# imall

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.

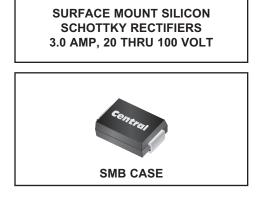
We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





CMSH3-20M CMSH3-60M CMSH3-40M CMSH3-100M

### Central semiconductor Corp.

www.centralsemi.com

#### 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<sub>A</sub>=25°C unless otherwise noted)

MAXIMOM NATITOO. (1A-23 0 diless otherwise holed)							
	SYMBOL	CMSH3 <u>-20M</u>	CMSH3 <u>-40M</u>	CMSH3 <u>-60M</u>	CMSH3 -100M	UNITS	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	20	40	60	100	V	
DC Blocking Voltage	VR	20	40	60	100	V	
RMS Reverse Voltage	V <sub>R(RMS)</sub>	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	5 to +150		°C	
Thermal Resistance	Θ၂			20		°C/W	

#### **ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub>		500	μA
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM,</sub> T <sub>A</sub> =100°C		20	mA
VF	I <sub>F</sub> =3.0A (CMSH3-20M, -40M)	0.48	0.55	V
V <sub>F</sub>	I <sub>F</sub> =3.0A (CMSH3-60M)	0.56	0.75	V
VF	I <sub>F</sub> =3.0A (CMSH3-100M)	0.75	0.85	V
CJ	V <sub>R</sub> =4.0V, f=1.0MHz (CMSH3-20M)	139		pF
CJ	V <sub>R</sub> =4.0V, f=1.0MHz (CMSH3-40M)	167		pF
СJ	V <sub>R</sub> =4.0V, f=1.0MHz (CMSH3-60M)	121		pF
CJ	V <sub>R</sub> =4.0V, f=1.0MHz (CMSH3-100M)	87		pF

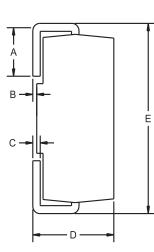
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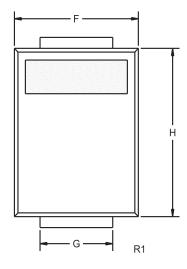




SURFACE MOUNT SILICON SCHOTTKY RECTIFIERS 3.0 AMP, 20 THRU 100 VOLT







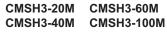
DEVICE	MARKING CODE		
CMSH3-20M	CS320M		
CMSH3-40M	CS340M		
CMSH3-60M	CS360M		
CMSH3-100M	CS3100M		

	DIMENSIONS					
	INC	HES	MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
A	0.030	0.060	0.76	1.52		
В	0.004	0.008	0.10	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	0.180	4.06	4.57		
SMD (DE\/- D1)						

SMB (REV: R1)

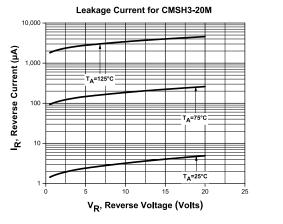
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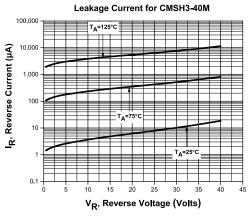


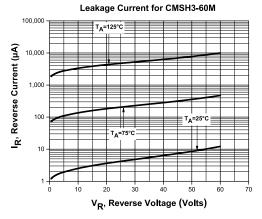
Semiconductor

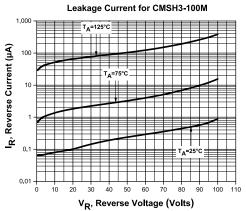
SURFACE MOUNT SILICON SCHOTTKY RECTIFIERS 3.0 AMP, 20 THRU 100 VOLT



**TYPICAL ELECTRICAL CHARACTERISTICS** 







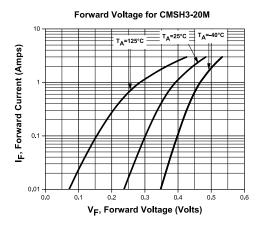
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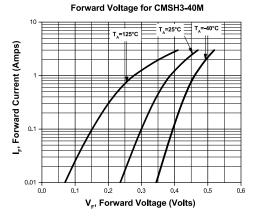


CMSH3-20M CMSH3-60M CMSH3-40M CMSH3-100M

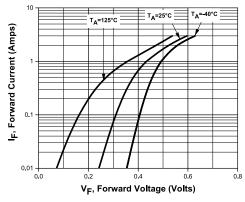
SURFACE MOUNT SILICON SCHOTTKY RECTIFIERS 3.0 AMP, 20 THRU 100 VOLT



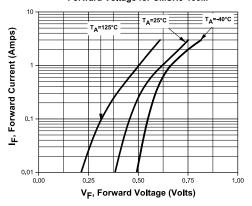
**TYPICAL ELECTRICAL CHARACTERISTICS** 



Forward Voltage for CMSH3-60M



Forward Voltage for CMSH3-100M



R4 (8-January 2016)

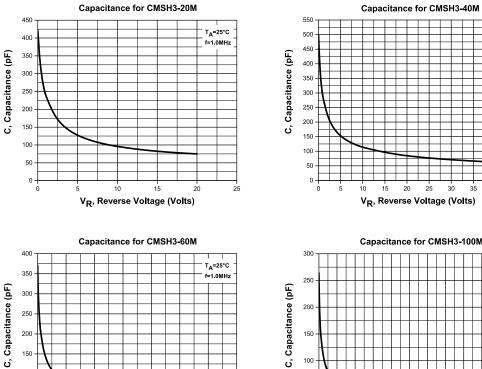
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CMSH3-20M CMSH3-60M CMSH3-40M **CMSH3-100M**  Semiconductor Corp

T<sub>A</sub>=25°C

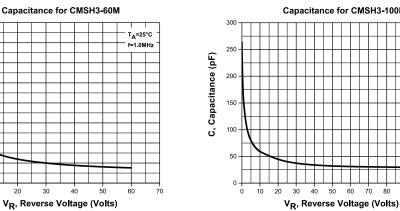
f=1.0MHz

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



#### **TYPICAL ELECTRICAL CHARACTERISTICS**

15 20 25 30 35 40 45 V<sub>R</sub>, Reverse Voltage (Volts) Capacitance for CMSH3-100M T<sub>A</sub>=25°C f=1.0MHz 150 100



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200

150

100 ·

50 0 -

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10

20

30

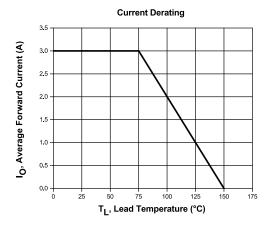
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90 100 110 CMSH3-20M CMSH3-60M CMSH3-40M CMSH3-100M



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

#### TYPICAL ELECTRICAL CHARACTERISTICS



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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 guick 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

· Custom product packing

Custom bar coding for shipments

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- · Custom product and package development

#### REQUESTING PRODUCT PLATING

- If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when 1. 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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