



**THE DATASHEET OF
CMDSH2-4L TR PBFREE**



CMDSH2-4L

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



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	Θ_{JA}	500	$^\circ\text{C/W}$

SYMBOL

V_{RRM}	40
I_F	200
I_{FSM}	1.0
P_D	250
T_J, T_{stg}	-65 to +150
Θ_{JA}	500

UNITS

V
mA
A
mW
$^\circ\text{C}$
$^\circ\text{C/W}$

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

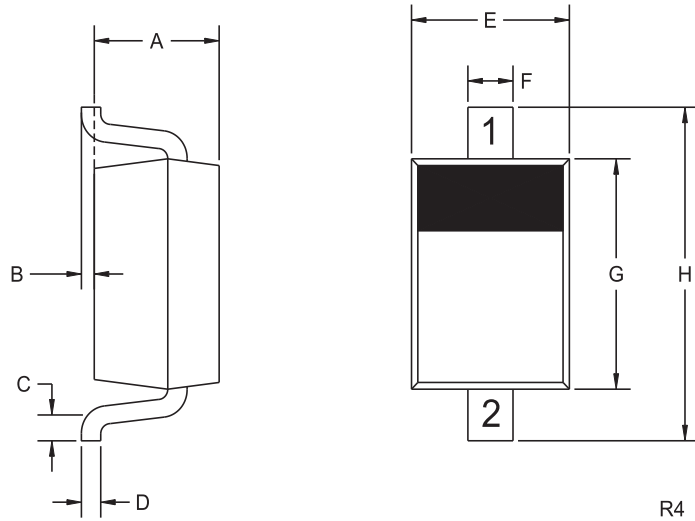
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=20\text{V}$		11	50	μA
BV_R	$I_R=100\mu\text{A}$	40	53		V
V_F	$I_F=10\text{mA}$		0.24	0.325	V
V_F	$I_F=100\text{mA}$		0.35	0.4	V
V_F	$I_F=200\text{mA}$		0.42	0.5	V
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$		8.5	10	pF
t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA},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

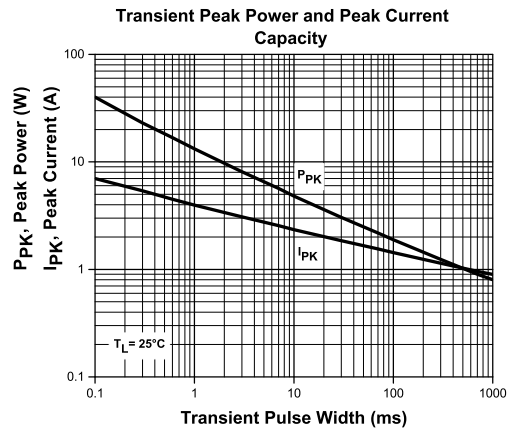
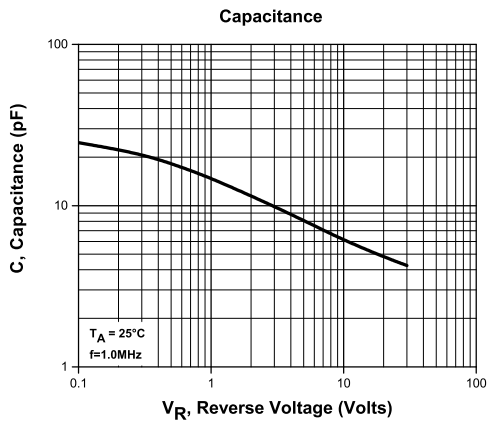
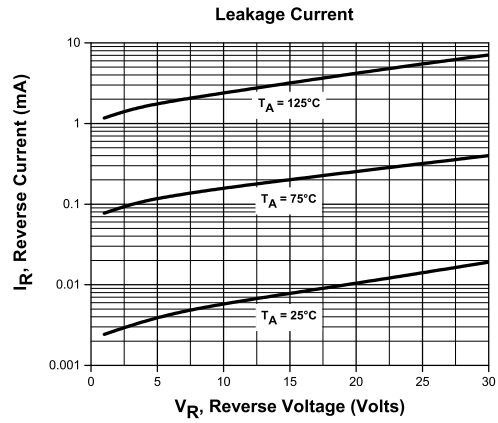
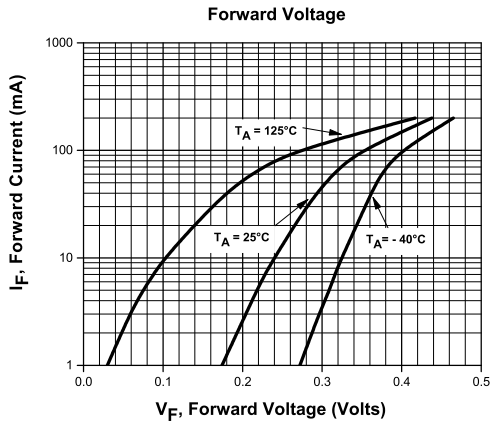
R3 (13-November 2015)

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TYPICAL ELECTRICAL CHARACTERISTICS



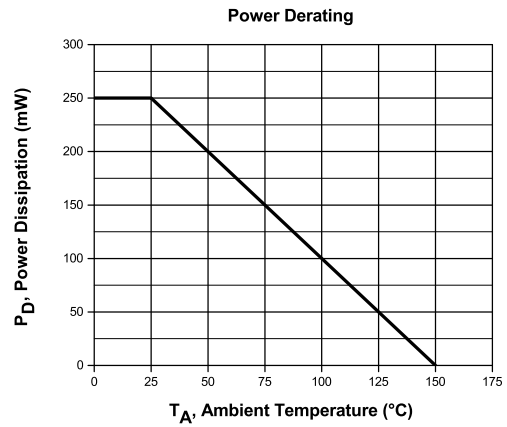
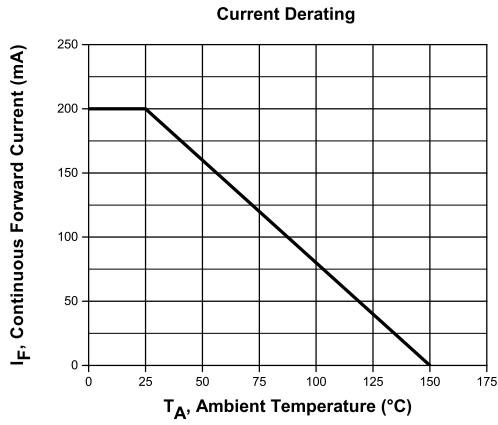
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TYPICAL ELECTRICAL CHARACTERISTICS



R3 (13-November 2015)

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 quick ship samples (2nd 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

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- ✓ Global Sourcing Solution
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- ✓ Cost Control Management
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- ✓ Excess Inventory Management