#### CLL914

### SURFACE MOUNT HIGH SPEED SILICON SWITCHING DIODE

SOD-80 CASE



#### www.centralsemi.com

# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CLL914 type is an ultra-high speed silicon switching diode manufactured by the epitaxial planar process, in a hermetically sealed glass surface mount package, designed for high speed switching applications.

# MARKING: CATHODE BAND

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	V <sub>R</sub>	75	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Continuous Forward Current	١ <sub>F</sub>	250	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	250	mA
Peak Forward Surge Current, tp=1.0µs	IFSM	4.0	А
Peak Forward Surge Current, tp=1.0s	IFSM	1.0	А
Power Dissipation	PD	500	mW
Operating and Storage Junction Temperature	т <sub>Ј</sub> , т <sub>stg</sub>	-65 to +200	°C
Thermal Resistance	$\Theta_{JA}$	350	°C/W

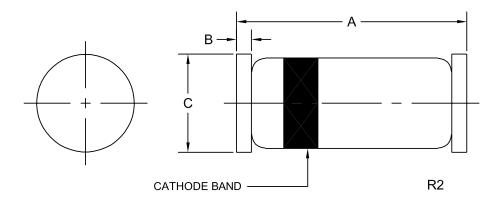
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =20V			25	nA
I <sub>R</sub>	V <sub>R</sub> =75V			5.0	μA
<sup>BV</sup> R	I <sub>R</sub> =100μΑ	100		V	
V <sub>F</sub>	I <sub>F</sub> =10mA			1.0	V
С <sub>Т</sub>	V <sub>R</sub> =0, f=1 MHz			4.0	pF
t <sub>rr</sub>	I <sub>R</sub> =I <sub>F</sub> =10mA, R <sub>L</sub> =100Ω,				
	Rec. to 1.0mA		4.0	5.0	ns





# SURFACE MOUNT HIGH SPEED SILICON SWITCHING DIODE

# SOD-80 CASE - MECHANICAL OUTLINE



MARKING: CATHODE BAND

DIMENSIONS							
	INCHES		MILLIMETER				
SYMBOL	MIN	MAX	MIN	MAX			
А	0.130	0.146	3.30	3.71			
В	0.014		0.35				
C (DIA)	0.049	0.067	1.25	1.70			
SOD-80 (REV:R2)							

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# **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**

### **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

### **DESIGNER SUPPORT/SERVICES**

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

- Free quick ship samples (2<sup>nd</sup> 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

· Custom product packing

- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

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

# CONTACT US

# **Corporate Headquarters & Customer Support Team**

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