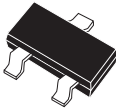


**CMPD1001
CMPD1001A
CMPD1001S**

**HIGH CURRENT
SWITCHING DIODE**



SOT-23 CASE

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	MARKING CODE: L20
CMPD1001S	DUAL, IN SERIES	MARKING CODE: L21
CMPD1001A	DUAL, COMMON ANODE	MARKING CODE: L22

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

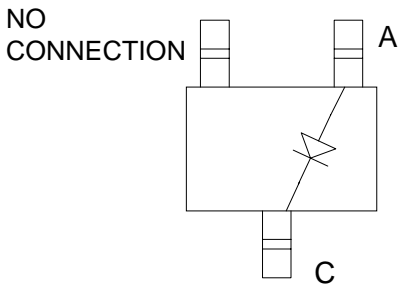
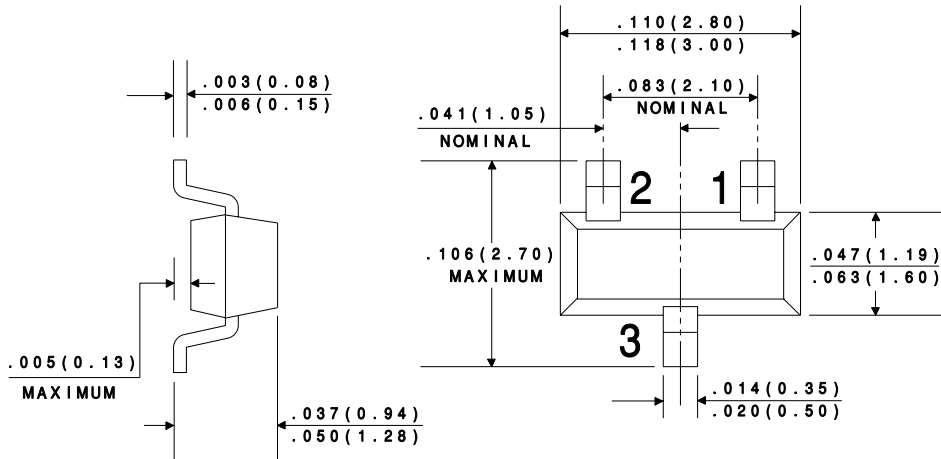
	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	90	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	600	mA
Peak Repetitive Reverse Current	I_{RRM}	600	mA
Forward Surge Current, $t_p=1 \mu\text{s}$	I_{FSM}	6000	mA
Forward Surge Current, $t_p=1 \text{ s}$	I_{FSM}	1000	mA
Power Dissipation	P_D	350	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	Θ_{JA}	357	$^{\circ}\text{C/W}$

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

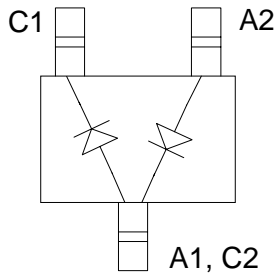
SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
BV_R	$I_R=100 \mu\text{A}$	90		V
I_R	$V_R=90\text{V}$		100	nA
I_R	$V_R=90\text{V}, T_A=150^{\circ}\text{C}$		100	μA
V_F	$I_F=10\text{mA}$		0.75	V

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
V_F	$I_F=50\text{mA}$		0.84	V
V_F	$I_F=100\text{mA}$		0.90	V
V_F	$I_F=200\text{mA}$		1.00	V
V_F	$I_F=400\text{mA}$		1.25	V
C_T	$V_R=0, f=1\text{ MHz}$		35	pF
t_{rr}	$I_F=I_R=30\text{mA}, \text{RECOV. TO } 3.0\text{mA}, R_L=100\Omega$		50	ns

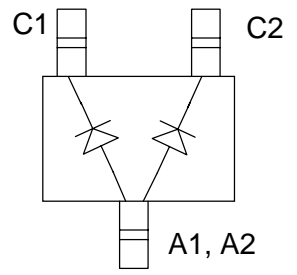
All dimensions in inches (mm).



CMPD1001



CMPD1001S



CMPD1001A