

CMPH-3  
 CMPH-3A  
 CMPH-3C  
 CMPH-3S

**SURFACE MOUNT  
 SILICON SCHOTTKY DIODES**



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPH-3 series types are Silicon Schottky diodes designed for surface mount fast switching applications requiring a low forward voltage drop.



**SOT-23 CASE**

The following configurations are available:

CMPH-3 SINGLE  
 CMPH-3A DUAL, COMMON ANODE  
 CMPH-3C DUAL, COMMON CATHODE  
 CMPH-3S DUAL, IN SERIES

**MARKING CODE: D95**  
**MARKING CODE: DB1**  
**MARKING CODE: DB2**  
**MARKING CODE: DA5**

**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
Continuous Forward Current	$I_F$	100	mA
Peak Repetitive Forward Current	$I_{FRM}$	350	mA
Peak Forward Surge Current, $t_p=10\text{ms}$	$I_{FSM}$	750	mA
Power Dissipation	$P_D$	350	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	357	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=25\text{V}$		90	500	nA
$I_R$	$V_R=25\text{V}, T_A=100^\circ\text{C}$		25	100	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	30			V
$V_F$	$I_F=2.0\text{mA}$		0.29	0.33	V
$V_F$	$I_F=15\text{mA}$		0.40	0.45	V
$V_F$	$I_F=100\text{mA}$		0.74	1.00	V
$C_T$	$V_R=1.0\text{V}, f=1.0\text{MHz}$		7.0		pF
$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$			5.0	ns

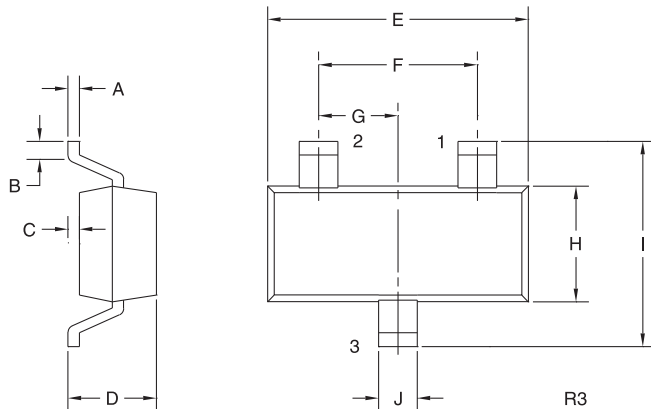
R6 (27-January 2010)

CMP SH-3  
 CMP SH-3A  
 CMP SH-3C  
 CMP SH-3S

SURFACE MOUNT  
 SILICON SCHOTTKY DIODES



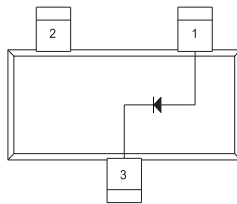
SOT-23 CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

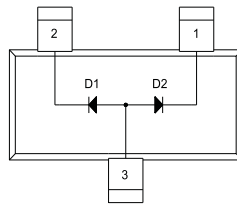
SOT-23 (REV: R3)

PIN CONFIGURATIONS



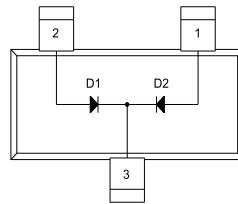
**CMP SH-3**  
**LEAD CODE:**  
 1) Anode  
 2) No Connection  
 3) Cathode

**MARKING CODE: D95**



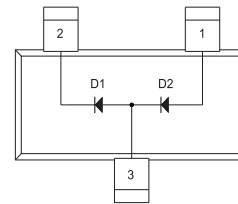
**CMP SH-3A**  
**LEAD CODE:**  
 1) Cathode D2  
 2) Cathode D1  
 3) Anode D1, D2

**MARKING CODE: DB1**



**CMP SH-3C**  
**LEAD CODE:**  
 1) Anode D2  
 2) Anode D1  
 3) Cathode D1, D2

**MARKING CODE: DB2**



**CMP SH-3S**  
**LEAD CODE:**  
 1) Anode D2  
 2) Cathode D1  
 3) Anode D1, Cathode D2

**MARKING CODE: DA5**

R6 (27-January 2010)

www.centalsemi.com