

CMPSH1-4L

**SURFACE MOUNT SILICON
HIGH CURRENT
ULTRA LOW V_F
SCHOTTKY RECTIFIER**

**POWER
23**

**SUB ONE
CERTIFIED**



SOT-23F CASE



www.centra-semi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPSH1-4L is a high current, ultra low V_F , Schottky rectifier in a surface mount SOT-23F package. It is suitable for all applications requiring a high current, small sized, operationally efficient Schottky rectifier.

MARKING CODE: CSL**APPLICATIONS:**

- Load/Power switches
- Power supply converter circuits
- Battery powered equipment including cell phones, digital cameras, pagers, PDAs, etc.

FEATURES:

- Current ($I_F=1.0A$)
- Low forward voltage drop ($V_F=0.39V$ MAX @ 1.0A)
- Low reverse current (150 μA TYP @ $V_R=20V$)
- Small, surface mount, power SOT-23F package

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

Continuous Reverse Voltage
Average Forward Current
Peak Forward Surge Current, $t_p=8.3ms$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL**UNITS**

V_R	40	V
I_O	1.0	A
I_{FSM}	20	A
P_D	350	mW
T_J, T_{stg}	-65 to +125	$^\circ C$
Θ_{JA}	286	$^\circ C/W$

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

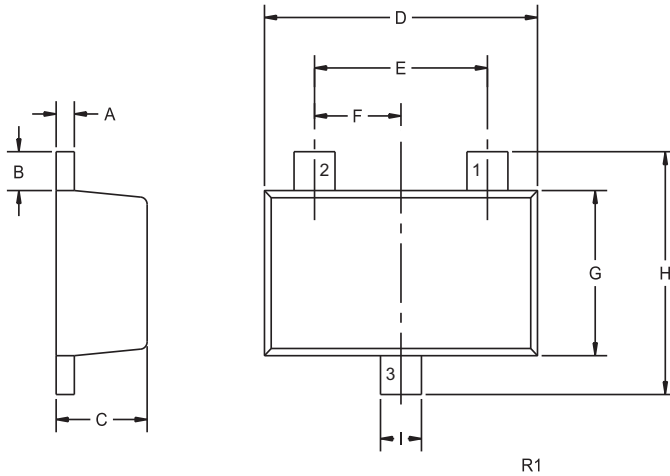
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=20V$		150	900	μA
I_R	$V_R=30V$		0.25	1.5	mA
BV_R	$I_R=1.0mA$	40			V
V_F	$I_F=100mA$		230	270	mV
V_F	$I_F=500mA$		300	340	mV
V_F	$I_F=1.0A$		340	390	mV
V_F	$I_F=1.5A$		390	420	mV
C_J	$V_R=10V, f=1.0MHz$		50		pF

CMPSH1-4L

SURFACE MOUNT SILICON
HIGH CURRENT
ULTRA LOW V_F
SCHOTTKY RECTIFIER



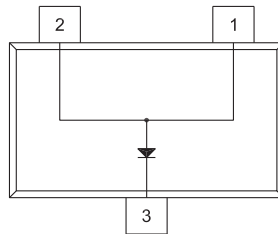
SOT-23F CASE - MECHANICAL OUTLINE



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)

PIN CONFIGURATION

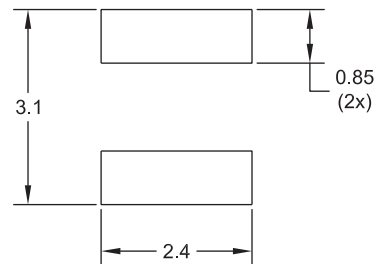


LEAD CODE:

- 1) Anode
- 2) Anode
- 3) Cathode

MARKING CODE: CSL

OPTIONAL MOUNTING PADS (Dimensions in mm)



R0

(For standard mounting pads
see SOT-23F Package Details)

