

CMPSH05-4C

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



SOT-23F CASE

MARKING CODE: C405

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

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}
 I_F
 I_{FRM}
 I_{FSM}
 P_D

40
500
3.5
10
350

UNITS

V
mA
A
A
mW

 $^\circ\text{C}$
 $^\circ\text{C/W}$

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	μA
I_R	$V_R=30\text{V}$		100	μA
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

CentralTM
Semiconductor Corp.

DESCRIPTION:

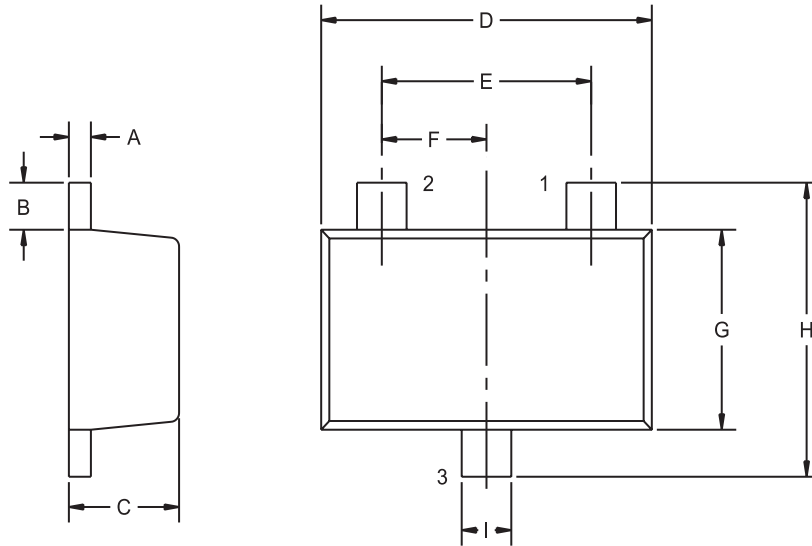
The CENTRAL SEMICONDUCTOR CMPSH05-4C is a Dual, Common Cathode HIGH CURRENT, LOW V_F 40 volt Schottky Diode pair packaged in a space saving SOT-23F surface mount case. This device has been designed for small signal general purpose applications when small size and operational efficiency are prime requirements.

SPECIFICATIONS:

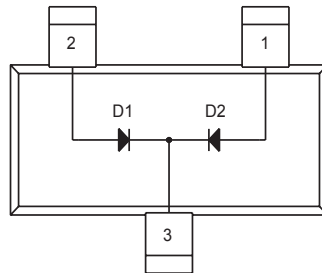
- Low $V_F = 0.35\text{V}$ max @ 100mA
- $V_{RRM} = 40\text{V}$
- $I_F = 500\text{mA}$

R0 (14-September 2004)

SOT-23F CASE - MECHANICAL OUTLINE



R1



LEAD CODE:

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

MARKING CODE: C405

SYMBOL	DIMENSIONS			
	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)