CMLSH1-40
CMLSH1-40G*

SURFACE MOUNT SILICON
HIGH CURRENT, LOW V_F
SCHOTTKY RECTIFIERS

SOT-563 CASE

* Device is ***Halogen Free*** by design

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLSH1-40 is a 40 volt Schottky rectifier packaged in a space saving SOT-563 surface mount case. This device has been designed for applications requiring high current and a low forward voltage drop.

MARKING CODES: CMLSH1-40: C41
CMLSH1-40G*: CG4

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Continuous Forward Current	I_F	1.0	A
Peak Repetitive Forward Current, tp≤1.0ms	I_{FRM}	3.5	A
Forward Surge Current, tp=8.0ms	I_{FSM}	10	A
Power Dissipation	P_D	250	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	500	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_R	V_R=5.0V			10	μA
I_R	V_R=8.0V			20	μA
I_R	V_R=15V			50	μA
BV_R	I_R=100μA	40			V
V_F	I_F=10mA			0.29	V
V_F	I_F=100mA			0.36	V
V_F	I_F=500mA			0.45	V
V_F	I_F=1.0A			0.55	V
C_J	V_R=4.0V, f=1.0MHz		50		pF
t_{rr}	I_F=I_R=500mA, I_{rr}=50mA, R_L=50Ω		15		ns

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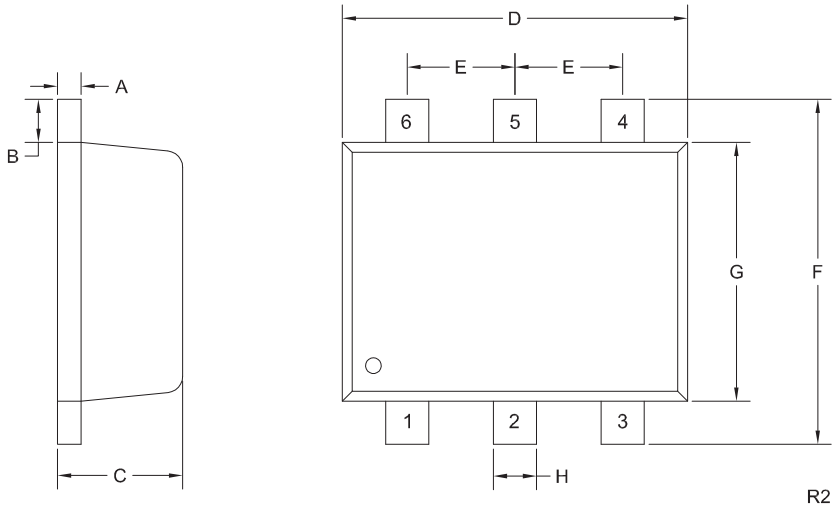
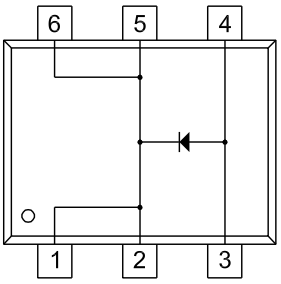
SOT-563 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:
1) Cathode
2) Cathode
3) Anode
4) Anode
5) Cathode
6) Cathode

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.0027	0.007	0.07	0.18
B	0.008		0.20	
C	0.017	0.024	0.45	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.059	0.067	1.50	1.70
G	0.043	0.051	1.10	1.30
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R2)

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SERVICES

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development / Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

R4 (1-July 2015)