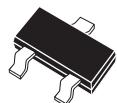


CMPD2005S

SURFACE MOUNT
DUAL, IN SERIES
HIGH VOLTAGE
SILICON SWITCHING DIODES



SOT-23 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD2005S contains two (2) High Voltage Silicon Switching Diodes, manufactured by the epitaxial planar process, epoxy molded in a SOT-23 surface mount package, designed for applications requiring high voltage capability.

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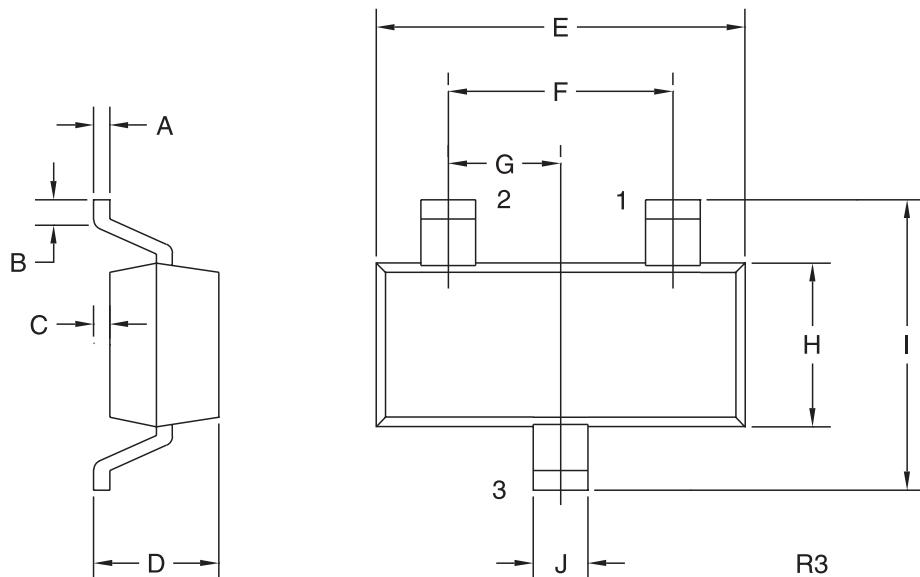
MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	300	V
Peak Repetitive Reverse Voltage	V_{RRM}	350	V
Peak Repetitive Reverse Current	I_O	200	mA
Continuous Forward Current	I_F	225	mA
Peak Repetitive Forward Current	I_{FRM}	625	mA
Forward Surge Current, $t_p = 1\mu\text{s}$	I_{FSM}	4.0	A
Forward Surge Current, $t_p = 1\text{s}$	I_{FSM}	1.0	A
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	$^\circ\text{C/W}$

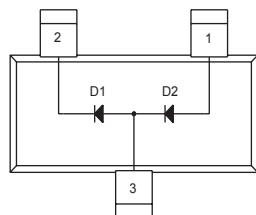
ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=280\text{V}$			100	nA
I_R	$V_R=280\text{V}, T_A=150^\circ\text{C}$			100	μA
BV_R	$I_R=100\mu\text{A}$	350			V
V_F	$I_F=20\text{mA}$		0.87		V
V_F	$I_F=100\text{mA}$		1.0		V
V_F	$I_F=200\text{mA}$		1.25		V
C_T	$V_R=0, f=1.0\text{ MHz}$		5.0		pF
t_{rr}	$I_R=I_F=30\text{mA}$, Rec. to 3.0mA, $R_L=100\Omega$		50		ns

SOT-23 CASE - MECHANICAL OUTLINE



MARKING CODE: DB5



LEAD CODE:

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

SYMBOL	DIMENSIONS			
	INCHES	MILLIMETERS	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075	-	1.90	-
G	0.037	-	0.95	-
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

R1 (6-August 2003)