

CMSH2-20L  
CMSH2-40L

SURFACE MOUNT SILICON  
LOW  $V_F$   
SCHOTTKY RECTIFIERS  
2.0 AMP, 20 AND 40 VOLT

LOW  
 $V_F$



SMB CASE



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMSH2-20L and CMSH2-40L 2.0 Amp surface mount low  $V_F$  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:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

	<b>SYMBOL</b>	<b>CMSH2-20L</b>	<b>CMSH2-40L</b>	<b>UNITS</b>
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	40	V
DC Blocking Voltage	$V_R$	20	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	28	V
Average Forward Current ( $T_L=105^\circ\text{C}$ )	$I_O$		2.0	A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	$I_{FSM}$		50	A
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150		$^\circ\text{C}$
Thermal Resistance	$\theta_{JL}$	20		$^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_R$	$V_R=\text{Rated } V_{RRM}$		0.50	mA
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$		20	mA
$V_F$	$I_F=2.0\text{A}$ (CMSH2-20L)	0.39	0.40	V
$V_F$	$I_F=2.0\text{A}$ (CMSH2-40L)	0.34	0.40	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$ (CMSH2-20L)	386		pF
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$ (CMSH2-40L)	200		pF

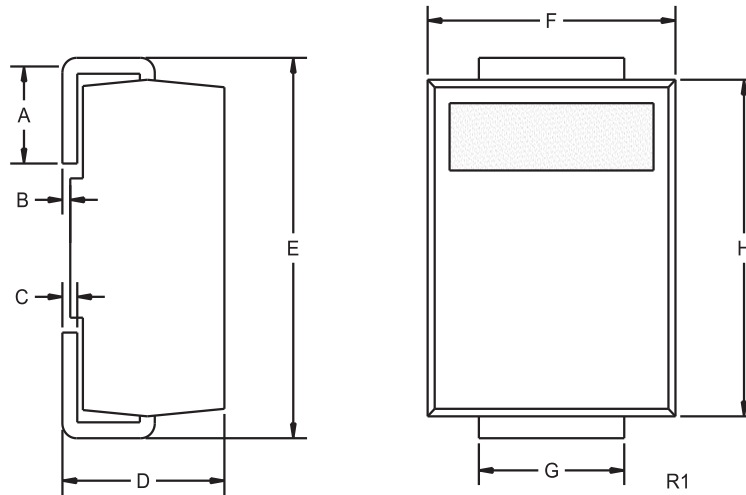
R4 (10-December 2015)

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SMB CASE - MECHANICAL OUTLINE



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

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.004	0.008	0.10	0.20
C	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
H	0.160	0.180	4.06	4.57

SMB (REV: R1)