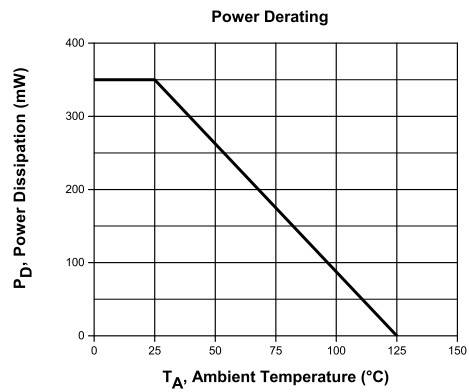
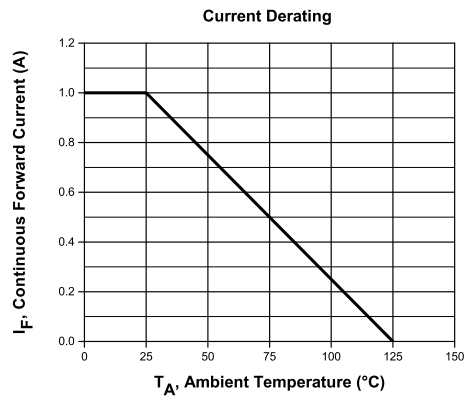
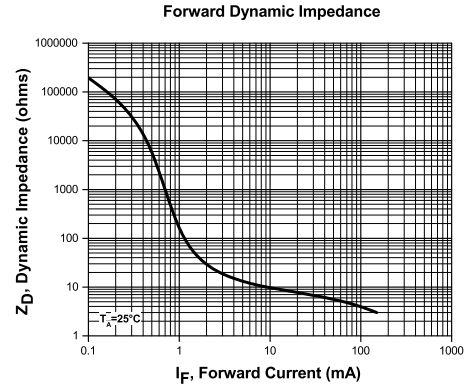
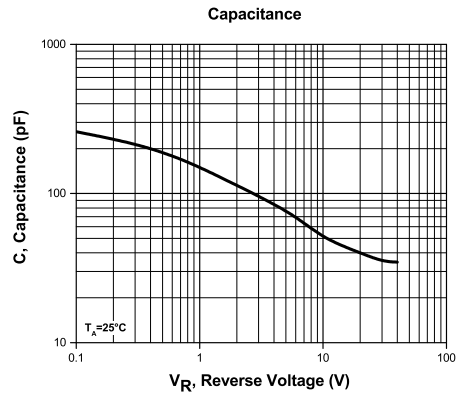
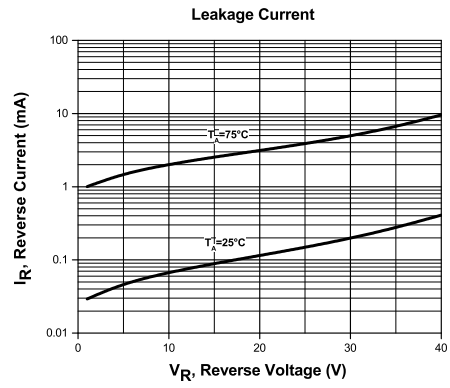
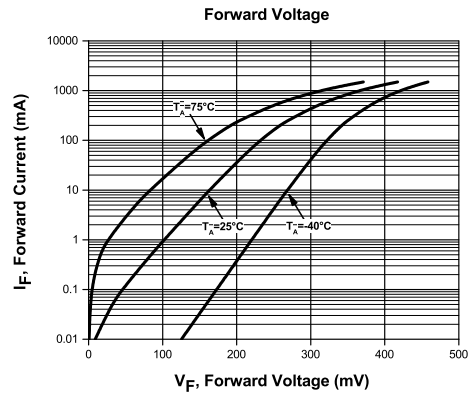
R4 (21-September 2015)

CMP SH1-4L

SURFACE MOUNT SILICON
HIGH CURRENT
ULTRA LOW V_F
SCHOTTKY RECTIFIER



TYPICAL ELECTRICAL CHARACTERISTICS



R4 (21-September 2015)

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Central Semiconductor:](#)

[CMPSH1-4L](#)