

CMOSH-4E

**ENHANCED SPECIFICATION  
SURFACE MOUNT SILICON  
SCHOTTKY DIODE**



www.centrasemi.com



SOD-523 CASE

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMOSH-4E is an enhanced version of the CMOSH-3 silicon Schottky diode in an SOD-523 surface mount package.

**MARKING CODE: 4E**

**ENHANCED SPECIFICATIONS:**

- ◆  $I_F$  from 100mA MAX to 200mA MAX
- ◆  $BV_R$  from 30V MIN to 40V MIN
- ◆  $V_F$  from 1.0V MAX to 0.8V MAX

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

- ◆ **Peak Repetitive Reverse Voltage**
- ◆ **Continuous Forward Current**  
Peak Repetitive Forward Current  
Peak Forward Surge Current,  $t_p=10\text{ms}$   
Power Dissipation  
Operating and Storage Junction Temperature  
Thermal Resistance

**SYMBOL**

SYMBOL	UNITS
$V_{RRM}$	40 V
$I_F$	200 mA
$I_{FRM}$	350 mA
$I_{FSM}$	750 mA
$P_D$	250 mW
$T_J, T_{stg}$	-65 to +150 °C
$\Theta_{JA}$	500 °C/W

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=25\text{V}$		90	500	nA
$I_R$	$V_R=25\text{V}, T_A=100^\circ\text{C}$		25	100	$\mu\text{A}$
◆ $BV_R$	$I_R=100\mu\text{A}$	40	50		V
$V_F$	$I_F=2.0\text{mA}$		0.29	0.33	V
◆ $V_F$	$I_F=15\text{mA}$		0.37	0.42	V
◆ $V_F$	$I_F=100\text{mA}$		0.51	0.80	V
◆◆ $V_F$	$I_F=200\text{mA}$		0.65	1.0	V
$C_J$	$V_R=1.0\text{V}, f=1.0\text{MHz}$		7.0		pF
$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$			5.0	ns

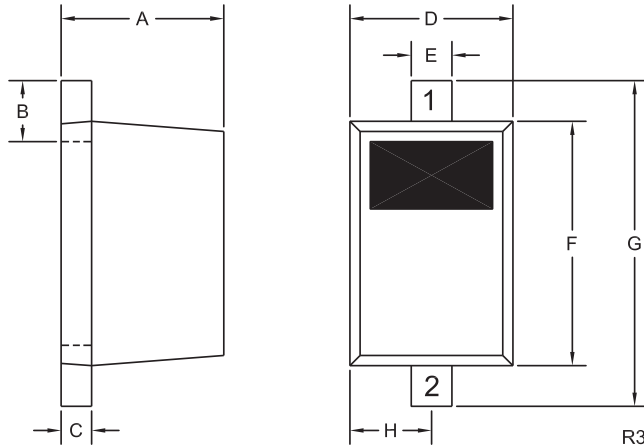
- ◆ Enhanced specification.
- ◆◆ Additional Enhanced specification.

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**SOD-523 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) Cathode
- 2) Anode

**MARKING CODE: 4E**

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.020	0.031	0.50	0.80
B	0.008	0.016	0.20	0.40
C	0.002	0.008	0.05	0.20
D	0.028	0.035	0.70	0.90
E	0.008	0.014	0.20	0.35
F	0.039	0.055	1.00	1.40
G	0.055	0.071	1.40	1.80
H	0.016		0.40	

SOD-523 (REV: R3)

