

**SURFACE MOUNT  
HIGH CURRENT  
SILICON SWITCHING DIODE**



## SOT-23 CASE



**www.centrasemi.com**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPD1001 series types are silicon switching diodes manufactured by the epitaxial planar process, designed for applications requiring high current capability.

The following configurations are available:

CMPD1001	SINGLE
CMPD1001A	DUAL, COMMON ANODE
CMPD1001S	DUAL, IN SERIES

**MARKING CODE: L20**

**MARKING CODE: L22**

**MARKING CODE: L21**

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	V <sub>R</sub>	90	V
Continuous Forward Current	I <sub>F</sub>	250	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	600	mA
Peak Repetitive Reverse Current	I <sub>RRM</sub>	600	mA
Peak Forward Surge Current, t <sub>p</sub> =1.0μs	I <sub>FSM</sub>	6.0	A
Peak Forward Surge Current, t <sub>p</sub> =1.0s	I <sub>FSM</sub>	1.0	A
Power Dissipation	P <sub>D</sub>	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	357	°C/W

**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=90V$		100	nA
$I_R$	$V_R=90V, T_A=150^{\circ}C$		100	$\mu A$
$BV_R$	$I_R=100\mu A$	90		V
$V_F$	$I_F=10mA$		0.75	V
$V_F$	$I_F=50mA$		0.84	V
$V_F$	$I_F=100mA$		0.90	V
$V_F$	$I_F=200mA$		1.00	V
$V_F$	$I_F=400mA$		1.25	V
$C_T$	$V_R=0, f=1.0MHz$		35	pF
$t_{rr}$	$I_R=I_F=30mA, Rec. to 3.0mA, R_L=100\Omega$		50	ns

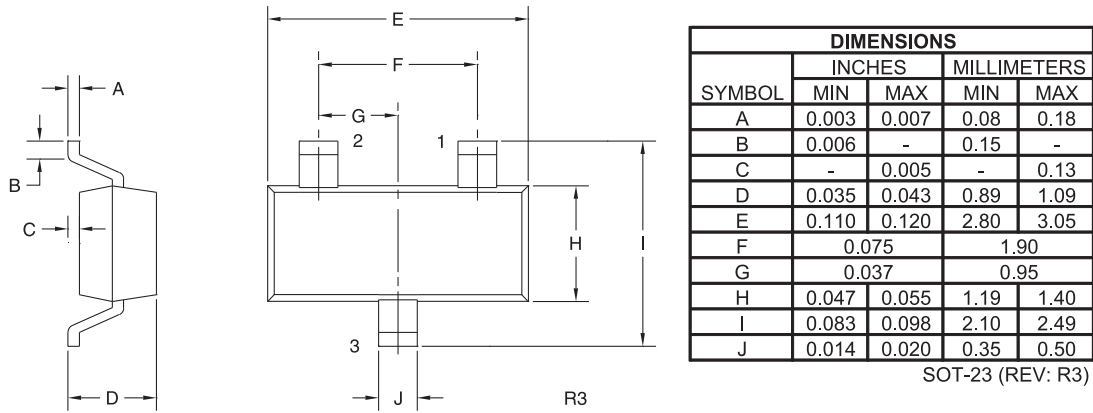
R6 (25-January 2010)

CMPD1001  
CMPD1001A  
CMPD1001S

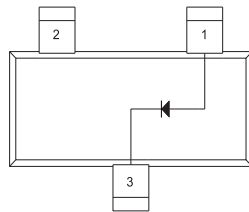
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## SOT-23 CASE - MECHANICAL OUTLINE



## PIN CONFIGURATIONS

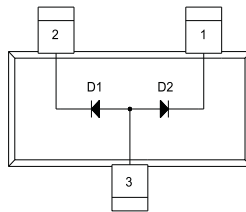


**CMPD1001**

**LEAD CODE:**

- 1) Anode
- 2) No Connection
- 3) Cathode

**MARKING CODE: L20**

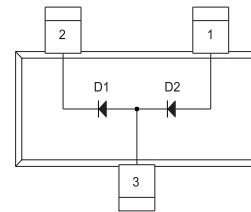


**CMPD1001A**

**LEAD CODE:**

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

**MARKING CODE: L22**



**CMPD1001S**

**LEAD CODE:**

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

**MARKING CODE: L21**

R6 (25-January 2010)

# Mouser Electronics

Authorized Distributor

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