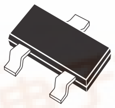
CMPD7006
CMPD7006A
CMPD7006C
CMPD7006S

SURFACE MOUNT VERY HIGH VOLTAGE SILICON SWITCHING DIODE



SOT-23 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The Central Semiconductor CMPD7006, CMPD7006A, CMPD7006C and CMPD7006S 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:

CMPD7006	SINGLE	**MARKING CODE: C7006**
CMPD7006A	DUAL, COMMON ANODE	**MARKING CODE: C706A**
CMPD7006C	DUAL, COMMON CATHODE	**MARKING CODE: C706C**
CMPD7006S	DUAL, IN SERIES	**MARKING CODE: C706S**

MAXIMUM RATINGS PER DIODE: (T_A=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	600	V
Peak Repetitive Reverse Voltage	V_{RRM}	600	V
Continous 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	TYP	MAX	UNITS
I_R	V_R=480V		7.0	100	nA
I_R	V_R=480V, T_A=150°C			100	μA
BV_R	I_R=1.0μA	600	675		V
V_F	I_F=10mA		0.88	1.0	V
V_F	I_F=50mA		1.04	1.2	V
V_F	I_F=100mA		1.16	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

R0 (8-December 2003)

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CMPD7006
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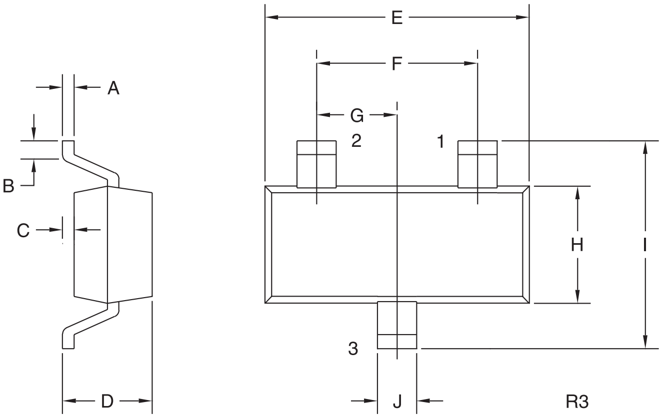
SURFACE MOUNT VERY HIGH VOLTAGE SILICON SWITCHING DIODE

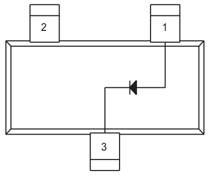
SOT-23 CASE - MECHANICAL OUTLINE



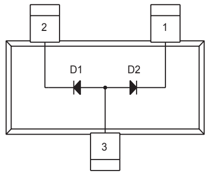
	DIMENSIONS			
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

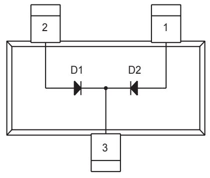
MARKING CODE:
SEE PREVIOUS PAGE



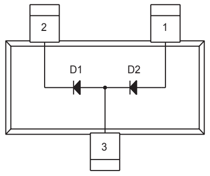
LEAD CODE:
CMPD7006
1) Anode
2) No Connection
3) Cathode



LEAD CODE:
CMPD7006A
1) Cathode D2
2) Cathode D1
3) Anode D1, Anode D2



LEAD CODE:
CMPD7006C
1) Anode D2
2) Anode D1
3) Cathode D1, Cathode D2



LEAD CODE:
CMPD7006S
1) Anode D2
2) Cathode D1
3) Anode D1, Cathode D2

R0 (8-December 2003)