

**CMD5H05-4**  
**SURFACE MOUNT**  
**SUPERmini™**  
**LOW  $V_F$**   
**SILICON SCHOTTKY DIODE**



# Central™

## Semiconductor Corp.

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMD5H05-4 is a 40 volt Schottky Diode packaged in a space saving surface mount SOD-323 case. This SUPERmini™ device has been designed for applications requiring a low forward voltage drop.

**MARKING CODE: C55**

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

Peak Repetitive Reverse Voltage  
 Continuous Forward Current  
 Peak Repetitive Forward Current,  $t_p \leq 1\text{ms}$   
 Forward Surge Current,  $t_p=8\text{ms}$   
 Power Dissipation  
 Operating and Storage  
 Junction Temperature  
 Thermal Resistance

**SYMBOL**

$V_{RRM}$  40  
 $I_F$  500  
 $I_{FRM}$  3.5  
 $I_{FSM}$  10  
 $P_D$  250  
 $T_J, T_{stg}$  -65 to +150  
 $\theta_{JA}$  500

**UNITS**

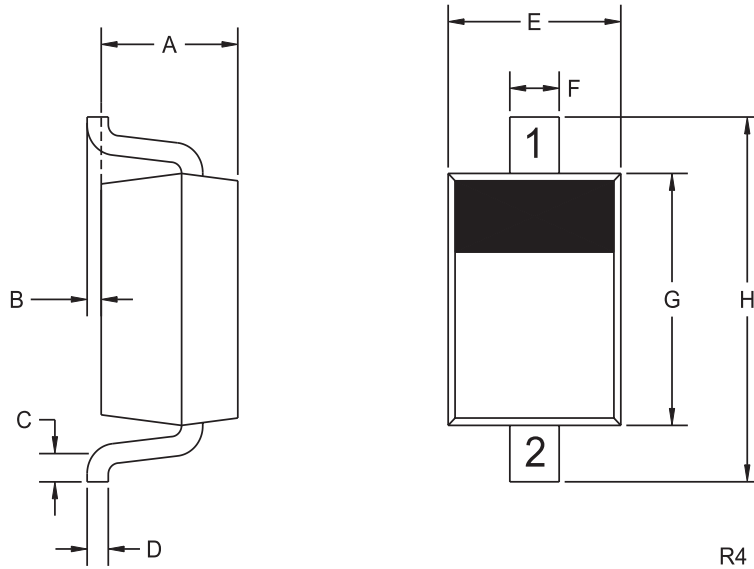
V  
 mA  
 A  
 A  
 mW  
 $^\circ\text{C}$   
 $^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R= 10\text{V}$		20	$\mu\text{A}$
$I_R$	$V_R= 30\text{V}$		100	$\mu\text{A}$
$BV_R$	$I_R= 500\mu\text{A}$	40		V
$V_F$	$I_F= 100\mu\text{A}$		0.13	V
$V_F$	$I_F= 1.0\text{mA}$		0.21	V
$V_F$	$I_F= 10\text{mA}$		0.27	V
$V_F$	$I_F= 100\text{mA}$		0.35	V
$V_F$	$I_F= 500\text{mA}$		0.47	V
$C_T$	$V_R= 1.0\text{V}, f=1.0\text{ MHz}$		50	pF

R0 (07-September 2004)

**SOD-323 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) CATHODE
- 2) ANODE

**MARKING CODE: C55**

DIMENSIONS				
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)