## **CMDD6001**

## SURFACE MOUNT ULTRA LOW LEAKAGE SILICON SWITCHING DIODE





www.centralsemi.com

# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMDD6001 type is a silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a SUPERmini™ surface mount package, designed for switching applications requiring a extremely low leakage diode.

**MARKING CODE: C61** 

MAXIMUM RATINGS: (T <sub>A</sub> =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 <sub>FRM</sub>	250	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	$P_{D}$	250	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	500	°C/W

ELECTRICAL CHARACTERISTICS: (T <sub>A</sub> =25°C unless otherwise noted)							
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS			
$I_{R}$	V <sub>R</sub> =75V		500	pA			
$BV_R$	I <sub>R</sub> =100μA	100		V			
$V_{F}$	I <sub>F</sub> =1.0mA		0.85	V			
$V_{F}$	I <sub>F</sub> =10mA		0.95	V			
$V_{F}$	I <sub>F</sub> =100mA		1.1	V			
$C_T$	$V_R=0$ , f=1.0MHz		2.0	pF			
t <sub>rr</sub>	$I_R = I_F = 10$ mA, $I_{rr} = 1.0$ mA, $R_L = 100$ Ω		3.0	μs			

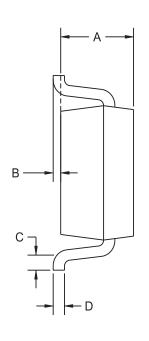
R5 (9-May 2011)

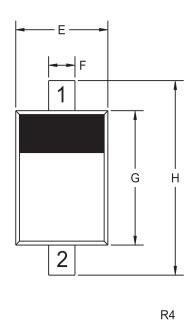
# **CMDD6001**

# **SURFACE MOUNT ULTRA LOW LEAKAGE** SILICON SWITCHING DIODE



# **SOD-323 CASE - MECHANICAL OUTLINE**





# **LEAD CODE:** 1) Cathode

- 2) Anode

MARKING CODE: C61

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.031	0.039	0.80	1.00			
В	0.000	0.004	0.00	0.10			
С	0.008	-	0.20	-			
D	0.004	0.007	0.11	0.19			
Е	0.045	0.053	1.15	1.35			
F	-	0.014	-	0.35			
G	0.063	0.071	1.60	1.80			
Н	0.094	0.102	2.40	2.60			

SOD-323 (REV: R4)

R5 (9-May 2011)

www.centralsemi.com

## **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 (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**

## Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA

Main Tel: (631) 435-1110 Main Fax: (631) 435-1824

Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>