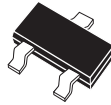


PRELIMINARY

**CMPD7005
CMPD7005A
CMPD7005C
CMPD7005S**

**SURFACE MOUNT
VERY HIGH VOLTAGE
SILICON SWITCHING DIODE**



SOT-23 CASE

CentralTM Semiconductor Corp.

DESCRIPTION:

The Central Semiconductor CMPD7005, CMPD7005A, CMPD7005C and CMPD7005S are silicon switching diodes with various diode configurations, manufactured by the epitaxial planar process and packaged in an epoxy molded SOT-23 surface mount case. These devices are designed for applications requiring high voltage switching diodes.

The following configurations are available:

CMPD7005	SINGLE	MARKING CODE: C7005
CMPD7005A	DUAL, COMMON ANODE	MARKING CODE: C705A
CMPD7005C	DUAL, COMMON CATHODE	MARKING CODE: C705C
CMPD7005S	DUAL, IN SERIES	MARKING CODE: C705S

MAXIMUM RATINGS PER DIODE: (T_A=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V _R	500	V
Peak Repetitive Reverse Voltage	V _{RRM}	500	V
Continuous Forward Current	I _F	100	mA
Peak Repetitive Forward Current	I _{FRM}	300	mA
Forward Surge Current, tp=1.0 μs	I _{FSM}	4.0	A
Forward Surge Current, tp=1.0 s	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

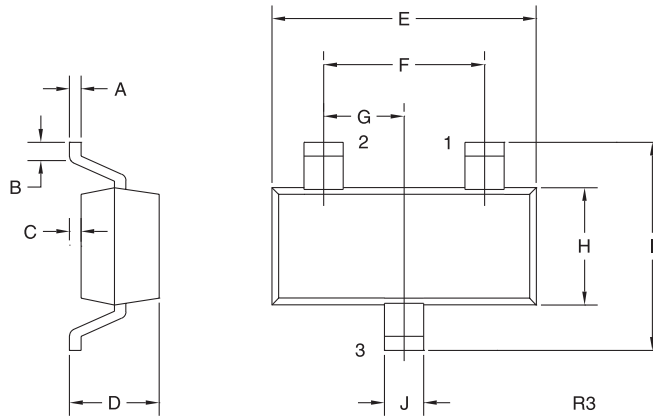
ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _R	V _R =400V		100	nA
I _R	V _R =400V, T _A =150°C		100	μA
BV _R	I _R =1.0μA	500		V
V _F	I _F =10mA		1.0	V
V _F	I _F =50mA		1.2	V
V _F	I _F =100mA		1.4	V
C _T	V _R =0V, f=1.0 MHz		5.0	pF
t _{rr}	I _R =I _F =10mA, R _L =100Ω, Rec. to 1.0mA		500	ns

R1 (8-February 2005)

**SURFACE MOUNT
VERY HIGH VOLTAGE
SILICON SWITCHING DIODE**

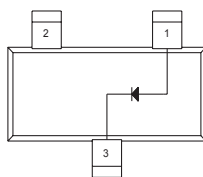
SOT-23 CASE - MECHANICAL OUTLINE



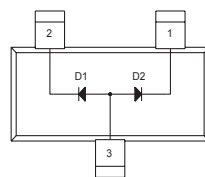
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

**MARKING CODE:
SEE PREVIOUS PAGE**

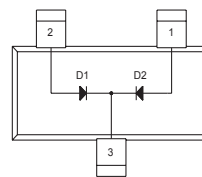
SOT-23 (REV: R3)



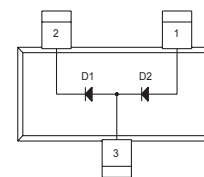
**LEAD CODE:
CMPD7005**
1) Anode
2) No Connection
3) Cathode



**LEAD CODE:
CMPD7005A**
1) Cathode D2
2) Cathode D1
3) Anode D1, Anode D2



**LEAD CODE:
CMPD7005C**
1) Anode D2
2) Anode D1
3) Cathode D1, Cathode D2



**LEAD CODE:
CMPD7005S**
1) Anode D2
2) Cathode D1
3) Anode D1, Cathode D2