

**CMPSH05-4C**

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

**SOT-23F CASE**[www.centralemi.com](http://www.centralemi.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
$\Theta_{JA}$	357

**UNITS**

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

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

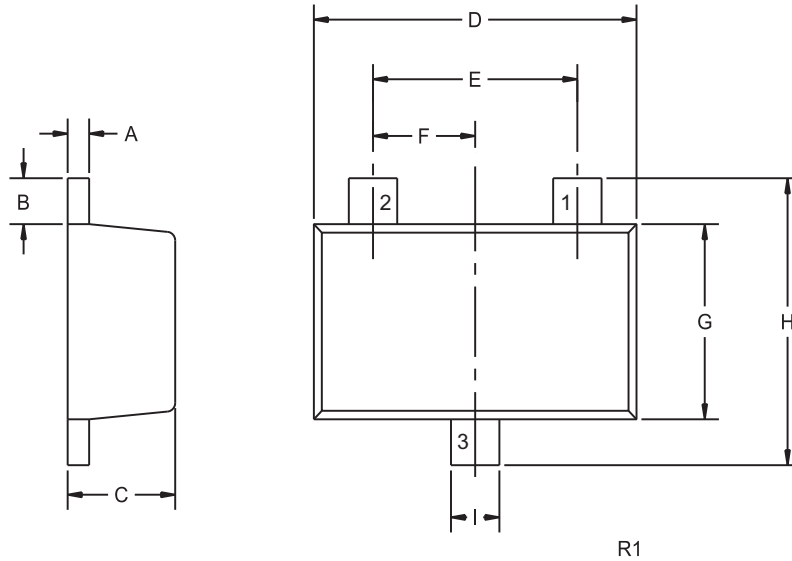
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=10V$		30	$\mu A$
$I_R$	$V_R=30V$		100	$\mu A$
$BV_R$	$I_R=500\mu A$	40		V
$V_F$	$I_F=100\mu A$		0.13	V
$V_F$	$I_F=1.0mA$		0.21	V
$V_F$	$I_F=10mA$		0.27	V
$V_F$	$I_F=100mA$		0.35	V
$V_F$	$I_F=500mA$		0.47	V
$C_J$	$V_R=1.0V, f=1.0MHz$		50	pF

CMPSH05-4C

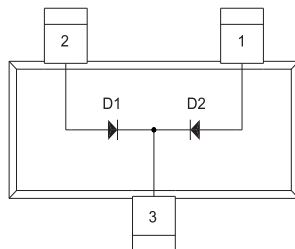
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SOT-23F CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

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

MARKING CODE: C405

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)

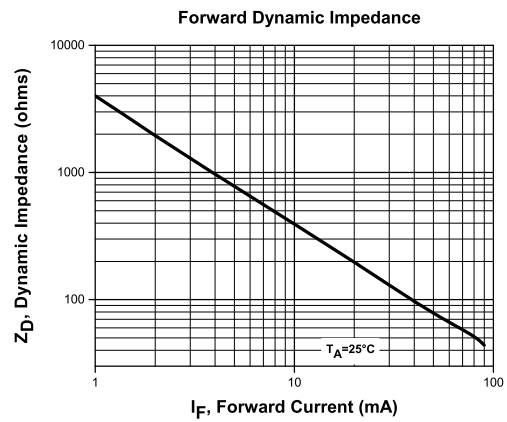
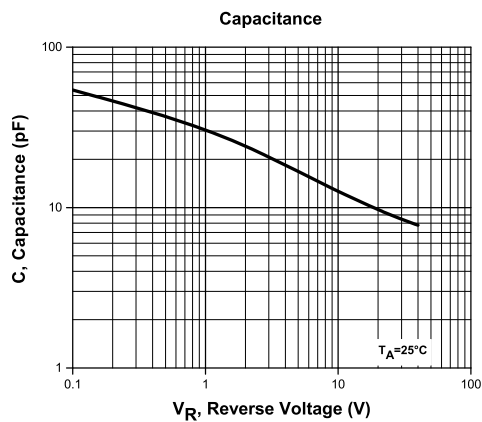
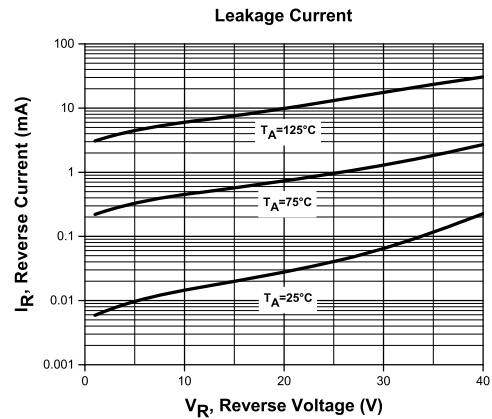
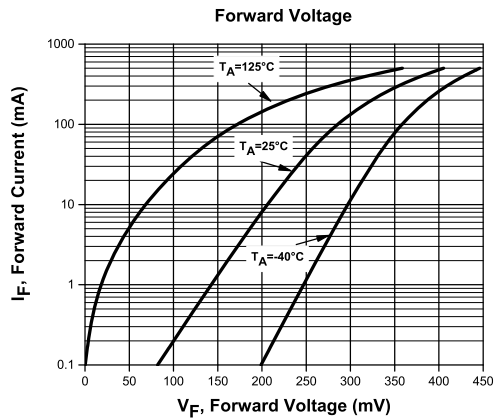
R3 (8-January 2018)

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## TYPICAL ELECTRICAL CHARACTERISTICS



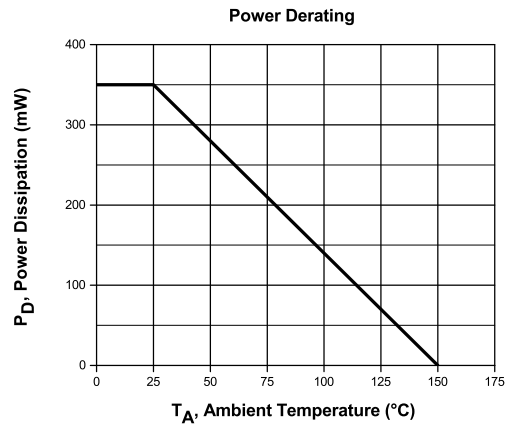
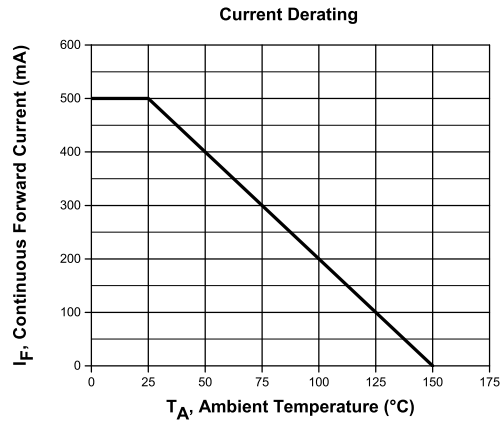
R3 (8-January 2018)

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## TYPICAL ELECTRICAL CHARACTERISTICS



R3 (8-January 2018)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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