

CMGSH1-3
SURFACE MOUNT
LOW V_F
SILICON SCHOTTKY DIODE



www.centrasemi.com



SOD-723 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMGSH1-3 is a high quality Silicon Schottky Diode designed for applications where ultra small size and operational efficiency are prime requirements. Packaged in the SOD-723 package, this component provides performance characteristics suitable for the most demanding size constrained applications.

MARKING CODE: CC

APPLICATIONS:

- DC - DC Converters
- Voltage Clamping
- Protection Circuits
- Battery powered devices including Cell Phones, Digital Cameras, Pagers, PDAs, Laptop Computers, etc.

FEATURES:

- $V_R=30V$
- $I_O=100mA$
- Very Low Forward Voltage Drop ($V_F=0.38V$ TYP @ 100mA)
- Reverse Current (20 μA MAX @ 10V)
- Small SOD-723 package

MAXIMUM RATINGS: ($T_A=25^\circ C$)

Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Average Forward Current	I_O	100	mA
Peak Forward Current	I_{FM}	200	mA
Peak Forward Surge Current, $t_p=10ms$	I_{FSM}	1.0	A
Power Dissipation	P_D	100	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +125	$^\circ C$
Thermal Resistance	θ_{JA}	1,000	$^\circ C/W$

SYMBOL

SYMBOL	MIN	TYP	MAX	UNITS
V_{RRM}		30		V
I_O		100		mA
I_{FM}		200		mA
I_{FSM}		1.0		A
P_D		100		mW
T_J, T_{stg}	-65		+125	$^\circ C$
θ_{JA}		1,000		$^\circ C/W$

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

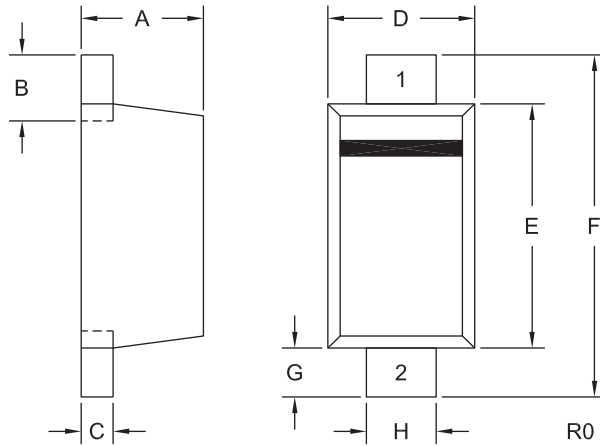
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=10V$			20	μA
I_R	$V_R=30V$			50	μA
BV_R	$I_R=100\mu A$	30			V
V_F	$I_F=1.0mA$		0.18		V
V_F	$I_F=5.0mA$		0.23		V
V_F	$I_F=100mA$		0.38	0.50	V
C_T	$V_R=0, f=1.0MHz$		15		pF

R0 (18-July 2011)

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SOD-723 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

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SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.017	0.022	0.45	0.55
B	0.007	0.015	0.18	0.38
C	0.003	0.007	0.08	0.18
D	0.021	0.026	0.55	0.65
E	0.037	0.042	0.95	1.05
F	0.053	0.057	1.35	1.45
G	0.006	0.010	0.15	0.25
H	0.009	0.013	0.25	0.32

SOD-723 (REV: R0)

R0 (18-July 2011)