

CMPSH05-4C

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

**SOT-23F CASE**www.centrasemi.com**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.

MARKING CODE: C405**FEATURES:**

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

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

Peak Repetitive Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current, $t_p \leq 1.0ms$
Peak Forward Surge Current, $t_p=8.0ms$
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	350	
T_J, T_{stg}	-65 to +150	
θ_{JA}	357	

UNITS

V
mA
A
A
mW
 $^\circ C$
 $^\circ C/W$

ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ C$ unless otherwise noted)

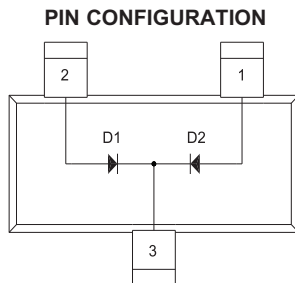
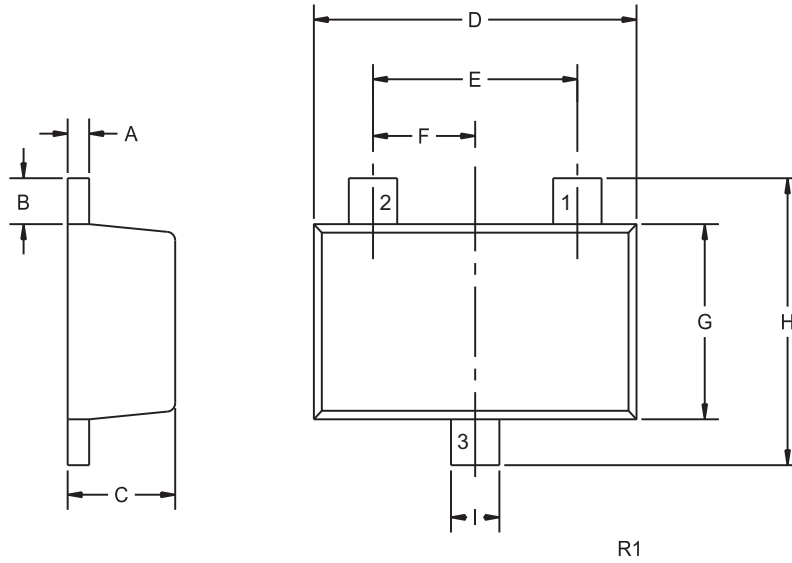
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=10V$		20	μA
I_R	$V_R=30V$		100	μA
BV_R	$I_R=500\mu A$	40		V
V_F	$I_F=100\mu A$		0.13	V
V_F	$I_F=1.0mA$		0.21	V
V_F	$I_F=10mA$		0.27	V
V_F	$I_F=100mA$		0.35	V
V_F	$I_F=500mA$		0.47	V
C_J	$V_R=1.0V, f=1.0MHz$		50	pF

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SOT-23F CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Anode D2
- 2) Anode D1
- 3) Cathode D1, D2

MARKING CODE: C405

SYMBOL	DIMENSIONS		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)

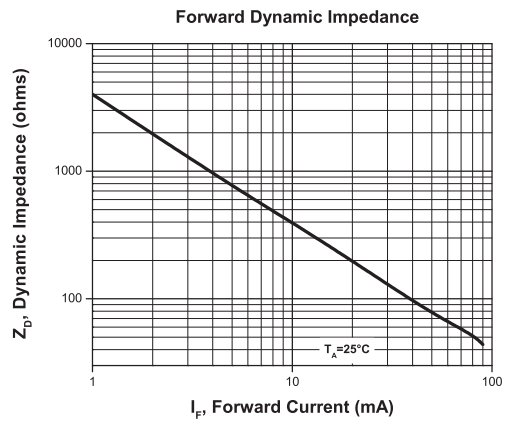
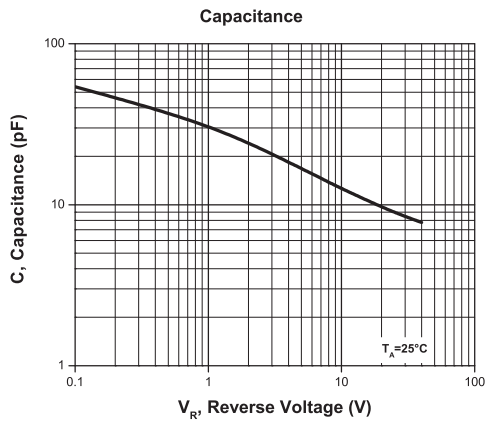
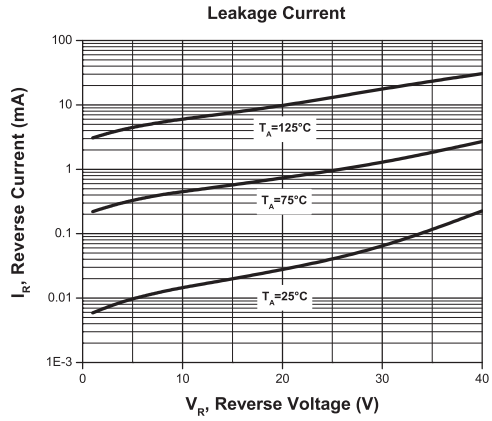
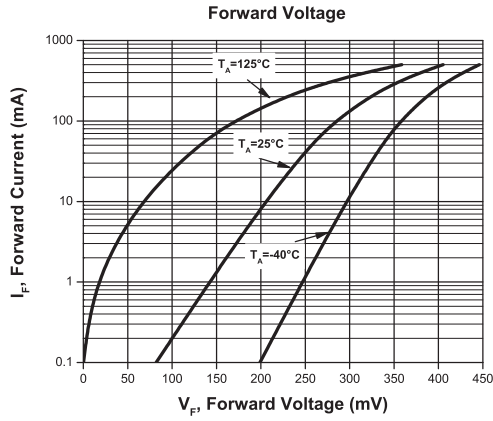
R2 (30-September 2015)

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TYPICAL ELECTRICAL CHARACTERISTICS



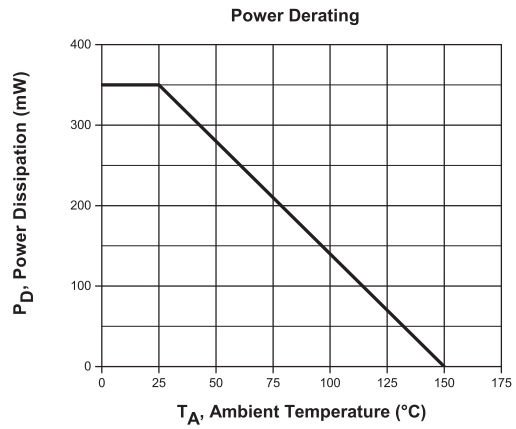
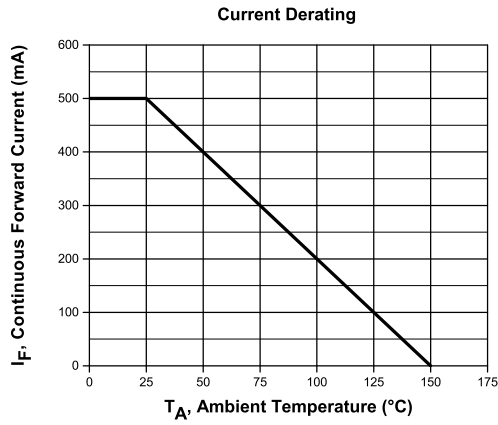
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TYPICAL ELECTRICAL CHARACTERISTICS



R2 (30-September 2015)

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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

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd 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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