

SURFACE MOUNT DUAL, IN SERIES SILICON SWITCHING DIODES





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# DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSD2004S type is a dual, in series silicon switching diode manufactured by the epitaxial planar process, designed for applications requiring high voltage capability.

#### MARKING CODE: B6D

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	VR	300	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	300	V
Peak Repetitive Reverse Current	IRRM	200	mA
Continuous Forward Current	١ <sub>F</sub>	225	mA
Peak Repetitive Forward Current	IFRM	625	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	275	mW
Operating and Storage Junction Temperature	TJ, Tstg	-65 to +150	°C
Thermal Resistance	$\Theta_{JA}$	455	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =240V		100	nA
I <sub>R</sub>	V <sub>R</sub> =240V, T <sub>A</sub> =150°C		100	μΑ
BVR	Ι <sub>R</sub> =100μΑ	300		V
V <sub>F</sub>	I <sub>F</sub> =100mA		1.0	V
с <sub>Т</sub>	V <sub>R</sub> =0, f=1.0MHz		5.0	pF
t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =30mA, I <sub>rr</sub> =3.0mA, R <sub>L</sub> =100Ω		50	ns

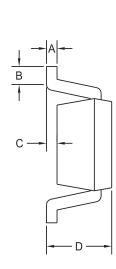
R6 (8-February 2010)

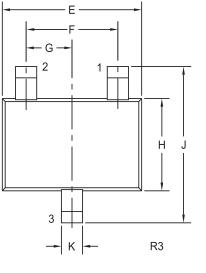


#### CMSD2004S

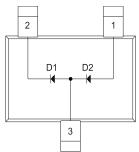
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## SOT-323 CASE - MECHANICAL OUTLINE





**PIN CONFIGURATION** 



LEAD CODE: 1) Anode D2 2) Cathode D1

3) Anode D1, Cathode D2

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DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
А	0.002	0.008	0.05	0.20		
В	0.004	-	0.10	-		
С	-	0.004	-	0.10		
D	0.031	0.043	0.80	1.10		
E	0.071	0.087	1.80	2.20		
F	0.051		1.30			
G	0.026		0.65			
Н	0.045	0.053	1.15	1.35		
J	0.079	0.087	2.00	2.20		
K	0.008	0.016	0.20	0.40		
SOT-323 (REV: R3)						

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R6 (8-February 2010)

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