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

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



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)

	SYMBOL	CMSH3 -20M	CMSH3 -40M	CMSH3 -60M	CMSH3 -100M	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 <sub>R(RMS)</sub>	14	28	42	71	V
Average Forward Current (T <sub>L</sub> =75°C)	Ìο			3.0		Α
Peak Forward Surge Current, tp=8.3ms	I <sub>FSM</sub>			80		Α
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>		-65	to +150		°C
Thermal Resistance	⊝ی∟			20		°C/W

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

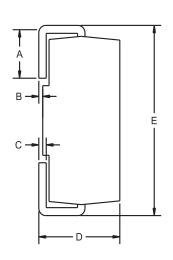
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_{R}$	V <sub>R</sub> =Rated V <sub>RRM</sub>		500	μΑ
$I_{R}$	V <sub>R</sub> =Rated V <sub>RRM,</sub> T <sub>A</sub> =100°C		20	mA
$V_{F}$	I <sub>F</sub> =3.0A (CMSH3-20M, -40M)	0.48	0.55	V
$V_{F}$	I <sub>F</sub> =3.0A (CMSH3-60M)	0.56	0.75	V
$V_{F}$	I <sub>F</sub> =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
$C_{J}$	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

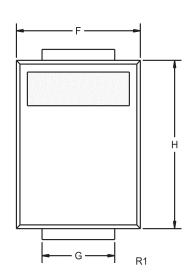
CMSH3-20M CMSH3-60M CMSH3-100M

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



# **SMB CASE - MECHANICAL OUTLINE**





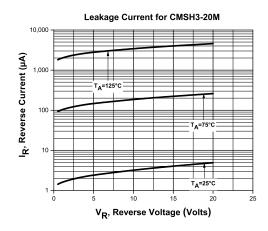
DEVICE	MARKING CODE		
CMSH3-20M	CS320M		
CMSH3-40M	CS340M		
CMSH3-60M	CS360M		
CMSH3-100M	CS3100M		

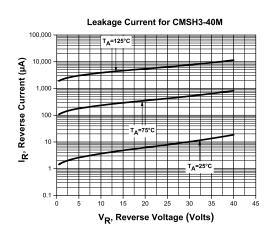
DIMENSIONS					
	INCHES		MILLIMETERS		
SYMBOL	MIN	MAX	MIN	MAX	
Α	0.030	0.060	0.76	1.52	
В	0.004	0.008	0.10	0.20	
С	0.006	0.012	0.15	0.30	
D	0.086	0.096	2.18	2.44	
E	0.200	0.220	5.08	5.59	
F	0.130	0.150	3.30	3.81	
G	0.077	0.083	1.96	2.11	
Н	0.160	0.180	4.06	4.57	

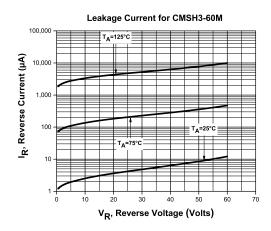
SMB (REV: R1)

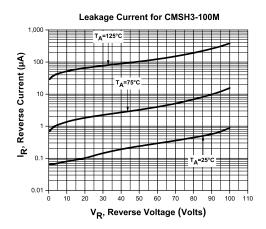
SURFACE MOUNT SILICON SCHOTTKY RECTIFIERS 3.0 AMP, 20 THRU 100 VOLT





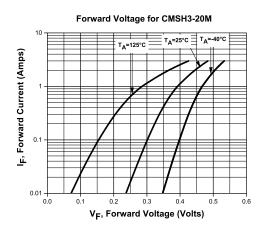


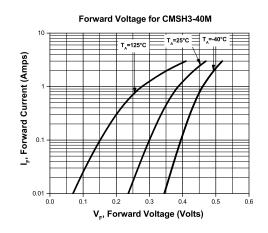


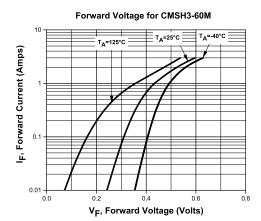


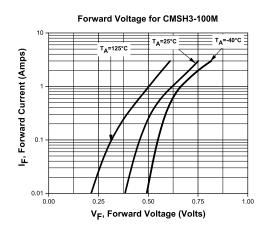
SURFACE MOUNT SILICON SCHOTTKY RECTIFIERS 3.0 AMP, 20 THRU 100 VOLT





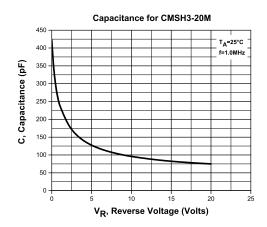


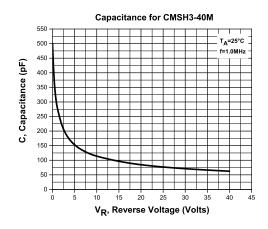


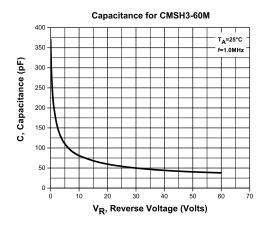


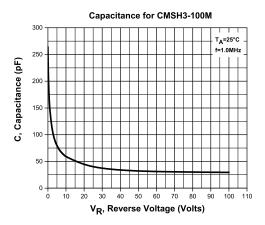
SURFACE MOUNT SILICON SCHOTTKY RECTIFIERS 3.0 AMP, 20 THRU 100 VOLT





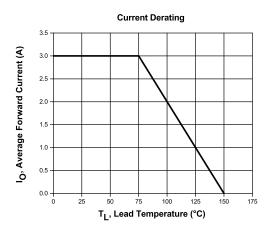






SURFACE MOUNT SILICON SCHOTTKY RECTIFIERS 3.0 AMP, 20 THRU 100 VOLT





#### **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 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

- · 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.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

**Worldwide Distributors:** 

www.centralsemi.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: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>

www.centralsemi.com (001)