

**CMHSH-3**  
**SURFACE MOUNT SILICON**  
**SCHOTTKY DIODE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMHSH-3 is a silicon Schottky diode, epoxy molded in a SOD-123 surface mount package, designed for fast switching applications requiring a low forward voltage drop.

**MARKING CODE: CH3**



**SOD-123 CASE**

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

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
Continuous Forward Current	$I_F$	200	mA
Peak Repetitive Forward Current	$I_{FRM}$	300	mA
Peak Forward Surge Current, $t_p < 1.0\text{s}$	$I_{FSM}$	600	mA
Power Dissipation	$P_D$	400	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	312.5	$^\circ\text{C/W}$

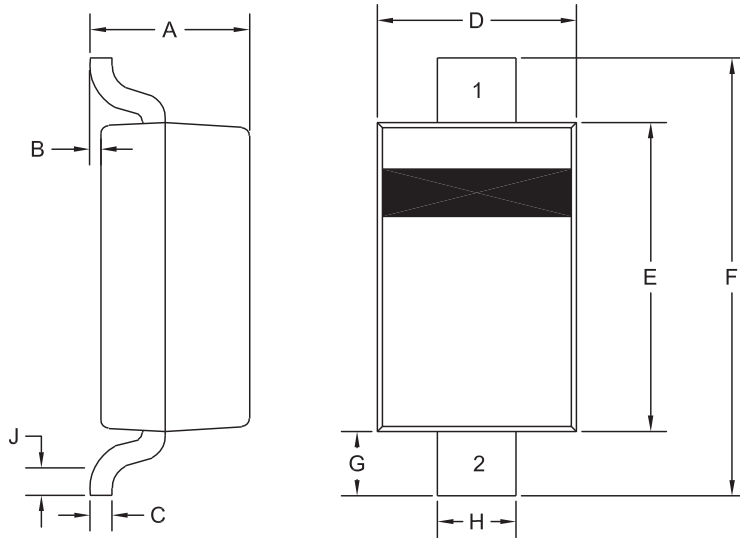
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=25\text{V}$			2.0	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	30			V
$V_F$	$I_F=100\mu\text{A}$			240	mV
$V_F$	$I_F=1.0\text{mA}$			320	mV
$V_F$	$I_F=10\text{mA}$			400	mV
$V_F$	$I_F=30\text{mA}$			500	mV
$V_F$	$I_F=100\text{mA}$			1.0	V
$C_J$	$V_R=1.0\text{V}, f=1.0\text{MHz}$		7.0		pF
$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		7.0		ns

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**SOD-123 CASE - MECHANICAL OUTLINE**



R5

**LEAD CODE**

- 1) Cathode
- 2) Anode

**MARKING CODE: CH3**

<b>DIMENSIONS</b>				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.053	0.95	1.35
B	0.000	0.005	0.00	0.12
C	-	0.008	-	0.20
D	0.055	0.071	1.40	1.80
E	0.098	0.110	2.50	2.80
F	0.142	0.154	3.60	3.90
G	0.016	-	0.40	-
H	0.020	0.028	0.50	0.70
J	0.010	-	0.25	-

