CMSD2004S

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 _A =25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	V_{R}	300	V
Peak Repetitive Reverse Voltage	V_{RRM}	300	V
Peak Repetitive Reverse Current	I _{RRM}	200	mA
Continuous Forward Current	l _F	225	mA
Peak Repetitive Forward Current	I _{FRM}	625	mA
Peak Forward Surge Current, tp=1.0µs	I _{FSM}	4.0	Α
Peak Forward Surge Current, tp=1.0s	I _{FSM}	1.0	Α
Power Dissipation	P_{D}	275	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	455	°C/W

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

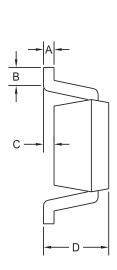
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SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{R}	V _R =240V		100	nA
I_{R}	V _R =240V, T _A =150°C		100	μΑ
BV_R	I _R =100μA	300		V
V_{F}	I _F =100mA		1.0	V
C _T	V _R =0, f=1.0MHz		5.0	pF
t _{rr}	$I_F = I_R = 30 \text{mA}, I_{rr} = 3.0 \text{mA}, R_I = 100 \Omega$		50	ns

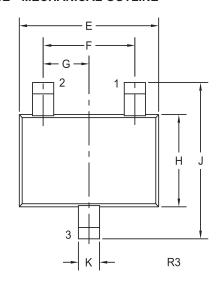
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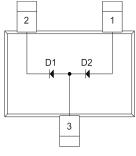


SOT-323 CASE - MECHANICAL OUTLINE





PIN CONFIGURATION



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LEAD CODI	_	

- 1) Anode D2
- 2) Cathode D1
- 3) Anode D1, Cathode D2

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DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
Α	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		
Е	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)

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 guick 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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