

Central Semiconductor Corp.

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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSH3-20M series 3.0 Amp surface mount silicon Schottky rectifier is a 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 current capability

• Flammability classification UL94V-0

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

	SYMBOL	CMSH3 -20M	CMSH3 <u>-40M</u>	CMSH3 <u>-60M</u>	CMSH3 -100M	UNITS	
Peak Repetitive Reverse Voltage	V _{RRM}	20	40	60	100	V	
DC Blocking Voltage	VR	20	40	60	100	V	
RMS Reverse Voltage	V _{R(RMS)}	14	28	42	71	V	
Average Forward Current (TL=75°C)	IO			3.0		А	
Peak Forward Surge Current, tp=8.3ms	IFSM			80		А	
Operating and Storage Junction Temperature	TJ, Tstg		-65	to +150		°C	
Thermal Resistance	Θ၂			20		°C/W	

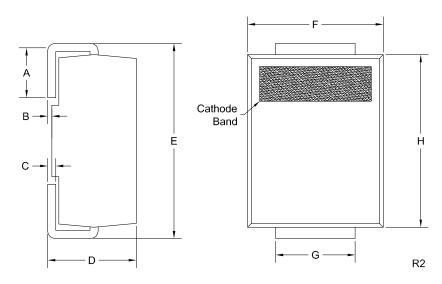
ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I _R	V _R =Rated V _{RRM}		500	μA
I _R	V _R =Rated V _{RRM,} T _A =100°C		20	mA
V _F	I _F =3.0A (CMSH3-20M, -40M)	0.48	0.55	V
V _F	I _F =3.0A (CMSH3-60M)	0.56	0.75	V
V _F	I _F =3.0A (CMSH3-100M)	0.75	0.85	V
СЈ	V _R =4.0V, f=1.0MHz (CMSH3-20M)	139		pF
CJ	V _R =4.0V, f=1.0MHz (CMSH3-40M)	167		pF
CJ	V _R =4.0V, f=1.0MHz (CMSH3-60M)	121		pF
CJ	V _R =4.0V, f=1.0MHz (CMSH3-100M)	87		pF

R5 (6-September 2018)



SURFACE MOUNT SILICON SCHOTTKY RECTIFIERS 3.0 AMP, 20 THRU 100 VOLT



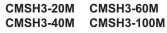
SMB CASE - MECHANICAL OUTLINE

DEVICE	MARKING CODE		
CMSH3-20M	CS320M		
CMSH3-40M	CS340M		
CMSH3-60M	CS360M		
CMSH3-100M	CS3100M		

DIMENSIONS					
	INCHES		MILLIMETERS		
SYMBOL	MIN	MAX	MIN	MAX	
A	0.030	0.060	0.76	1.52	
В	0.000	0.008	0.00	0.20	
С	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	
Н	0.160	0.191	4.06	4.85	
SMB (REV: R2)					

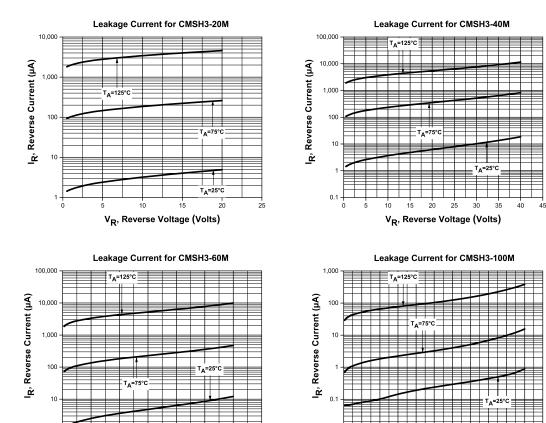
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0.01

0

10 20 30 40 50 60 70 80 90

TYPICAL ELECTRICAL CHARACTERISTICS

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10

0

20

30

V_R, Reverse Voltage (Volts)

40

50

60

70

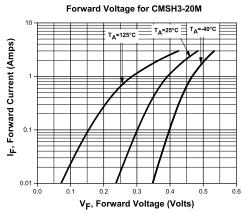
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V_R, Reverse Voltage (Volts)

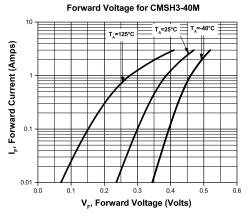
100 110

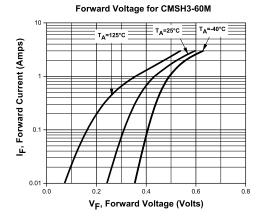


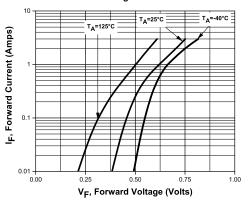
SURFACE MOUNT SILICON SCHOTTKY RECTIFIERS 3.0 AMP, 20 THRU 100 VOLT



TYPICAL ELECTRICAL CHARACTERISTICS







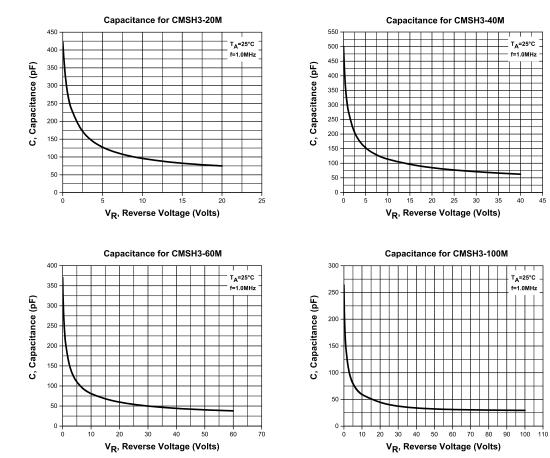
Forward Voltage for CMSH3-100M

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TYPICAL ELECTRICAL CHARACTERISTICS

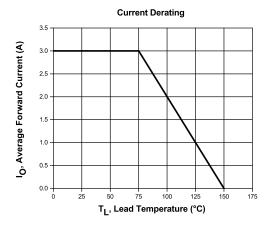
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SURFACE MOUNT SILICON SCHOTTKY RECTIFIERS 3.0 AMP, 20 THRU 100 VOLT

TYPICAL ELECTRICAL CHARACTERISTICS



R5 (6-September 2018)

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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

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

· Custom product packing

- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

· Custom bar coding for shipments

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

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