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



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSH3-20MA series 3.0 Amp surface mount silicon Schottky rectifier is a 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 current capability
- Flammability classification UL94V-0
- · High reliability

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

	SYMBOL	CMSH3 -20MA	CMSH3 -40MA	CMSH3 -60MA	CMSH3 -100MA	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	71	V
Average Forward Current (T _L =75°C)	Îo			3.0		Α
Peak Forward Surge Current, tp=8.3ms	IFSM			80		Α
Operating and Storage Junction Temperature	T _J , T _{stg}		-65	to +150		°C
Thermal Resistance	$\Theta_{. II}$			30		°C/W

FL FCTRICAL	CHARACTERISTICS:	T = 25°C unless	otherwise noted)
LLLCINICAL	CHAINACH LINGHICG.	1 N-23 C UIII C 33	OUTE WISE HOLEUT

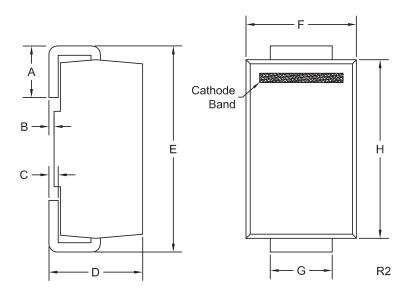
ELECTRICAL CHARACTERISTICS: (TA=25°C unless otherwise noted)				
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_{R}	V _R =Rated V _{RRM}		500	μΑ
I_{R}	V _R =Rated V _{RRM,} T _A =100°C		20	mA
VF	I _F =3.0A (CMSH3-20MA)	0.46	0.50	V
V_{F}	I _F =3.0A (CMSH3-40MA)	0.47	0.50	V
V_{F}	I _F =3.0A (CMSH3-60MA)	0.56	0.70	V
V_{F}	I _F =3.0A (CMSH3-100MA)	0.76	0.85	V
СЈ	V _R =4.0V, f=1.0MHz (CMSH3-20MA)	174		pF
C_{J}	V _R =4.0V, f=1.0MHz (CMSH3-40MA)	160		pF
СЈ	V _R =4.0V, f=1.0MHz (CMSH3-60MA)	121		pF
CJ	V _R =4.0V, f=1.0MHz (CMSH3-100MA)	83		pF

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SMA CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMSH3-20MA	CS320MA
CMSH3-40MA	CS340MA
CMSH3-60MA	CS360MA
CMSH3-100MA	CS3100MA

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	0.078	0.103	1.98	2.62	
E	0.188	0.220	4.78	5.59	
F	0.090	0.115	2.29	2.92	
G	0.050	0.070	1.27	1.78	
Н	0.157	0.181	3.99	4.60	
SMA (DE\/: D2\					

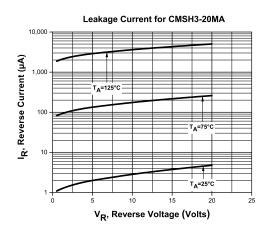
SMA (REV: R2)

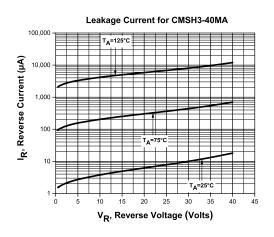
R4 (3-February 2016)

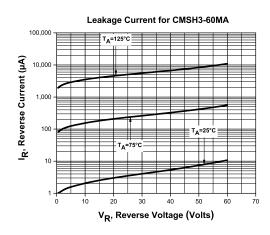
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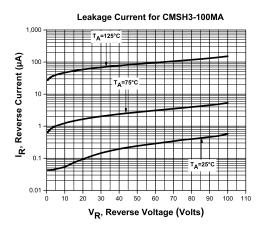


TYPICAL ELECTRICAL CHARACTERISTICS







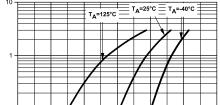


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TYPICAL ELECTRICAL CHARACTERISTICS



V_F, Forward Voltage (Volts)

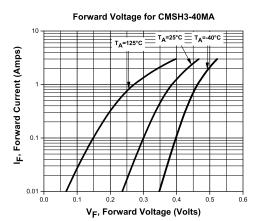
IF, Forward Current (Amps)

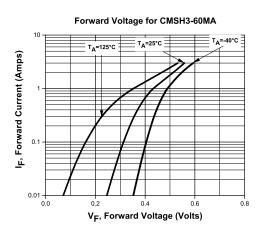
0.01

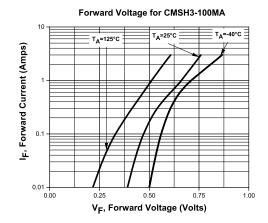
Forward Voltage for CMSH3-20MA

0.6

0.5





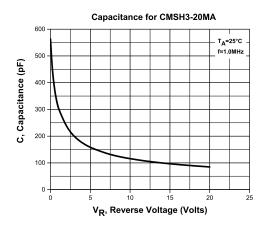


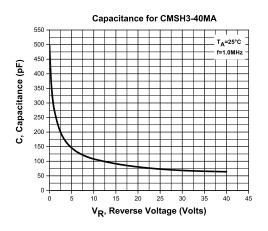
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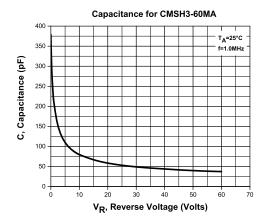
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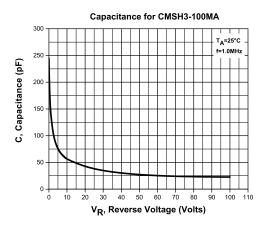


TYPICAL ELECTRICAL CHARACTERISTICS







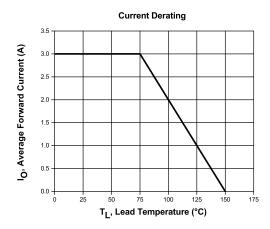


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TYPICAL ELECTRICAL CHARACTERISTICS



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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

- · 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

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