## SURFACE MOUNT SILICON SCHOTTKY DIODE



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## **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 <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
Continuous Forward Current	ΙF	200	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	300	mA
Peak Forward Surge Current, tp<1.0s	I <sub>FSM</sub>	600	mA
Power Dissipation	$P_{D}$	400	mW
Operating and Storage Junction Temperature	T <sub>J,</sub> T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	312.5	°C/W

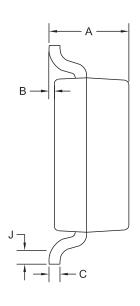
**ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

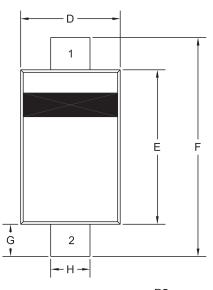
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{R}$	V <sub>R</sub> =25V			2.0	μΑ
$BV_R$	I <sub>R</sub> =100μA	30			V
VF	I <sub>F</sub> =100μA			240	mV
VF	I <sub>F</sub> =1.0mA			320	mV
VF	I <sub>F</sub> =10mA			400	mV
$V_{F}$	I <sub>F</sub> =30mA			500	mV
VF	I <sub>F</sub> =100mA			1.0	V
CJ	V <sub>R</sub> =1.0V, f=1.0MHz		7.0		pF
t <sub>rr</sub>	$I_F = I_R = 10$ mA, $I_{rr} = 1.0$ mA, $R_L = 100$ Ω		7.0		ns

## SURFACE MOUNT SILICON **SCHOTTKY DIODE**



## **SOD-123 CASE - MECHANICAL OUTLINE**





R5

# **LEAD CODE**1) Cathode

- 2) Anode

MARKING CODE: CH3

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.037	0.053	0.95	1.35			
В	0.000	0.005	0.00	0.12			
С	-	0.008	-	0.20			
D	0.055	0.071	1.40	1.80			
Е	0.098	0.110	2.50	2.80			
F	0.142	0.154	3.60	3.90			
G	0.016	-	0.40	-			
Н	0.020	0.028	0.50	0.70			
J	0.010	-	0.25	-			

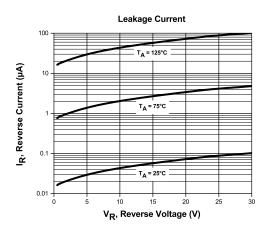
SOD-123 (REV:R5)

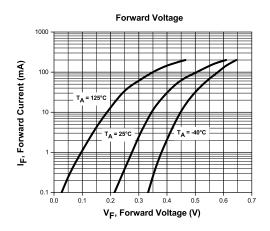
R7 (16-February 2016)

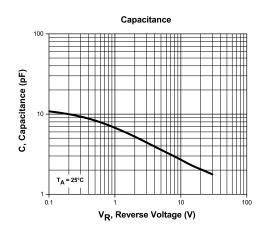


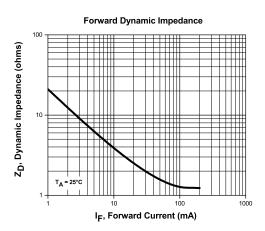


### TYPICAL ELECTRICAL CHARACTERISTICS





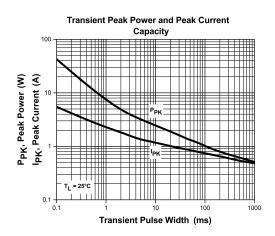


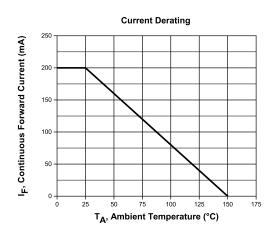


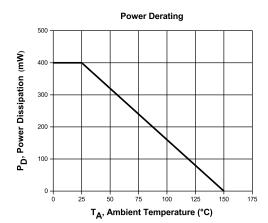
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### TYPICAL ELECTRICAL CHARACTERISTICS







#### **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).
- 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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