



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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**CMP SH1-4****SURFACE MOUNT SILICON  
HIGH CURRENT  
SCHOTTKY RECTIFIER****SOT-23F CASE**[www.centrasemi.com](http://www.centrasemi.com)**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
$^\circ\text{C}$
$^\circ\text{C/W}$

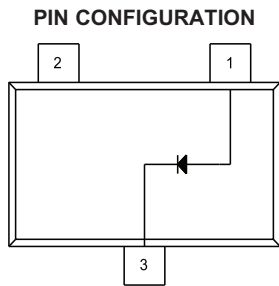
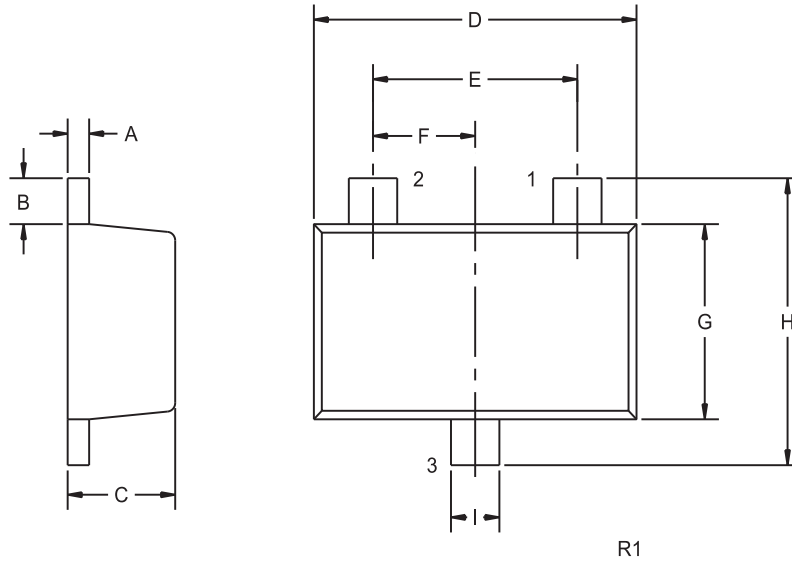
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

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

**CMP SH1-4**  
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**SCHOTTKY RECTIFIER**



**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)

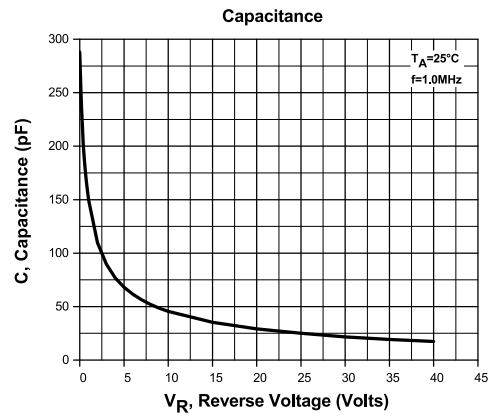
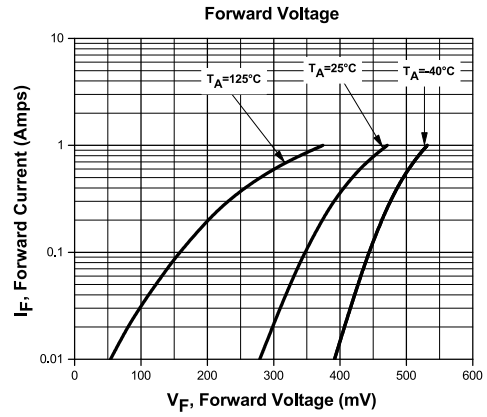
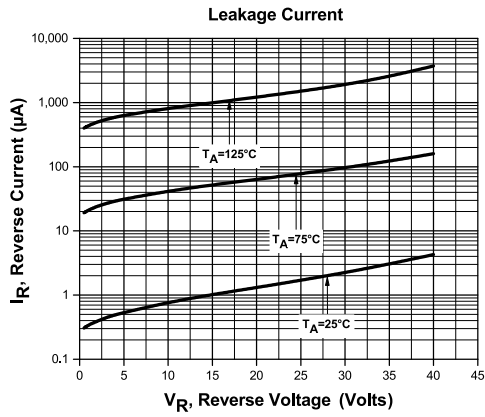
R4 (30-November 2015)

CMPH1-4

SURFACE MOUNT SILICON  
HIGH CURRENT  
SCHOTTKY RECTIFIER



TYPICAL ELECTRICAL CHARACTERISTICS



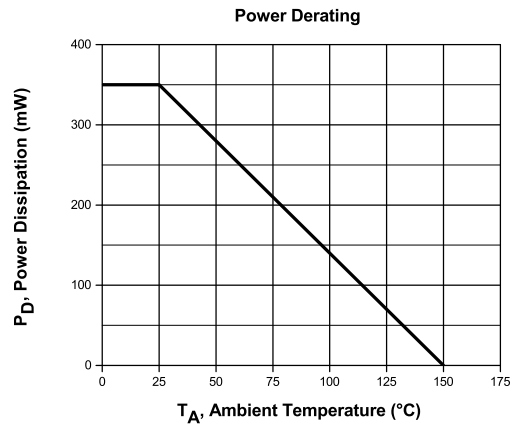
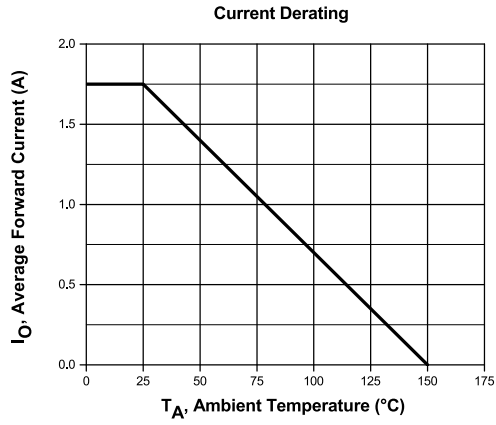
R4 (30-November 2015)

CMP SH1-4

SURFACE MOUNT SILICON  
HIGH CURRENT  
SCHOTTKY RECTIFIER



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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### 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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