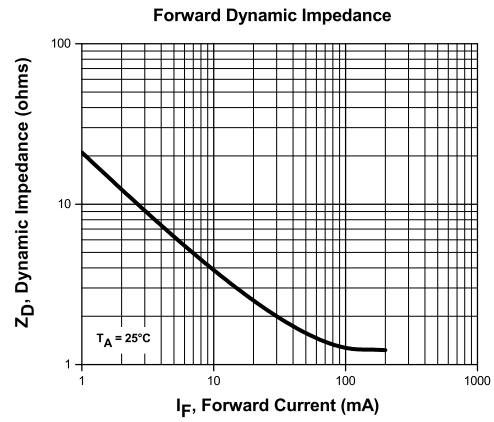
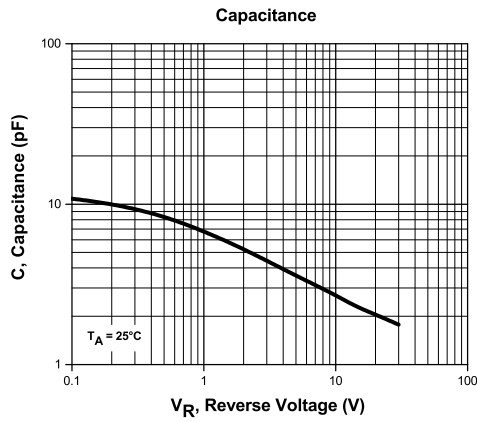
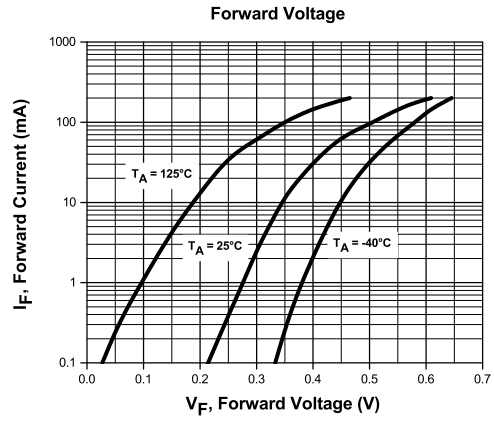
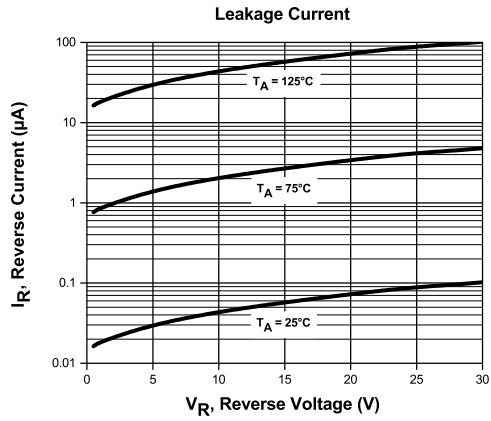
R5 (16-February 2016)

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**TYPICAL ELECTRICAL CHARACTERISTICS**



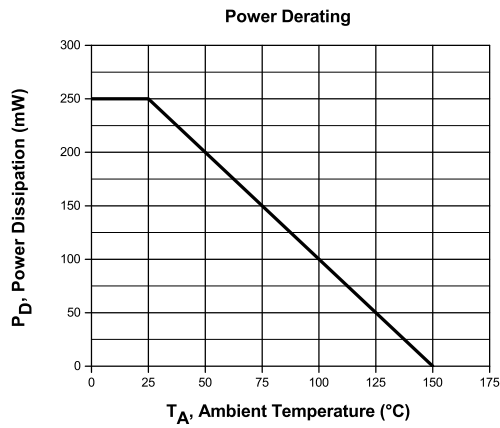
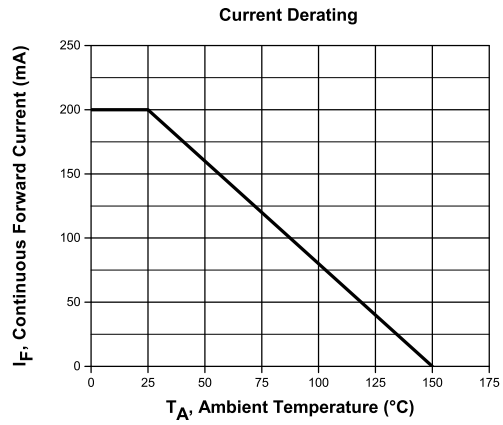
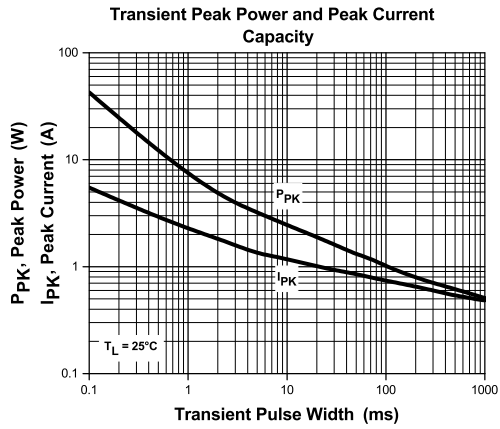
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**TYPICAL ELECTRICAL CHARACTERISTICS**



R5 (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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