

**CMP SH1-4****SURFACE MOUNT SILICON  
HIGH CURRENT  
SCHOTTKY RECTIFIER**[www.centrasemi.com](http://www.centrasemi.com)**SOT-23F CASE****DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMP SH1-4 is a High Current, Schottky Rectifier in a surface mount SOT-23F package suitable for high current applications in mobile communications and DC-DC converters.

**MARKING CODE: SH1****FEATURES:**

- High Current (1.0 Amp)
- Power SOT-23F Package

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

Continuous Reverse Voltage
Continuous Forward Current
Average Forward Current
Peak Forward Surge Current, $t \leq 100\mu\text{s}$
Peak Forward Surge Current, $t \leq 10\text{ms}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

**SYMBOL**

$V_R$	40
$I_F$	1.0
$I_O$	1.75
$I_{FSM}$	12
$I_{FSM}$	5.2
$P_D$	350
$T_J, T_{stg}$	-65 to +150
$\theta_{JA}$	357

**UNITS**

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

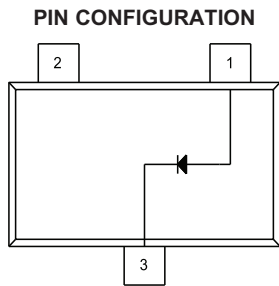
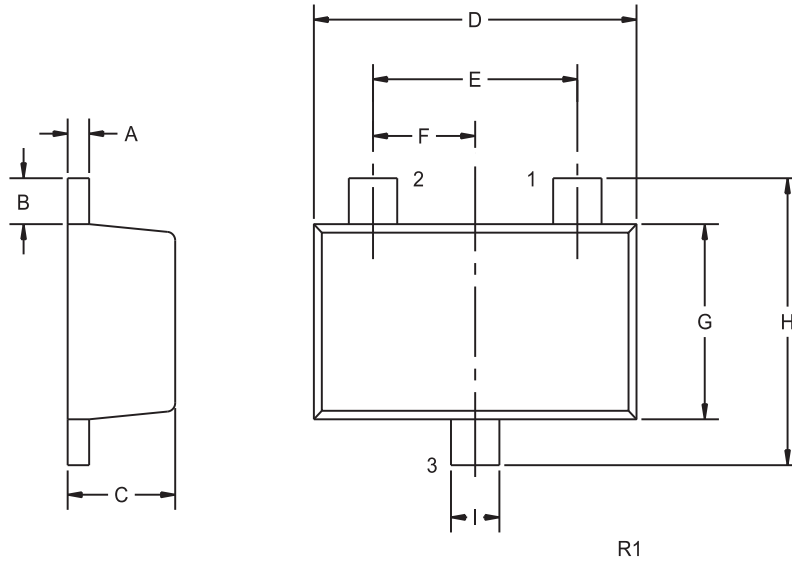
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=30\text{V}$		2.0	100	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	40			V
$V_F$	$I_F=100\text{mA}$		347	390	mV
$V_F$	$I_F=500\text{mA}$		418	480	mV
$V_F$	$I_F=1.0\text{A}$		471	550	mV
$V_F$	$I_F=1.5\text{A}$		551	620	mV
$V_F$	$I_F=1.0\text{A}, @ T_A=100^\circ\text{C}$		420		mV
$C_J$	$V_R=25\text{V}, f=1.0\text{MHz}$		25		pF
$t_{rr}$	$I_F=500\text{mA}, I_R=500\text{mA}, I_{rr}=50\text{mA}$		12		ns

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



**LEAD CODE:**  
 1) Anode  
 2) No Connection  
 3) Cathode

**MARKING CODE: SH1**

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)

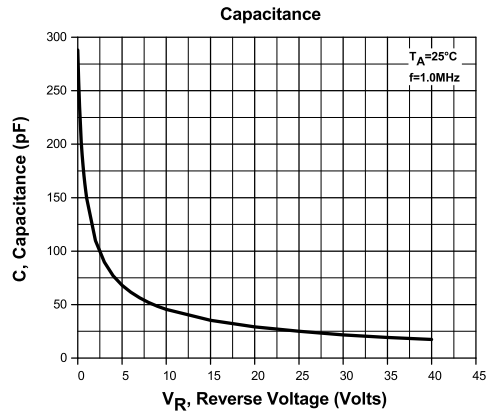
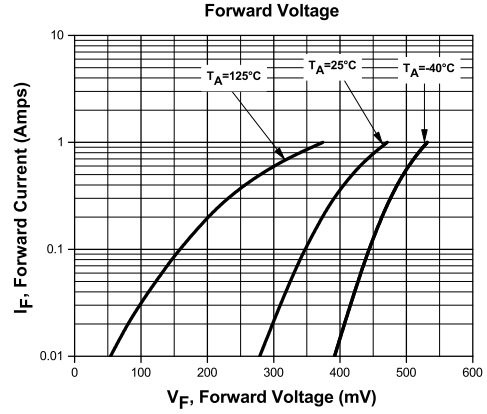
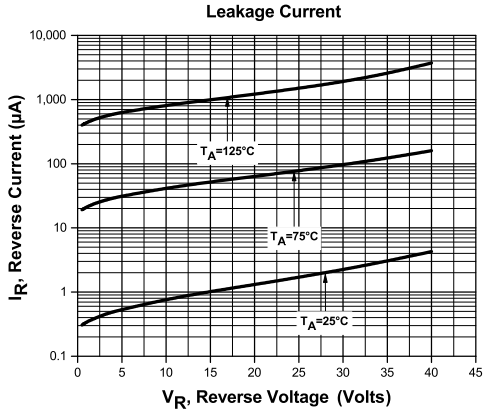
R4 (30-November 2015)

CMPH1-4

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TYPICAL ELECTRICAL CHARACTERISTICS



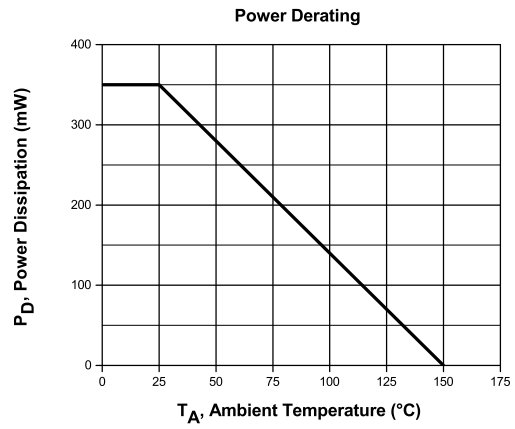
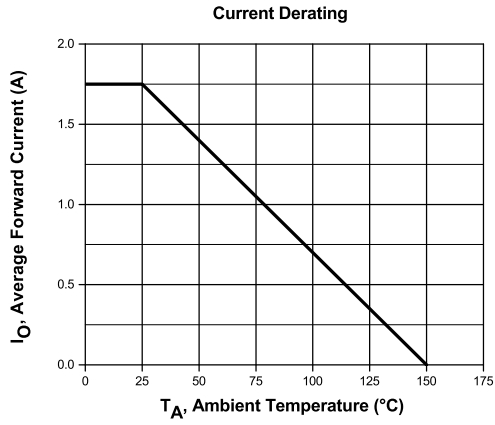
R4 (30-November 2015)

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TYPICAL ELECTRICAL CHARACTERISTICS



R4 (30-November 2015)

## 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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### CONTACT US

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