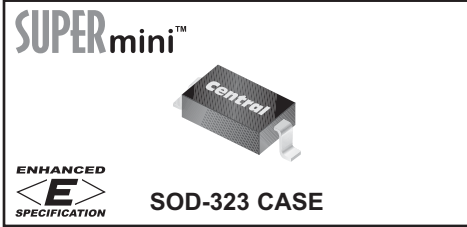


**CMDSH-4E**  
**ENHANCED SPECIFICATION**  
**SURFACE MOUNT**  
**SILICON SCHOTTKY DIODE**



www.centrasemi.com



**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMDSH-4E is an Enhanced version of the CMDSH-3 Silicon Schottky Diode in an SOD-323 Surface Mount Package.

**ENHANCED SPECIFICATIONS:**

- ◆  $I_O$  from 100mA max to 200mA max.
- ◆  $BV_R$  from 30V min to 40V min.
- ◆  $V_F$  from 1.0V max to 0.8V max.

**MARKING CODE: S1E**

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

- ◆ **Peak Repetitive Reverse Voltage**
- ◆ **Average 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**

$V_{RRM}$	<b>40</b>
$I_O$	<b>200</b>
$I_{FRM}$	350
$I_{FSM}$	750
$P_D$	250
$T_J, T_{stg}$	-65 to +150
$\theta_{JA}$	500

**UNITS**

<b>V</b>
<b>mA</b>
mA
mA
mW
$^\circ\text{C}$
$^\circ\text{C}/\text{W}$

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

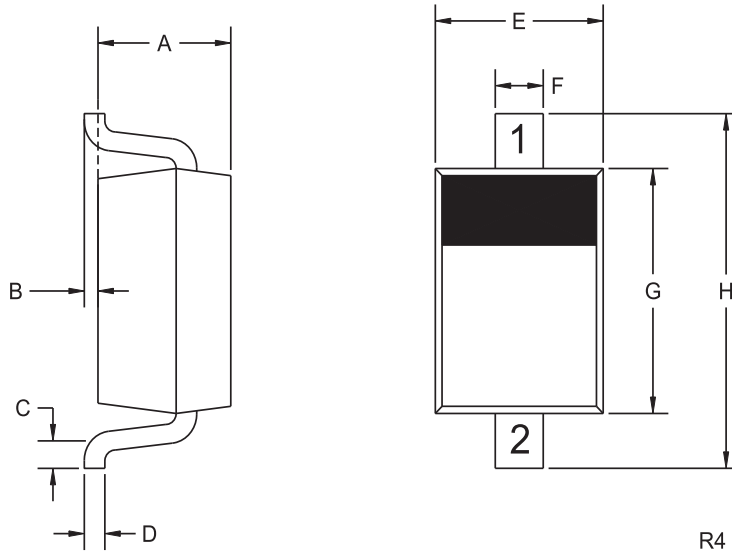
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=25\text{V}$		90	500	nA
$I_R$	$V_R=25\text{V}, T_A=100^\circ\text{C}$		25	100	$\mu\text{A}$
◆ $BV_R$	$I_R=100\mu\text{A}$	<b>40</b>	<b>50</b>		<b>V</b>
$V_F$	$I_F=2.0\text{mA}$		0.29	0.33	V
◆ $V_F$	$I_F=15\text{mA}$		<b>0.37</b>	<b>0.42</b>	<b>V</b>
◆ $V_F$	$I_F=100\text{mA}$		<b>0.61</b>	<b>0.80</b>	<b>V</b>
◆ ◆ $V_F$	$I_F=200\text{mA}$		<b>0.65</b>	<b>1.0</b>	<b>V</b>
$C_T$	$V_R=1.0\text{V}, f=1.0\text{MHz}$		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.

**CMDSH-4E**  
**ENHANCED SPECIFICATION**  
**SURFACE MOUNT**  
**SILICON SCHOTTKY DIODE**



**SOD-323 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) CATHODE
- 2) ANODE

**MARKING CODE: S1E**

SYMBOL	DIMENSIONS			
	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)

R2 (8-January 2010)