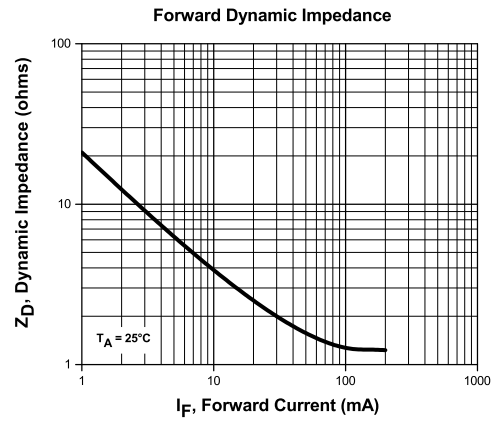
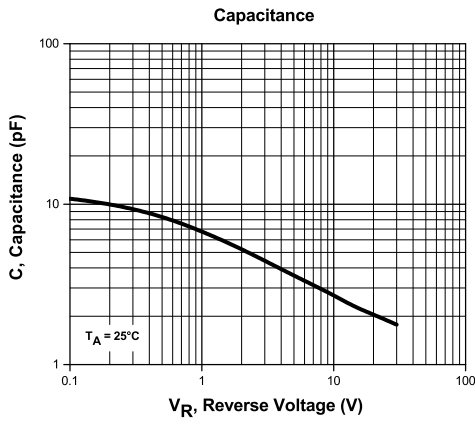
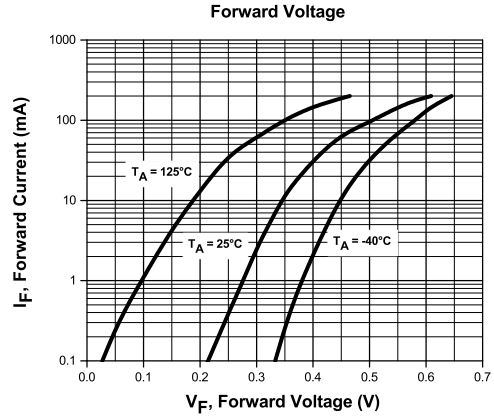
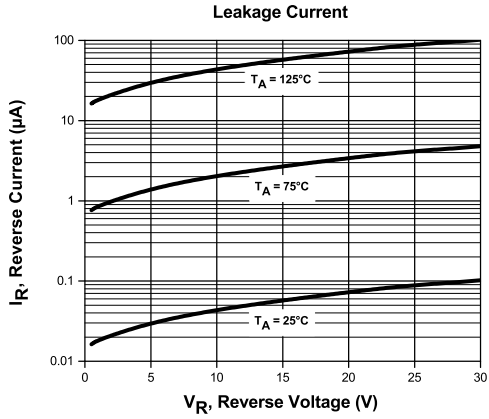
SOD-123 (REV:R5)

R7 (16-February 2016)

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**TYPICAL ELECTRICAL CHARACTERISTICS**

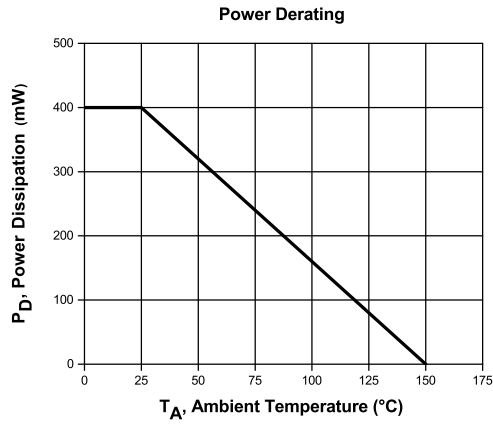
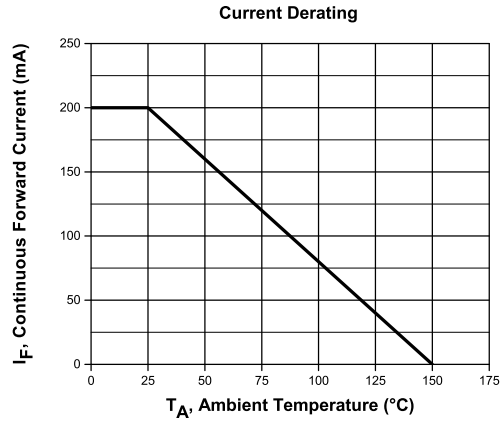
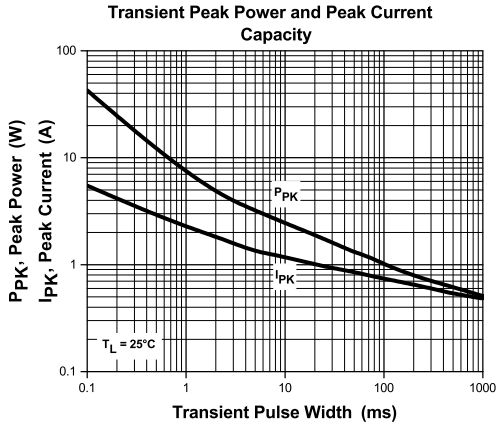


R7 (16-February 2016)

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**TYPICAL ELECTRICAL CHARACTERISTICS**



R7 (16-February 2016)

## 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

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