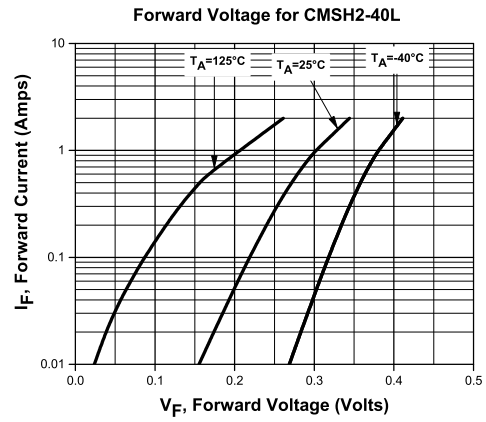
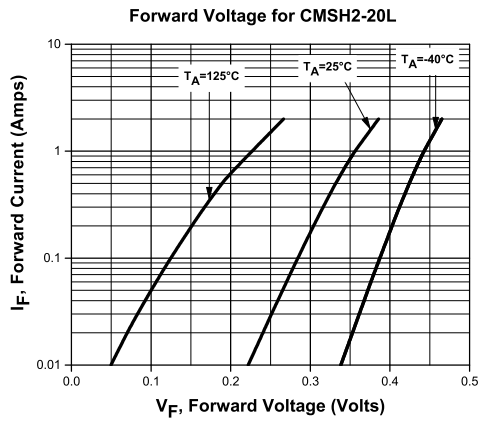
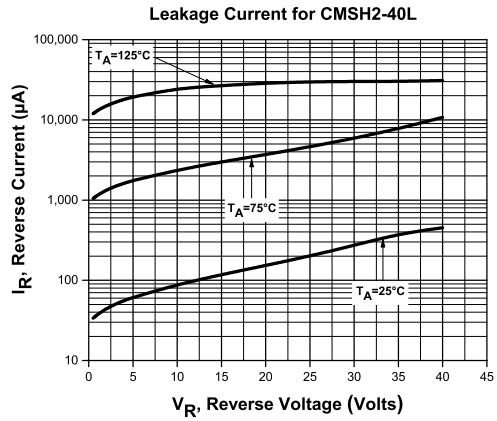
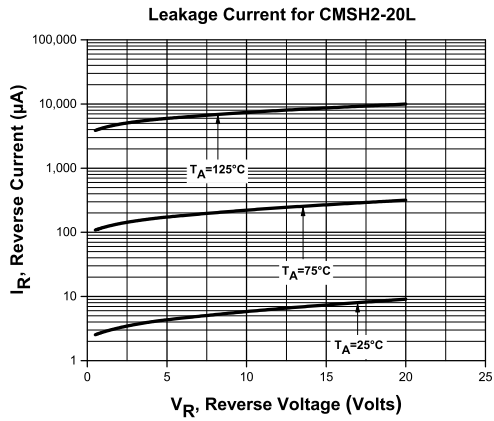
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### TYPICAL ELECTRICAL CHARACTERISTICS



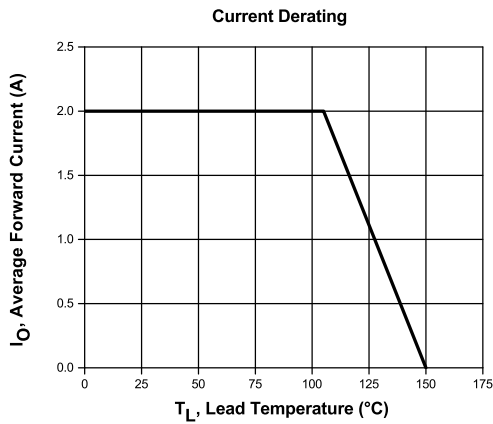
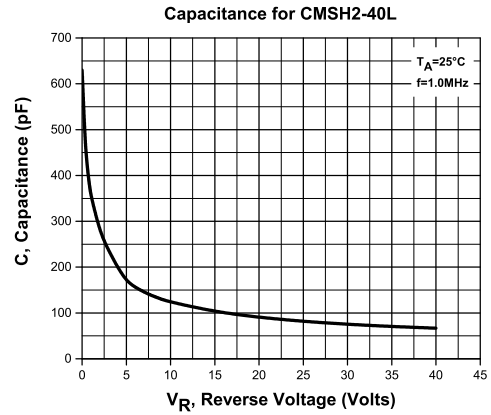
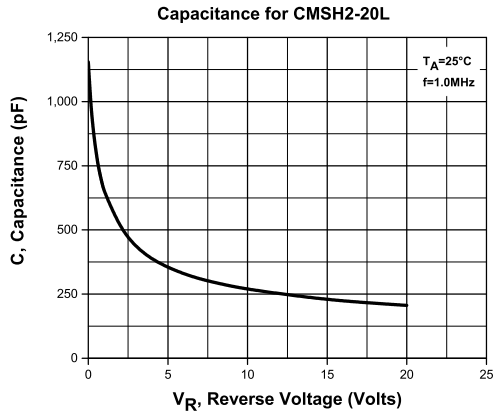
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### TYPICAL ELECTRICAL CHARACTERISTICS



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## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick 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

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### CONTACT US

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