

# Central<sup>TM</sup> Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CMPD3003  
CMPD3003A  
CMPD3003C  
CMPD3003S

SURFACE MOUNT  
LOW LEAKAGE  
SWITCHING DIODE

SOT-23 CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR CMPD3003 series types are silicon switching diodes manufactured by the epitaxial planar process, designed for switching applications requiring an extremely low leakage diode.

The following configurations are available:

CMPD3003	SINGLE	MARKING CODE: LLO
CMPD3003A	DUAL, COMMON ANODE	MARKING CODE: LLA
CMPD3003C	DUAL, COMMON CATHODE	MARKING CODE: LLC
CMPD3003S	DUAL, IN SERIES	MARKING CODE: LLS

## MAXIMUM RATINGS (T<sub>A</sub>=25°C)

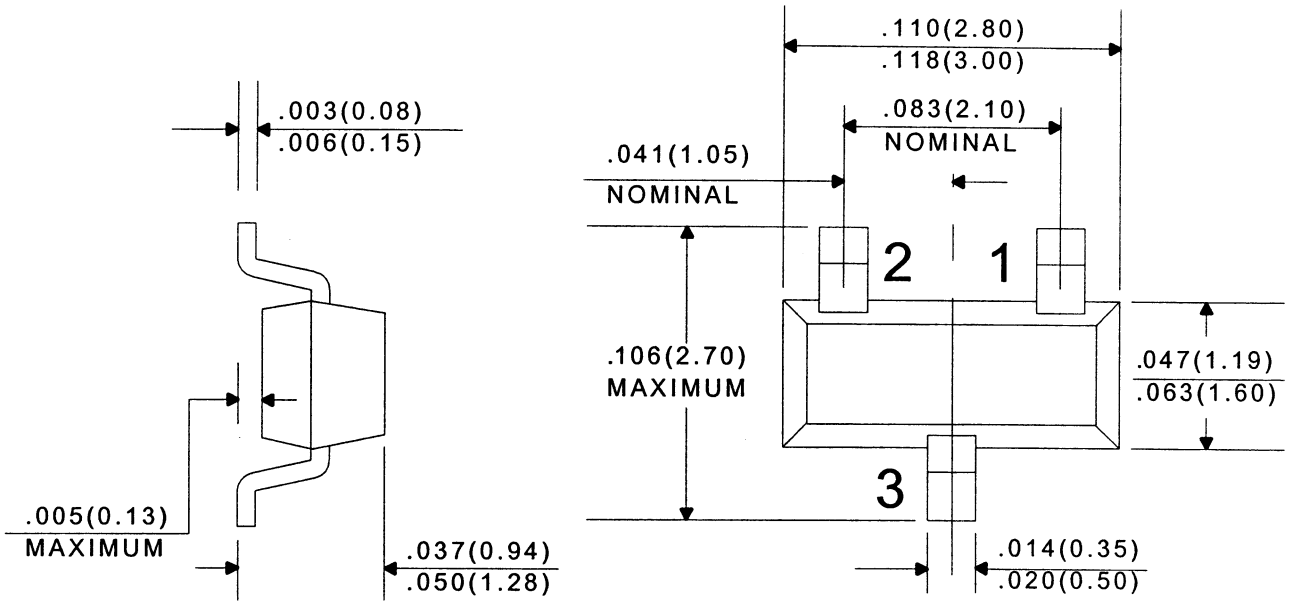
	SYMBOL		UNITS
Continuous Reverse Voltage	V <sub>R</sub>	180	V
Average Rectified Current	I <sub>O</sub>	200	mA
DC Forward Current	I <sub>F</sub>	600	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	700	mA
Peak Forward Surge Current, tp=1 s	I <sub>FSM</sub>	1.0	A
Peak Forward Surge Current, tp=1 μs	I <sub>FSM</sub>	2.0	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 (T<sub>A</sub>=25°C unless otherwise noted)

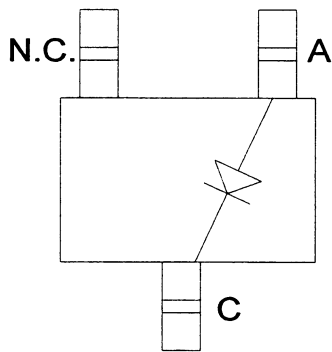
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
B <sub>VR</sub>	I <sub>R</sub> =5.0μA	200		V
I <sub>R</sub>	V <sub>R</sub> =125V		1.0	nA
I <sub>R</sub>	V <sub>R</sub> =125V, T <sub>A</sub> =150°C		3.0	μA
I <sub>R</sub>	V <sub>R</sub> =180V		10	nA
I <sub>R</sub>	V <sub>R</sub> =180V, T <sub>A</sub> =150°C		5.0	μA
V <sub>F</sub>	I <sub>F</sub> =1.0mA	0.62	0.72	V
V <sub>F</sub>	I <sub>F</sub> =10mA	0.72	0.83	V
V <sub>F</sub>	I <sub>F</sub> =50mA	0.80	0.89	V
V <sub>F</sub>	I <sub>F</sub> =100mA	0.83	0.93	V
V <sub>F</sub>	I <sub>F</sub> =200mA	0.87	1.10	V
V <sub>F</sub>	I <sub>F</sub> =300mA	0.90	1.15	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1 MHz		4.0	pF

(See Reverse Side)

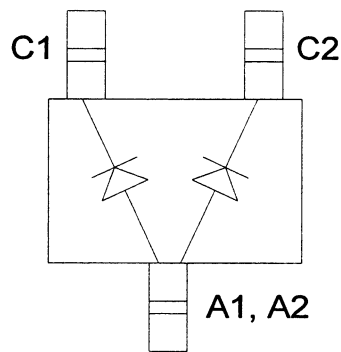
# SOT-23 CASE - MECHANICAL OUTLINE



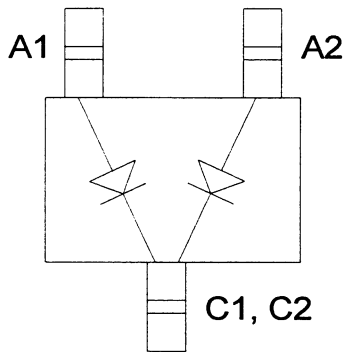
ALL DIMENSIONS IN INCHES (mm).



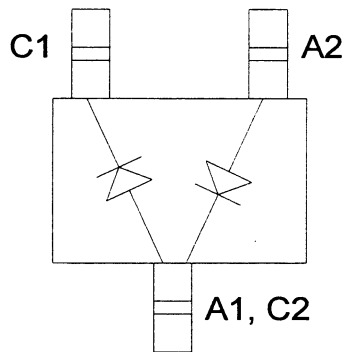
CMPD3003



CMPD3003A



CMPD3003C



CMPD3003S

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