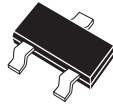


CMPD2005S

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.

MARKING CODE: DB5

MAXIMUM RATINGS (T_A=25 °C)

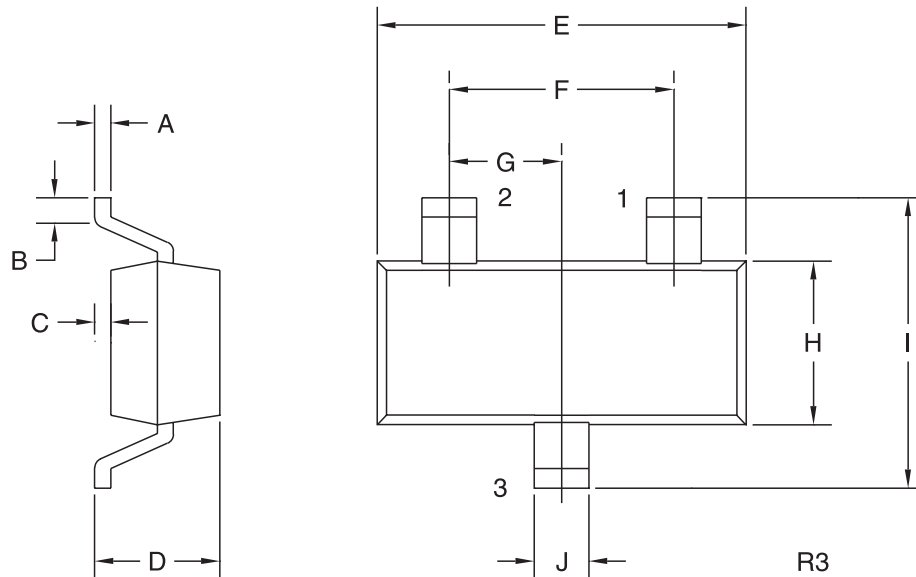
	SYMBOL		UNITS
Continuous Reverse Voltage	V _R	300	V
Peak Repetitive Reverse Voltage	V _{RRM}	350	V
Peak Repetitive Reverse Current	I _O	200	mA
Continuous Forward Current	I _F	225	mA
Peak Repetitive Forward Current	I _{FRM}	625	mA
Forward Surge Current, tp= 1 μs	I _{FSM}	4.0	A
Forward Surge Current, tp= 1s	I _{FSM}	1.0	A
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 PER DIODE: (T_A=25°C unless otherwise noted)

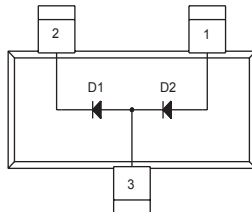
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _R	V _R =280V			100	nA
I _R	V _R =280V, T _A =150°C			100	μA
BV _R	I _R =100μA	350			V
V _F	I _F =20mA			0.87	V
V _F	I _F =100mA			1.0	V
V _F	I _F =200mA			1.25	V
C _T	V _R =0, f=1.0 MHz			5.0	pF
t _{rr}	I _R =I _F =30mA, Rec. to 3.0mA, R _L =100Ω			50	ns

R1 (6-August 2003)

SOT-23 CASE - MECHANICAL OUTLINE



MARKING CODE: DB5



LEAD CODE:

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

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)