CMASH-4

SURFACE MOUNT
SILICON SCHOTTKY DIODE

FEMTOmini™

SOD-923 CASE

MARKING CODE: A

Central™
Semiconductor Corp.

DESCRIPTION:

The Central Semiconductor Corp. CMASH-4 is a high quality Schottky Diode designed for applications where very small size and operational efficiency are prime requirements.

FEATURES:

- Current (I_O=200mA)
- Low Forward Voltage Drop (V_F=0.35V TYP @ 1.0mA)
- Low Reverse Current (25nA TYP @ 30V)
- Extremely Fast Switching (5ns Max)
- Miniture, 0.8 x 0.6 x 0.4mm, ultra low height profile **FEMTO**mini™ Surface Mount Package.

APPLICATIONS:

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

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Average Forward Current	I_O	200	mA
Forward Surge Current, tp=8.3ms	I_{FSM}	600	mA
Power Dissipation	P_D	100	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +125	°C
Thermal Resistance	Θ_{JA}	1000	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	V_R=30V		25	200	nA
BV_R	I_R=10μA	40			V
V_F	I_F=1.0mA		0.35	0.38	V
V_F	I_F=15mA		0.55	0.65	V
V_F	I_F=40mA		0.77	1.00	V
C_T	V_R = 0V, f=1.0 MHz			5.0	pF
t_{rr}	I_F=I_R=10mA, I_{rr}=1.0mA, R_L=100Ω			5.0	ns

R0 (13-February 2007)

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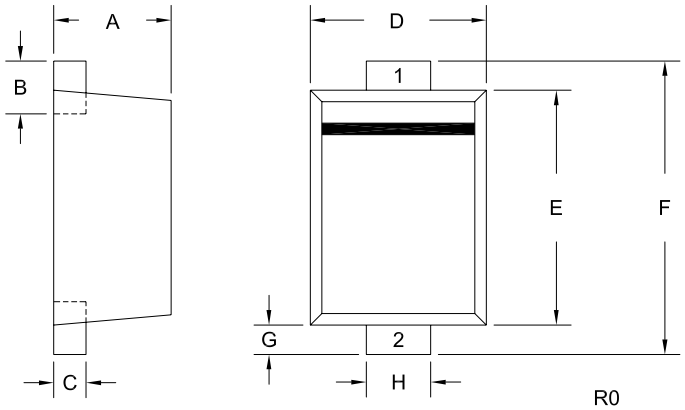
SOD-923 CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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 (13-February 2007)