# SURFACE MOUNT SILICON LOW V<sub>F</sub> SCHOTTKY RECTIFIERS 2.0 AMP, 20 AND 40 VOLT





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# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH2-20L and CMSH2-40L 2.0 Amp surface mount low  $V_{\text{F}}$  Schottky rectifiers are highly reliable components designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications where high efficiency is required.

MARKING CODES: CMSH2-20L: CS220L

CMSH2-40L: CS240L

## **FEATURES:**

- Low forward voltage drop
- Flammability classification UL94V-0
- · High current capability
- · High reliability

MAXIMUM RATINGS: (T<sub>A</sub>=25°C unless otherwise noted)

	SYMBOL	CMSH2-20L	CMSH2-40L	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	40	V
DC Blocking Voltage	$V_{R}$	20	40	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	28	V
Average Forward Current (T <sub>L</sub> =105°C)	IO	2	2.0	Α
Peak Forward Surge Current, tp=8.3ms	I <sub>FSM</sub>		50	Α
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to	o +150	°C
Thermal Resistance	ΘJL	2	20	°C/W

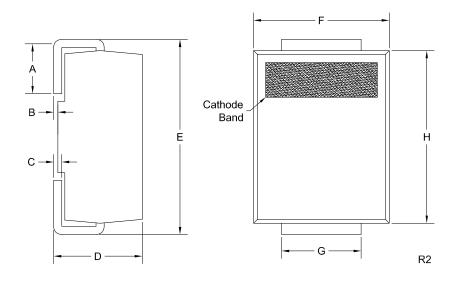
# **ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_{R}$	$V_R$ =Rated $V_{RRM}$		0.50	mA
$I_R$	V <sub>R</sub> =Rated V <sub>RRM,</sub> T <sub>A</sub> =100°C		20	mA
$V_{F}$	I <sub>F</sub> =2.0A (CMSH2-20L)	0.39	0.40	V
$V_{F}$	I <sub>F</sub> =2.0A (CMSH2-40L)	0.34	0.40	V
CJ	V <sub>R</sub> =4.0V, f=1.0MHz (CMSH2-20L)	386		pF
CJ	V <sub>R</sub> =4.0V, f=1.0MHz (CMSH2-40L)	200		pF

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# **SMB CASE - MECHANICAL OUTLINE**



DEVICE	MARKING CODE
CMSH2-20L	CS220L
CMSH2-40L	CS240L

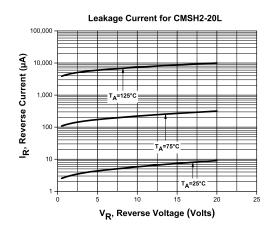
DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
Α	0.030	0.060	0.76	1.52
В	0.000	0.008	0.00	0.20
С	0.006	0.012	0.15	0.30
D	0.086	0.096	2.18	2.44
E	0.200	0.220	5.08	5.59
F	0.130	0.150	3.30	3.81
G	0.077	0.083	1.96	2.11
Н	0.160	0.191	4.06	4.85

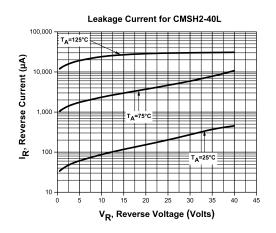
SMB (REV: R2)

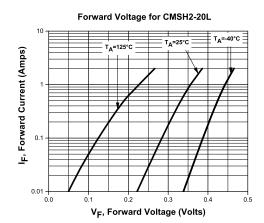
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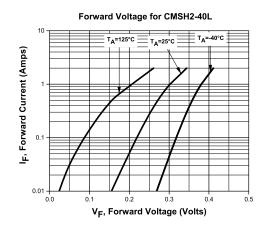


## TYPICAL ELECTRICAL CHARACTERISTICS





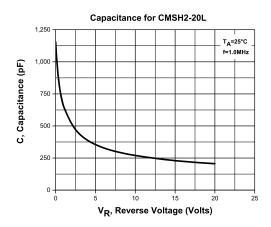


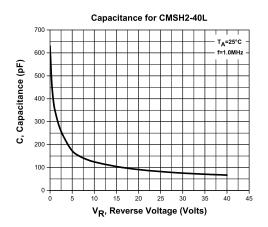


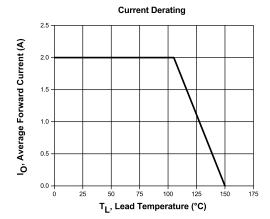
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# TYPICAL ELECTRICAL CHARACTERISTICS







### **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

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# Product End of Life Notification

PDN ID:	PDN01110
Notification Date:	11/08/18
Last Buy Date:	5/08/19
Last Shipment Date	11/08/19

Summary: The CMSH2-40L Schottky Rectifier is discontinued and now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Management Process. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

Central Part Number	<b>Replacement</b>
CMSH2-40L BK	N/A, Stock Only
CMSH2-40L TR13	N/A, Stock Only

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. Please email your requests to engineering@centralsemi.com.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.

CCC785 REV 002