CMPD914E

ENHANCED SPECIFICATION
SURFACE MOUNT
HIGH SPEED
SILICON SWITCHING DIODE

Central
Semiconductor Corp.

w w w . c e n t r a l s e m i . c o m

SOT-23 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD914E is an Enhanced version of the CMPD914 High Speed Switching Diode in a SOT-23 surface mount package, designed for high speed applications.

MARKING CODE: C5DE

FEATURED ENHANCED SPECIFICATIONS:

◆ BV_R from 100V min to 120V min. (150V TYP)

◆ V_F from 1.0V max to 0.85V max. (0.72V TYP)

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	75	V
◆ **Peak Repetitive Reverse Voltage**	V_{RRM}	**120**	**V**
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	250	mA
Peak Forward Surge Current, tp=1.0µs	I_{FSM}	4000	mA
Peak Forward Surge Current, tp=1.0ms	I_{FSM}	2000	mA
Peak Forward Surge Current, tp=1.0s	I_{FSM}	1000	mA
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	TYP	MAX	UNITS
I_R	V_R=20V			25	nA
I_R	V_R=75V			5.0	µA
◆ BV_R	I_R=100µA	120	150		V
◆ V_F	I_F=10mA		0.720	0.850	V
◆◆ V_F	I_F=100mA		0.915	0.970	V
C_T	V_R=0, f=1.0MHz			2.0	pF
t_{rr}	I_R=I_F=10mA, R_L=100Ω, Rec. to 1.0 mA			4.0	ns

◆ Enhanced specification.
◆◆ Additional Enhanced specification.

R3 (25-January 2010)

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SOT-23 CASE - MECHANICAL OUTLINE

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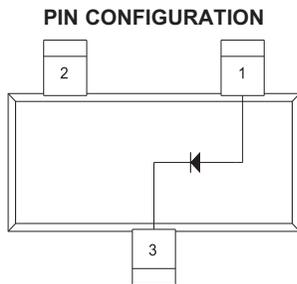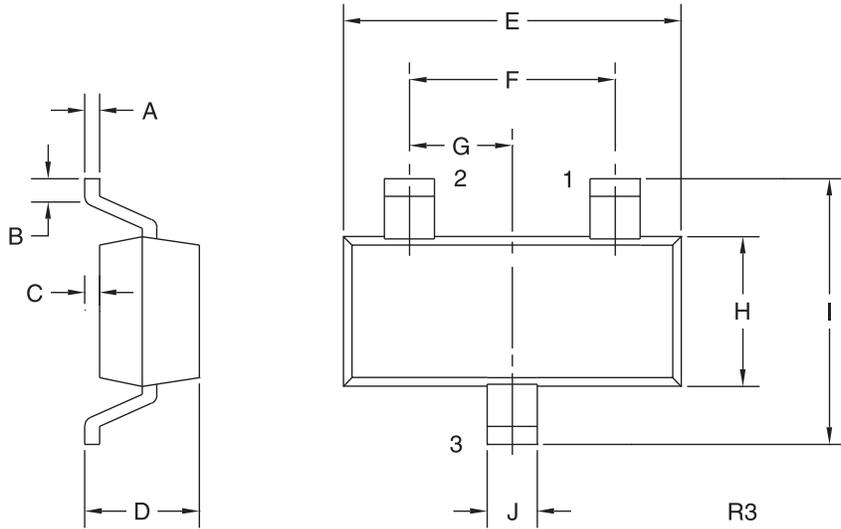
LEAD CODE:
1) Anode
2) No Connection
3) Cathode

MARKING CODE: C5DE

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)

R3 (25-January 2010)

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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