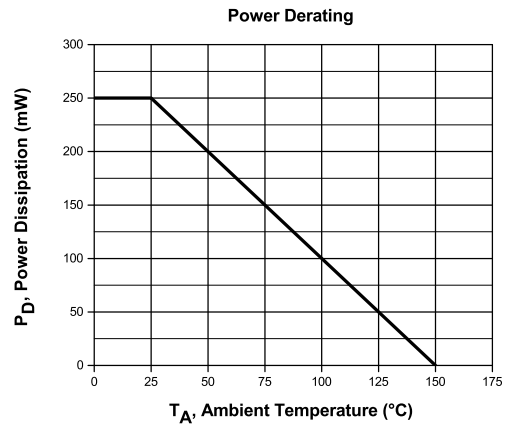
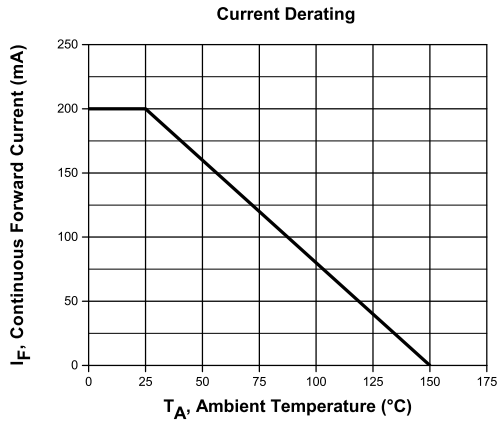
R3 (13-November 2015)

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TYPICAL ELECTRICAL CHARACTERISTICS



R3 (13-November 2015)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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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

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick 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

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### 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).

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### 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.centrasemi.com](http://www.centrasemi.com)

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[www.centrasemi.com/wwreps](http://www.centrasemi.com/wwreps)

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