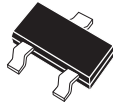


**CMPD2005S****DUAL, IN SERIES  
HIGH VOLTAGE  
SWITCHING DIODE****SOT-23 CASE**

# Central™

## 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.

**MARKING CODE: DB5****MAXIMUM RATINGS** ( $T_A=25^\circ\text{C}$ )

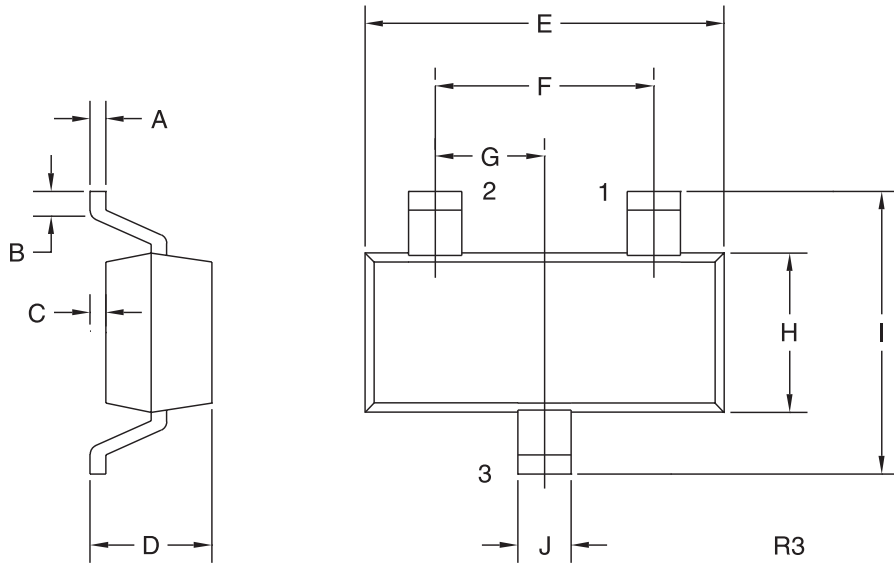
	SYMBOL		UNITS
Continuous Reverse Voltage	$V_R$	300	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	350	V
Peak Repetitive Reverse Current	$I_O$	200	mA
Continuous Forward Current	$I_F$	225	mA
Peak Repetitive Forward Current	$I_{FRM}$	625	mA
Forward Surge Current, $t_p=1\mu\text{s}$	$I_{FSM}$	4.0	A
Forward 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	$\theta_{JA}$	357	$^\circ\text{C/W}$

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

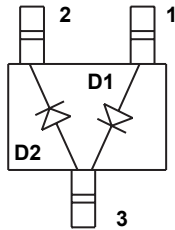
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=280\text{V}$			100	nA
$I_R$	$V_R=280\text{V}, T_A=150^\circ\text{C}$			100	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	350			V
$V_F$	$I_F=20\text{mA}$			0.87	V
$V_F$	$I_F=100\text{mA}$			1.0	V
$V_F$	$I_F=200\text{mA}$			1.25	V
$C_T$	$V_R=0, f=1.0\text{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

R0 (31-October 2002)

SOT-23 CASE - MECHANICAL OUTLINE



MARKING CODE: DB5



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	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)

LEAD CODE:

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