

CMPD914
SURFACE MOUNT
HIGH SPEED
SILICON SWITCHING DIODE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD914 is a ultra-high speed silicon switching diode manufactured by the epitaxial planar process, in an epoxy molded surface mount package, designed for high speed switching applications.

MARKING CODE: C5D



SOT-23 CASE

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

Continuous Reverse Voltage
Peak Repetitive Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$
Peak Forward Surge Current, $t_p=1.0\text{ms}$
Peak Forward Surge Current, $t_p=1.0\text{s}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_R	75
V_{RRM}	100
I_F	250
I_{FRM}	250
I_{FSM}	4.0
I_{FSM}	2.0
I_{FSM}	1.0
P_D	350
T_J, T_{stg}	-65 to +150
θ_{JA}	357

UNITS

V
V
mA
mA
A
A
A
mW
$^\circ\text{C}$
$^\circ\text{C/W}$

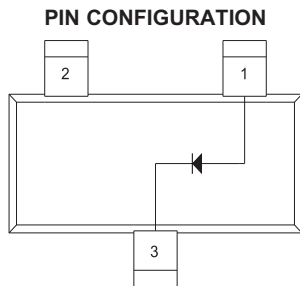
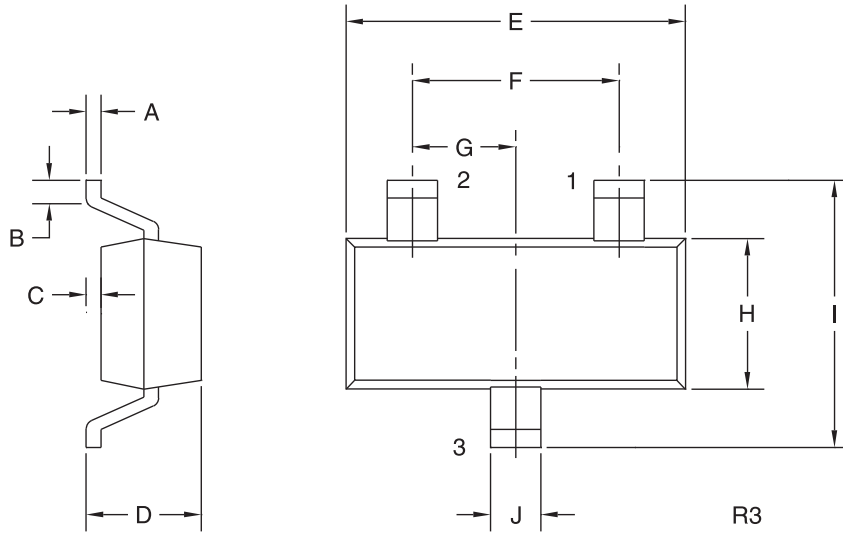
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=20\text{V}$		25	nA
I_R	$V_R=75\text{V}$		5.0	μA
BV_R	$I_R=100\mu\text{A}$	100		V
V_F	$I_F=10\text{mA}$		1.0	V
C_T	$V_R=0, f=1.0\text{MHz}$		4.0	pF
t_{rr}	$I_R=I_F=10\text{mA}, R_L=100\Omega, \text{Rec. to } 1.0\text{mA}$		4.0	ns

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SOT-23 CASE - MECHANICAL OUTLINE



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

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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)

R6 (25-January 2010)