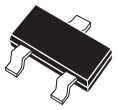
CMPD914

HIGH SPEED SWITCHING DIODE



SOT-23 CASE

Central™ Semiconductor Corp.

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

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	250	mA
Forward Surge Current, tp=1.0 μs	I_{FSM}	4.0	A
Forward Surge Current, tp=1.0 ms	I_{FSM}	2.0	A
Forward Surge Current, tp=1.0 s	I_{FSM}	1.0	A
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	357	°C/W

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

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

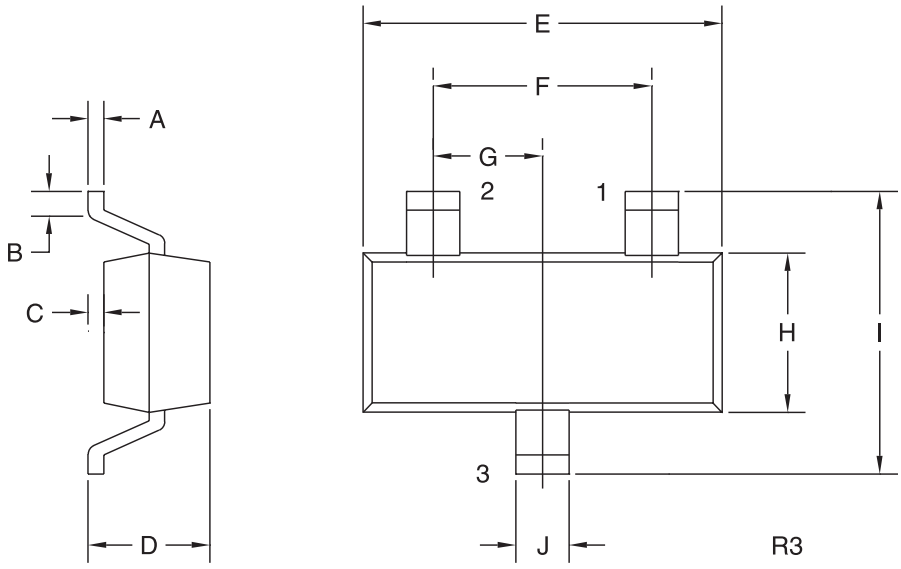
R4 (13-November 2002)

Central™
Semiconductor Corp.

CMPD914

HIGH SPEED
SWITCHING DIODE

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:
1) ANODE
2) NO CONNECTION
3) CATHODE

MARKING CODE: C5D

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)

R4 (13-November 2002)