

CMPSH05-4C

SURFACE MOUNT  
DUAL, COMMON CATHODE  
HIGH CURRENT, LOW  $V_F$   
SILICON SCHOTTKY DIODE



SOT-23F CASE

MARKING CODE: C405

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

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Continuous Forward Current	$I_F$	500	mA
Peak Repetitive Forward Current, $t_p \leq 1\text{ms}$	$I_{FRM}$	3.5	A
Forward Surge Current, $t_p=8\text{ms}$	$I_{FSM}$	10	A
Power Dissipation	$P_D$	350	mW
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	357	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS PER DIODE: ( $T_A=25^\circ\text{C}$  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

**Central**<sup>TM</sup>  
Semiconductor Corp.

**DESCRIPTION:**

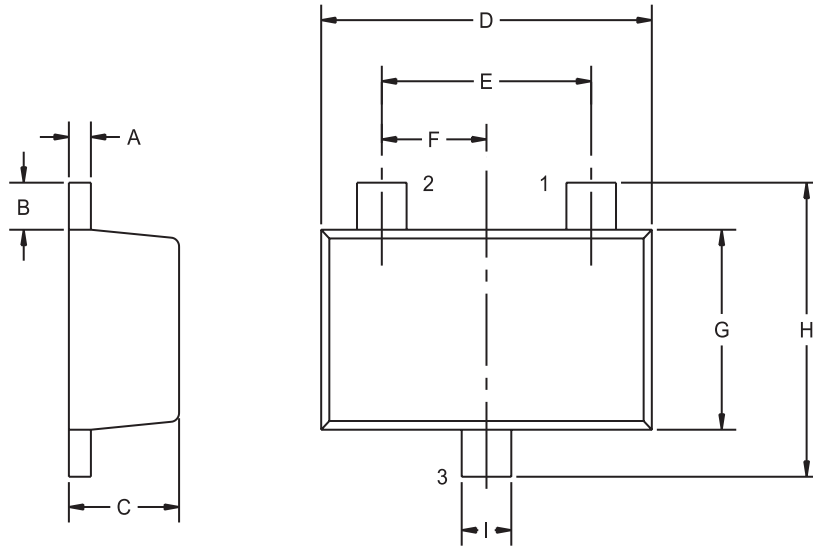
The CENTRAL SEMICONDUCTOR CMPSH05-4C is a Dual, Common Cathode HIGH CURRENT, LOW  $V_F$  40 volt Schottky Diode pair packaged in a space saving SOT-23F surface mount case. This device has been designed for small signal general purpose applications when small size and operational efficiency are prime requirements.

**SPECIFICATIONS:**

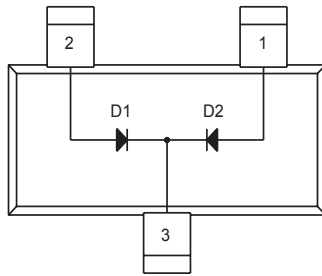
- Low  $V_F = 0.35\text{V}$  max @ 100mA
- $V_{RRM} = 40\text{V}$
- $I_F = 500\text{mA}$

R0 (14-September 2004)

**SOT-23F CASE - MECHANICAL OUTLINE**



R1



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.008	0.10	0.20
B	0.012	0.020	0.30	0.50
C	0.031	0.039	0.80	1.00
D	0.110	0.118	2.80	3.00
E	0.075		1.90	
F	0.037		0.95	
G	0.059	0.067	1.50	1.70
H	0.091	0.098	2.30	2.50
I	0.014	0.018	0.35	0.45

SOT-23F (REV: R1)

**LEAD CODE:**

- 1) ANODE D2
- 2) ANODE D1
- 3) CATHODE D1, D2

**MARKING CODE: C405**