

CMPSH1-4S**SURFACE MOUNT SILICON
HIGH CURRENT
SCHOTTKY RECTIFIER****SOT-23 CASE**www.centrasemi.com**DESCRIPTION:**

The CMPSH1-4S is a high current Schottky rectifier in a surface mount SOT-23 package suitable for high current applications in mobile communications and DC-DC converters.

MARKING CODE: SH1S**FEATURES:**

- High Forward Current (1.0 Amp)

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

Continuous Reverse Voltage	
Continuous 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	
Typical Thermal Resistance	

SYMBOL		UNITS
V_R	40	V
I_F	1.0	A
I_{FSM}	12	A
I_{FSM}	5.2	A
P_D	350	mW
T_J, T_{stg}	-55 to +150	$^{\circ}\text{C}$
Θ_{JA}	350	$^{\circ}\text{C/W}$

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

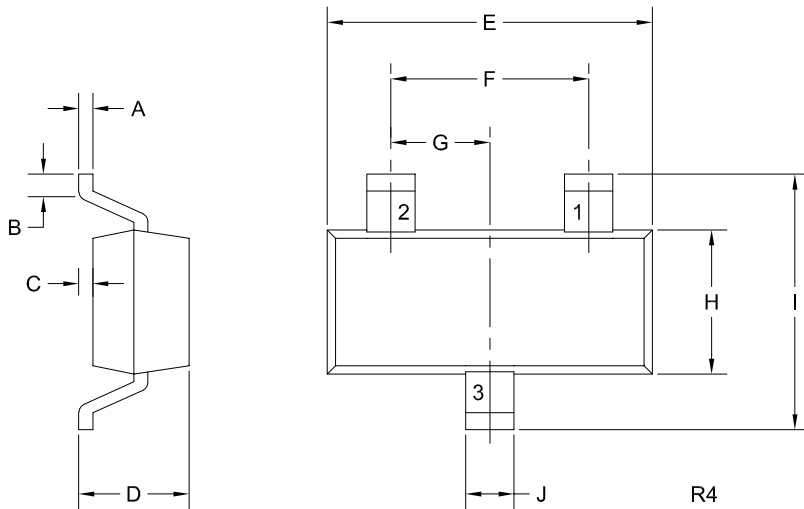
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=40\text{V}$			50	μA
BV_R	$I_R=1\text{mA}$	40			V
V_F	$I_F=100\text{mA}$		347	390	mV
V_F	$I_F=500\text{mA}$		418	480	mV
V_F	$I_F=1.0\text{A}$		471	550	mV
V_F	$I_F=1.5\text{A}$		551	620	mV
V_F	$I_F=1.0\text{A}, T_A=100^{\circ}\text{C}$		425		mV
C_J	$V_R=25\text{V}, f=1.0\text{MHz}$		18		pF
t_{rr}	$I_F=500\text{mA}, I_R=500\text{mA}, I_{rr}=50\text{mA}$		12		ns

CMPSH1-4S

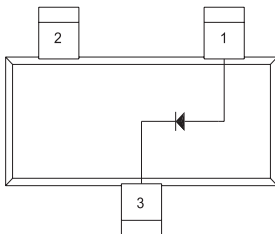
**SURFACE MOUNT SILICON
HIGH CURRENT
SCHOTTKY RECTIFIER**



SOT-23 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

- 1) Anode
- 2) No Connection
- 3) Cathode

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.044	0.89	1.12
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.104	2.10	2.64
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R4)

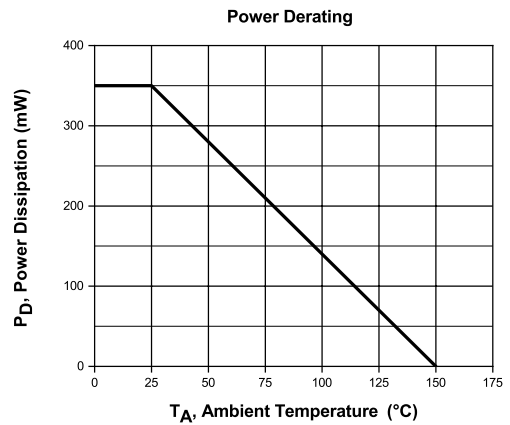
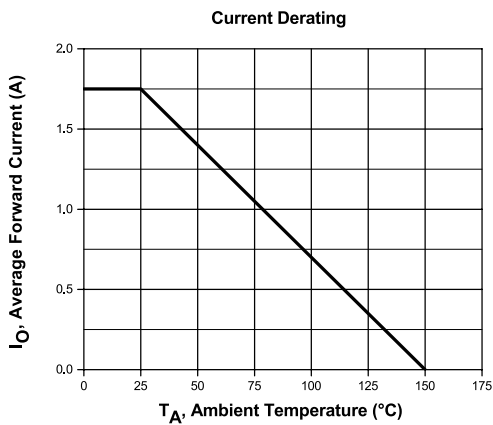
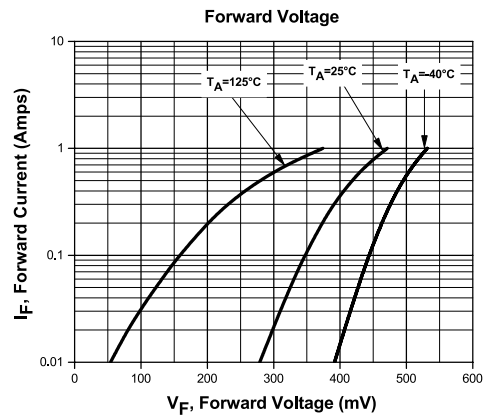
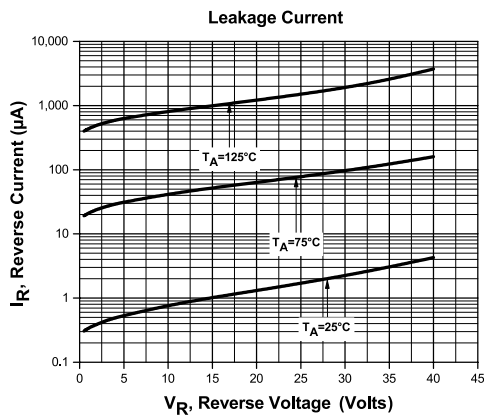
R2 (06-October 2022)

CMP SH1-4S

SURFACE MOUNT SILICON HIGH CURRENT SCHOTTKY RECTIFIER



TYPICAL ELECTRICAL CHARACTERISTICS



OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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

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).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms