

CMSH1-20 BK PBFREE Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	CMSH1-20 BK PBFREE-DG
Manufacturer	Central Semiconductor Corp
Manufacturer Product Number	CMSH1-20 BK PBFREE
Description	DIODE SCHOTTKY 20V 1A SMB
Detailed Description	Diode 20 V 1A Surface Mount SMB

This model CMSH1-20 BK PBFREE is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

CMSH1-20 BK PBFREE

Series:

-

Technology:

Schottky

Current - Average Rectified (Io):

1A

Speed:

Fast Recovery =< 500ns, > 200mA (Io)

Capacitance @ Vr, F:

68pF @ 4V, 1MHz

Package / Case:

DO-214AA, SMB

Operating Temperature - Junction:

-65°C ~ 150°C

Manufacturer:

Central Semiconductor Corp

Product Status:

Active

Voltage - DC Reverse (Vr) (Max):

20 V

Voltage - Forward (Vf) (Max) @ If:

550 mV @ 1 A

Current - Reverse Leakage @ Vr:

500 µA @ 20 V

Mounting Type:

Surface Mount

Supplier Device Package:

SMB

Base Product Number:

CMSH1

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0080

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

CMSH1-20 CMSH1-60
 CMSH1-40 CMSH1-100

**SURFACE MOUNT SILICON
 SCHOTTKY RECTIFIERS
 1.0 AMP, 20 THRU 100 VOLT**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSH1-20 series 1.0 Amp surface mount silicon rectifier is a high quality, well constructed, highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE

FEATURES:

- High reliability
- Special selections available

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

	SYMBOL	CMSH1 -20	CMSH1 -40	CMSH1 -60	CMSH1 -100	UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	20	40	60	100	V
DC Blocking Voltage	V _R	20	40	60	100	V
RMS Reverse Voltage	V _{R(RMS)}	14	28	42	70	V
Average Forward Current (T _A =75°C)	I _O			1.0		A
Peak Forward Surge Current, tp=8.3ms	I _{FSM}			30		A
Operating and Storage Junction Temperature	T _J , T _{stg}			-65 to +150		°C
Thermal Resistance	θ _{JL}			20		°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

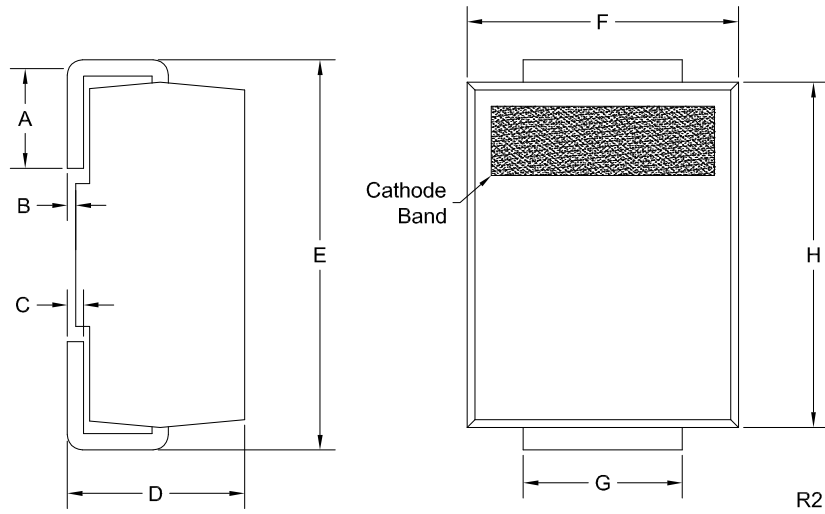
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I _R	V _R =Rated V _{RRM}		0.50	mA
I _R	V _R =Rated V _{RRM} , T _A =125°C		20	mA
V _F	I _F =1.0A (CMSH1-20)	0.46	0.55	V
V _F	I _F =1.0A (CMSH1-40)	0.48	0.55	V
V _F	I _F =1.0A (CMSH1-60)	0.48	0.70	V
V _F	I _F =1.0A (CMSH1-100)	0.75	0.85	V
C _J	V _R =4.0V, f=1.0MHz, (CMSH1-20)	68		pF
C _J	V _R =4.0V, f=1.0MHz, (CMSH1-40)	56		pF
C _J	V _R =4.0V, f=1.0MHz, (CMSH1-60)	42		pF
C _J	V _R =4.0V, f=1.0MHz, (CMSH1-100)	45		pF



CMSH1-20 CMSH1-60
 CMSH1-40 CMSH1-100

**SURFACE MOUNT SILICON
 SCHOTTKY RECTIFIERS
 1.0 AMP, 20 THRU 100 VOLT**

SMB CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMSH1-20	CS20
CMSH1-40	CS40
CMSH1-60	CS60
CMSH1-100	CS100

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.000	0.008	0.00	0.20
C	0.006	0.012	0.15	0.30
D	0.086	0.096	2.18	2.44
E	0.200	0.220	5.08	5.59
F	0.130	0.150	3.30	3.81
G	0.077	0.083	1.96	2.11
H	0.160	0.191	4.06	4.85

SMB (REV: R2)

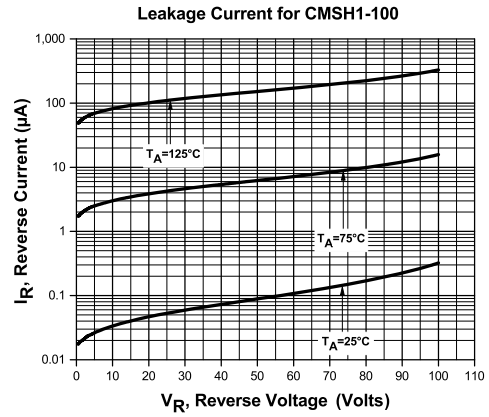
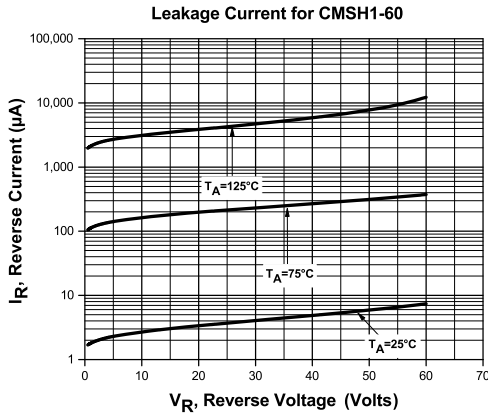
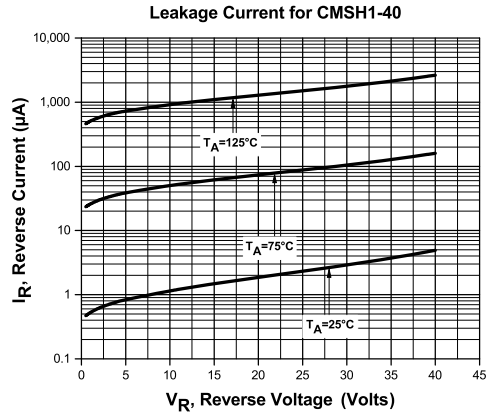
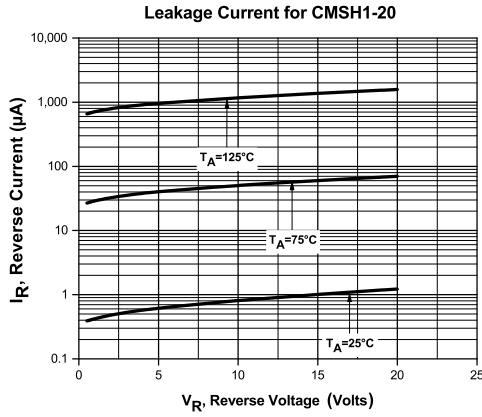
R5 (6-September 2018)



CM SH1-20 CM SH1-60
CM SH1-40 CM SH1-100

SURFACE MOUNT SILICON
SCHOTTKY RECTIFIERS
1.0 AMP, 20 THRU 100 VOLT

TYPICAL ELECTRICAL CHARACTERISTICS



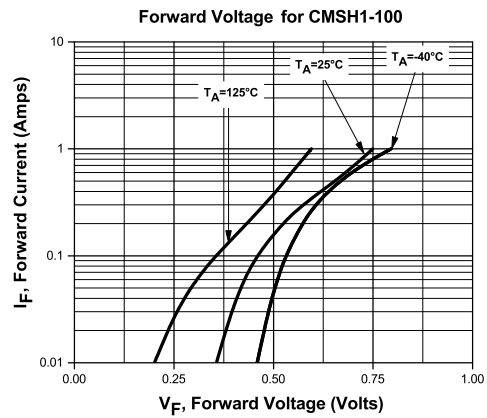
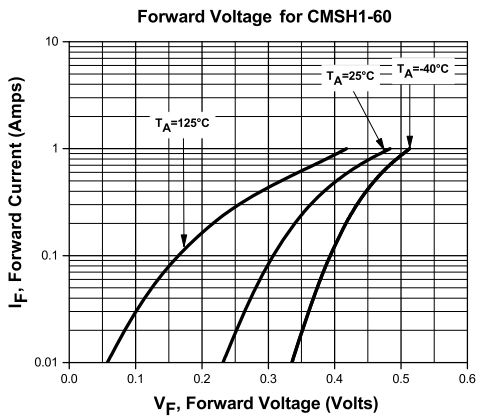
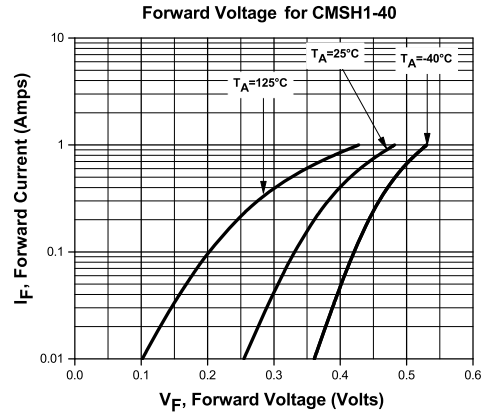
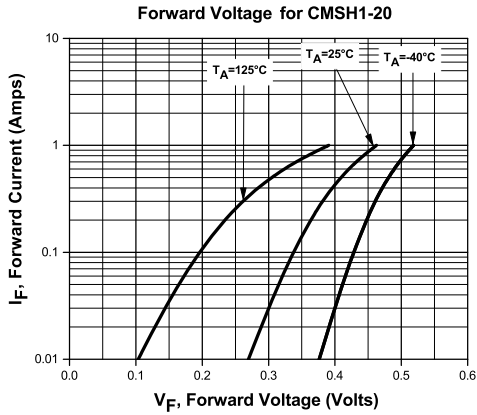
R5 (6-September 2018)



CMSh1-20 CMSh1-60
CMSh1-40 CMSh1-100

SURFACE MOUNT SILICON
SCHOTTKY RECTIFIERS
1.0 AMP, 20 THRU 100 VOLT

TYPICAL ELECTRICAL CHARACTERISTICS



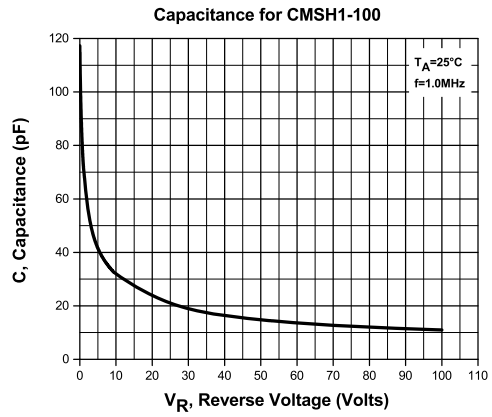
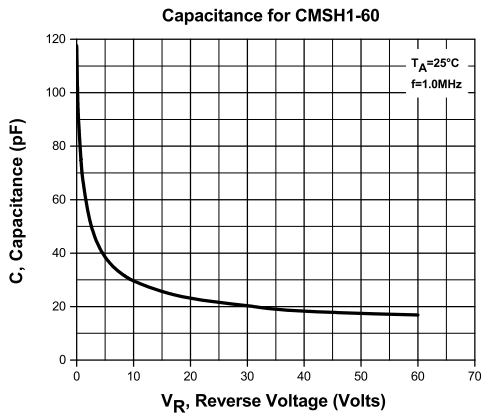
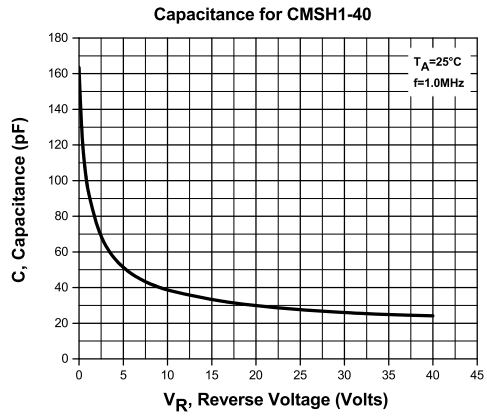
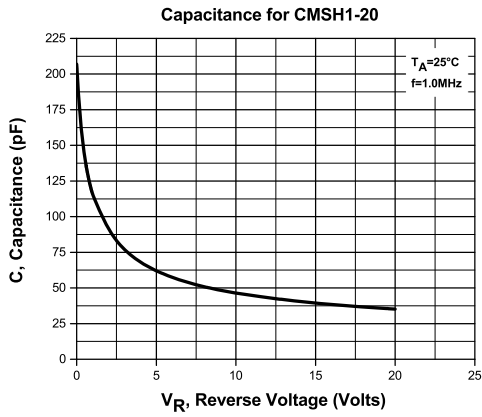
R5 (6-September 2018)



CMSH1-20 CMSH1-60
CMSH1-40 CMSH1-100

SURFACE MOUNT SILICON
SCHOTTKY RECTIFIERS
1.0 AMP, 20 THRU 100 VOLT

TYPICAL ELECTRICAL CHARACTERISTICS



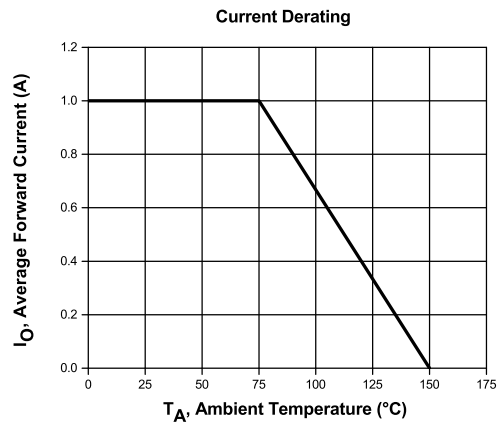
R5 (6-September 2018)

CMSH1-20 CMSH1-60
CMSH1-40 CMSH1-100

SURFACE MOUNT SILICON
SCHOTTKY RECTIFIERS
1.0 AMP, 20 THRU 100 VOLT



TYPICAL ELECTRICAL CHARACTERISTICS



R5 (6-September 2018)



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

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.