CMSD6001 CMSD6001A CMSD6001C CMSD6001S

SURFACE MOUNT ULTRA LOW LEAKAGE SILICON SWITCHING DIODES



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMSD6001 SERIES are silicon switching diodes manufactured by the epitaxial planar process, epoxy molded in a SUPERmini™ surface mount package, designed for switching applications requiring an extremely low leakage diode.



• Device is *Halogen Free* by design

CMSD6001: SINGLE MARKING CODE: 6C1
CMSD6001A: DUAL, COMMON ANODE
CMSD6001C: DUAL, COMMON CATHODE
CMSD6001S: DUAL, IN-SERIES
MARKING CODE: 61S
MARKING CODE: 61S

MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	v_{R}	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	ΙF	250	mA
Peak Repetitive Forward Current	I _{FRM}	250	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

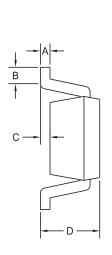
ELECTRICAL CHARACTERISTICS PER DIODE: (T _A =25°C unless otherwise noted)							
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS			
I_{R}	V _R =75V		500	pА			
BV_R	I _R =100μA	100		V			
V_{F}	I _F =1.0mA		0.85	V			
VF	I _F =10mA		0.95	V			
V_{F}	I _F =100mA		1.1	V			
C_T	V _R =0, f=1.0MHz		2.0	pF			
t _{rr}	$I_R = I_F = 10$ mA, $I_{rr} = 1.0$ mA, $R_L = 100$ Ω		3.0	μs			

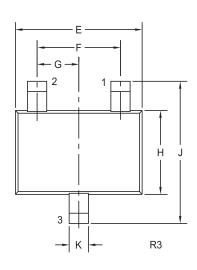
CMSD6001 CMSD6001A CMSD6001C **CMSD6001S**





SOT-323 CASE - MECHANICAL OUTLINE

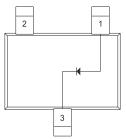




DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.002	0.008	0.05	0.20			
В	0.004	-	0.10	-			
С	-	0.004	-	0.10			
D	0.031	0.043	0.80	1.10			
Е	0.071	0.087	1.80	2.20			
F	0.051		1.30				
G	0.026		0.65				
Н	0.045	0.053	1.15	1.35			
J	0.079	0.087	2.00	2.20			
K	0.008	0.016	0.20	0.40			

SOT-323 (REV: R3)

PIN CONFIGURATIONS



CMSD6001 **LEAD CODE:**

- 1) Anode 2) NC
- 3) Cathode

MARKING CODE: 6C1

2 1 D2 3

CMSD6001A

LEAD CODE:

- 1) Cathode D2
- 2) Cathode D1
- 3) Anode D1, D2
- **MARKING CODE: 61A**

CMSD6001C

2

- **LEAD CODE:**
- 1) Anode D2
- 2) Anode D1
- 3) Cathode D1, D2

3

MARKING CODE: 61C

D2

CMSD6001S

D1

D2

LEAD CODE:

3

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

MARKING CODE: 61S

R3 (9-May 2011)

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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