

CMDH05-4

SURFACE MOUNT SILICON
LOW V_F
SCHOTTKY DIODE



www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMDH05-4 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



SOD-323 CASE

MAXIMUM RATINGS: ($T_A=25^\circ C$)

Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Continuous Forward Current	I_F	500	mA
Peak Repetitive Forward Current, $t_p \leq 1.0\text{ms}$	I_{FRM}	3.5	A
Peak Forward Surge Current, $t_p = 8.0\text{ms}$	I_{FSM}	10	A
Power Dissipation	P_D	250	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ C$
Thermal Resistance	Θ_{JA}	500	$^\circ C/W$

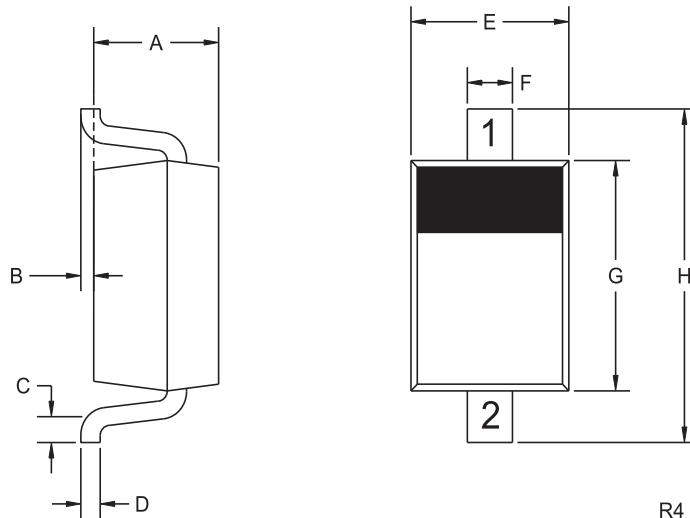
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ C$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=10V$			30	μA
I_R	$V_R=30V$		60	100	μA
I_R	$V_R=30V, T_A=85^\circ C$		2.5		mA
I_R	$V_R=30V, T_A=100^\circ C$		6.0		mA
BV_R	$I_R=500\mu A$	40			V
V_F	$I_F=100\mu A$			0.13	V
V_F	$I_F=1.0mA$			0.21	V
V_F	$I_F=10mA$			0.27	V
V_F	$I_F=100mA$			0.35	V
V_F	$I_F=500mA$			0.47	V
C_J	$V_R=1.0V, f=1.0MHz$			50	pF

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SOD-323 CASE - MECHANICAL OUTLINE



R4

LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: C55

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)

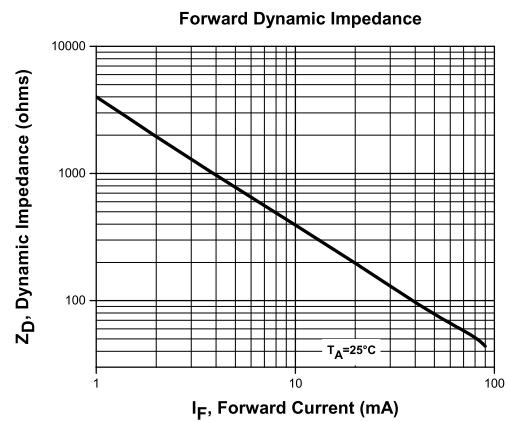
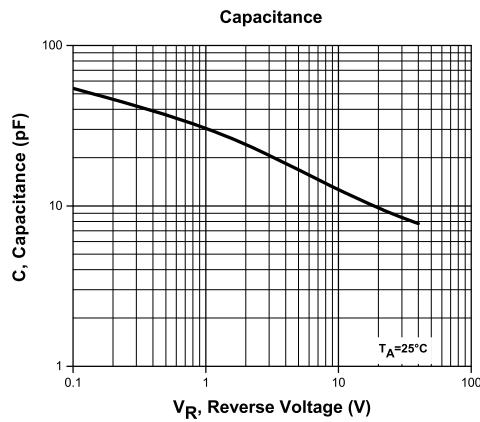
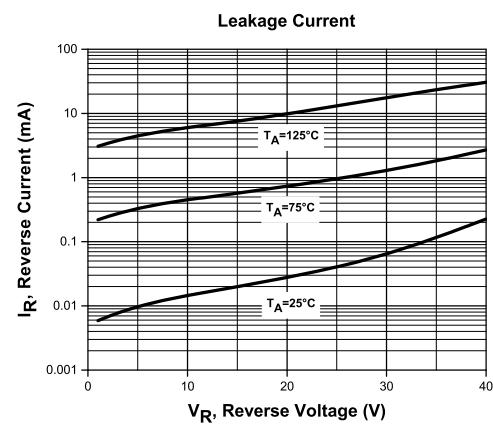
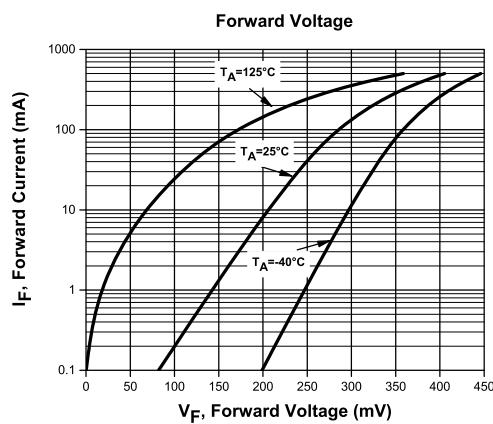
R4 (8-January 2018)

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Central
Semiconductor Corp.™

TYPICAL ELECTRICAL CHARACTERISTICS



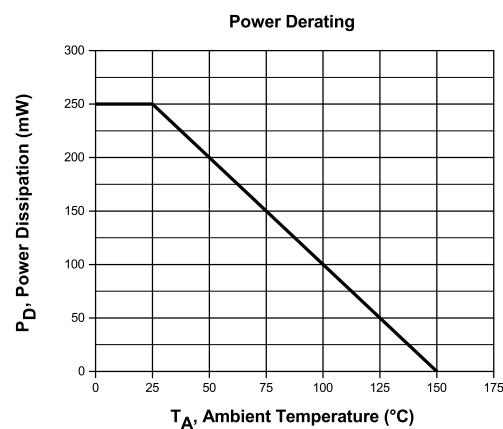
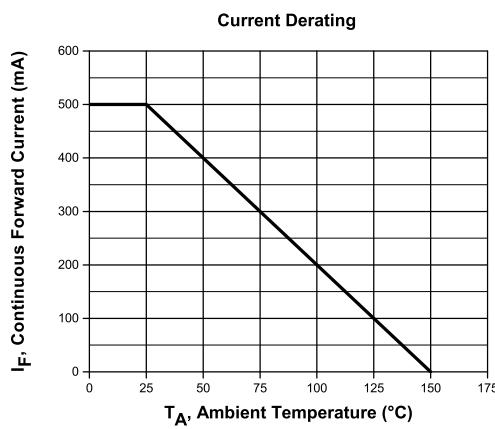
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PRODUCT SUPPORT

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

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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