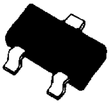
CMPD5001
CMPD5001S

**HIGH CURRENT
INDUCTIVE LOAD
SWITCHING DIODE**



SOT-23 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD5001 series types are silicon switching diodes manufactured by the epitaxial planar process, designed for switching inductive load applications requiring extremely high current capability.

The following configurations are available:

CMPD5001	SINGLE	**MARKING CODE: DA2**
CMPD5001S	DUAL, IN SERIES	**MARKING CODE: D49**

MAXIMUM RATINGS (T_A=25°C)

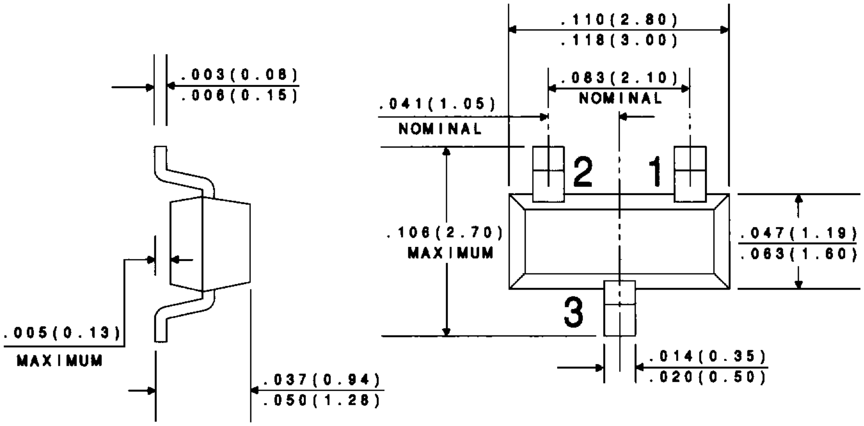
	SYMBOL		**UNITS**
Continuous Reverse Voltage	V_R	120	V
Continuous Forward Current	I_F	400	mA
Peak Repetitive Forward Current	I_{FRM}	800	mA
Peak Repetitive Reverse Current	I_{RRM}	600	mA
Forward Surge Current, tp=1 µs	I_{FSM}	6000	mA
Forward Surge Current, tp=1 s	I_{FSM}	1500	mA
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	357	°C/W

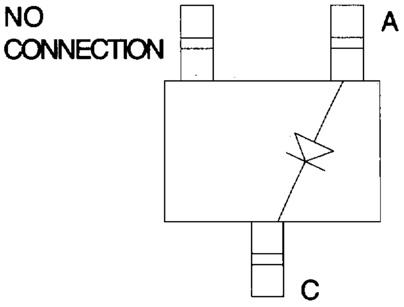
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**UNITS**
B_{VR}	I_R=1.0mA	120	175	V
I_R	V_R=90V		100	nA
I_R	V_R=90V, T_A=150°C		100	µA
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

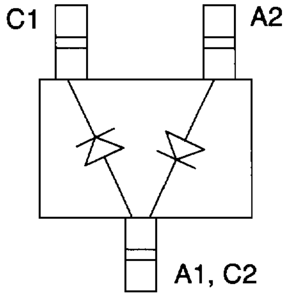
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
V_F	I_F=400mA		1.25	V
C_T	V_R=0, f=1 MHz		35	pF
t_{rr}	I_F=I_R=30mA, RECOV. TO 1.0mA, R_L=100Ω		60	ns
t_{rr}	I_F=I_R=10mA, RECOV. TO 1.0mA, R_L=100Ω		50	ns

All dimensions in inches (mm).





CMPD5001



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