### CMXD3004SR

SURFACE MOUNT SILICON DUAL PAIR, IN-SERIES HIGH VOLTAGE SWITCHING DIODE



www.centralsemi.com

## **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMXD3004SR consists of two in-series pairs of high voltage silicon switching diodes, manufactured in an SOT-26 surface mount package, designed for high voltage switching applications.

**MARKING CODE: C34SR** 



### **SOT-26 CASE**

## **APPLICATIONS:**

- Voltage multipliers
- Steering diode arrays
- Flyback diodes

## **FEATURES**:

- High voltage capability
- Low reverse leakage current
- Fast switching speed
- Low total conduction losses

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	$V_{R}$	350	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	375	V
Average Forward Current	IO	200	mA
Continuous Forward Current	l <sub>F</sub>	225	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	625	mA
Peak Forward Surge Current, tp=1.0µs	I <sub>FSM</sub>	4.0	Α
Peak Forward Surge Current, tp=1.0s	I <sub>FSM</sub>	1.0	Α
Power Dissipation	$P_{D}$	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	Θ.ΙΔ	357	°C/W

# **ELECTRICAL CHARACTERISTICS PER DIODE:** (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
$I_{R}$	V <sub>R</sub> =350V		0.07	1.0	μΑ
$BV_R$	I <sub>R</sub> =100μA	375	460		V
$V_{F}$	I <sub>F</sub> =100mA		0.95	1.0	V
CJ	$V_R$ =0, f=1.0MHz		0.50	5.0	pF
t <sub>rr</sub>	$I_F=I_R=30$ mA, $I_{rr}=3.0$ mA, $R_L=100\Omega$		11	50	ns

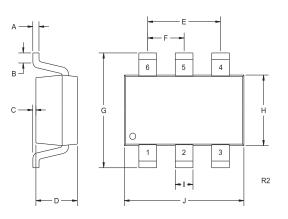
R1 (28-April 2014)

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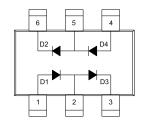
### **SOT-26 CASE - MECHANICAL OUTLINE**



DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
Α	0.004	0.007	0.11	0.19		
В	0.016	-	0.40	-		
С	-	0.004	-	0.10		
D	0.039	0.047	1.00	1.20		
E	0.074	0.075	1.88	1.92		
F	0.037	0.038	0.93	0.97		
G	0.102	0.118	2.60	3.00		
Н	0.059	0.067	1.50	1.70		
	0.016		0.41			
J	0.110	0.118	2.80	3.00		

SOT-26 (REV: R2)

## **PIN CONFIGURATION**



### **LEAD CODE:**

- 1) Anode D1
- 2) Cathode D1, Anode D3
- 3) Cathode D3
- 4) Anode D4
- 5) Cathode D4, Anode D2
- 6) Cathode D2

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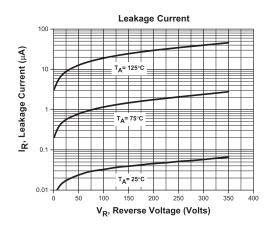
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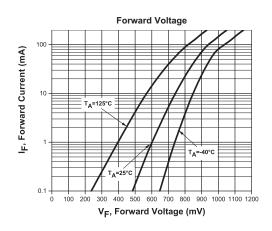
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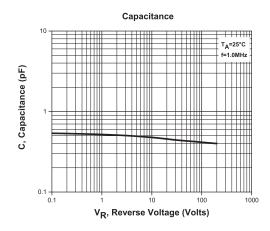
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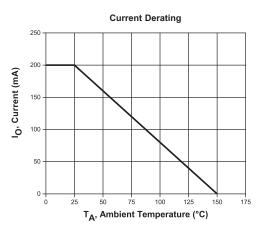


### TYPICAL ELECTRICAL CHARACTERISTICS









R1 (28-April 2014)

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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

- · 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 (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
- 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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