

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	θ_{JA}	357	$^\circ\text{C/W}$

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

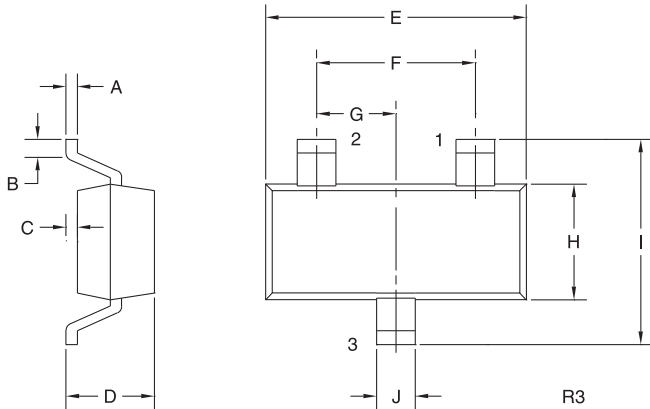
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=25\text{V}$		90	500	nA
I_R	$V_R=25\text{V}, T_A=100^\circ\text{C}$		25	100	μA
BV_R	$I_R=100\mu\text{A}$	30			V
V_F	$I_F=2.0\text{mA}$		0.29	0.33	V
V_F	$I_F=15\text{mA}$		0.40	0.45	V
V_F	$I_F=100\text{mA}$		0.74	1.00	V
C_T	$V_R=1.0\text{V}, f=1.0\text{MHz}$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

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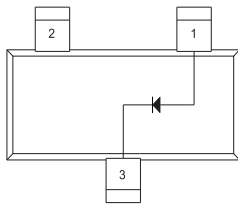
SOT-23 CASE - MECHANICAL OUTLINE



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

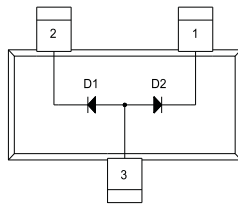
SOT-23 (REV: R3)

PIN CONFIGURATIONS



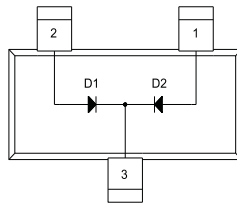
CMPH-3
LEAD CODE:
 1) Anode
 2) No Connection
 3) Cathode

MARKING CODE: D95



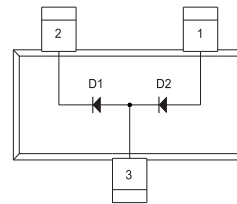
CMPH-3A
LEAD CODE:
 1) Cathode D2
 2) Cathode D1
 3) Anode D1, D2

MARKING CODE: DB1



CMPH-3C
LEAD CODE:
 1) Anode D2
 2) Anode D1
 3) Cathode D1, D2

MARKING CODE: DB2



CMPH-3S
LEAD CODE:
 1) Anode D2
 2) Cathode D1
 3) Anode D1, Cathode D2

MARKING CODE: DA5

R6 (27-January 2010)