



CMAD6263

**SURFACE MOUNT
SILICON HIGH VOLTAGE
SCHOTTKY DIODE**

FEMTOmini™



SOD-923 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMAD6263 is a high voltage Schottky Diode designed for applications where very small size and operational efficiency are prime requirements.

MARKING CODE: J

APPLICATIONS:

- DC / DC Converters
- Voltage Clamping
- Protection Circuits
- Battery powered applications including Cell Phones, Digital Cameras, Pagers, PDAs, Laptop, Computers, etc.

FEATURES:

- Current ($I_F=15\text{mA}$)
- Low Forward Voltage Drop ($V_F=0.395\text{V TYP @ } 1.0\text{mA}$)
- Low Reverse Current ($98\text{nA TYP @ } 50\text{V}$)
- Extremely Fast Switching (5ns Max)
- Miniture, 0.8 x 0.6 x 0.4mm, ultra low height profile **FEMTOmini™** Surface Mount Package.

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

Peak Repetitive Reverse Voltage
Continuous Forward Current
Forward Surge Current, $t_p=1.0\text{ s}$
Power Dissipation
Operating and Storage
Junction Temperature
Thermal Resistance

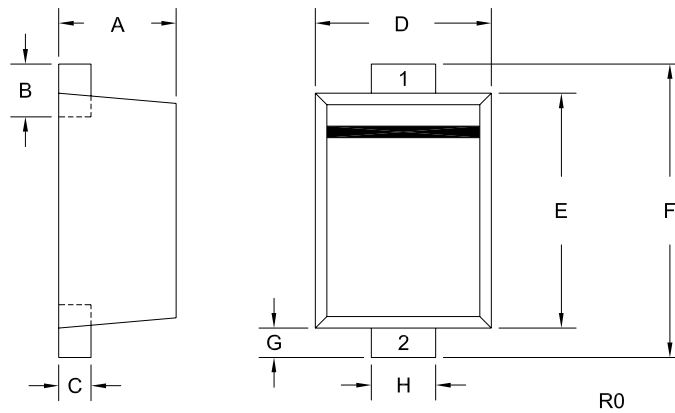
<u>SYMBOL</u>		<u>UNITS</u>
V_{RRM}	70	V
I_F	15	mA
I_{FSM}	50	mA
P_D	100	mW
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Θ_{JA}	1250	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
I_R	$V_R=50\text{V}$		98	200	nA
BV_R	$I_R=10\mu\text{A}$	70			V
V_F	$I_F=1.0\text{mA}$		395	410	mV
C_T	$V_R=0\text{V}, f=1.0\text{MHz}$			2.0	pF
t_{rr}	$I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$			5.0	ns

R0 (19-April 2007)

SOD-923 CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.015	0.016	0.39	0.41
B	0.004	0.010	0.10	0.26
C	0.003	0.006	0.08	0.14
D	0.022	0.026	0.55	0.65
E	0.030	0.033	0.75	0.85
F	0.035	0.043	0.90	1.10
G	0.002	0.006	0.05	0.15
H	0.007	0.011	0.17	0.27

SOD-923 (REV: R0)

Lead Code:
1) Cathode
2) Anode

R0 (19-April 2007)