CMUD4448

SURFACE MOUNT
ULTRAmini™
HIGH SPEED
SILICON SWITCHING DIODE

ULTRAmini™

SOT-523 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMUD4448 type is an ultra-high speed silicon switching diode manufactured by the epitaxial planar process, epoxy molded in an ULTRAmini™ surface mount package, designed for high speed switching applications.

MARKING CODE: DAA

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	250	mA
Forward Surge Current, tp=1 µsec.	I_{FSM}	4000	mA
Forward Surge Current, tp=1 sec.	I_{FSM}	1000	mA
Power Dissipation	P_D	250	mW
Operating and Storage Junction Temperature	T_J,T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	500	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
BV_R	I_R=5.0µA	75		V
BV_R	I_R=100µA	100		V
I_R	V_R=20V		25	nA
V_F	I_F=5.0mA	0.62	0.72	V
V_F	I_F=100mA		1.0	V
C_T	V_R=0, f=1 MHz		4.0	pF
t_{rr}	I_R=I_F=10mA, R_L=100Ω, Rec. to 1.0mA		4.0	ns

R1 (12-February 2003)

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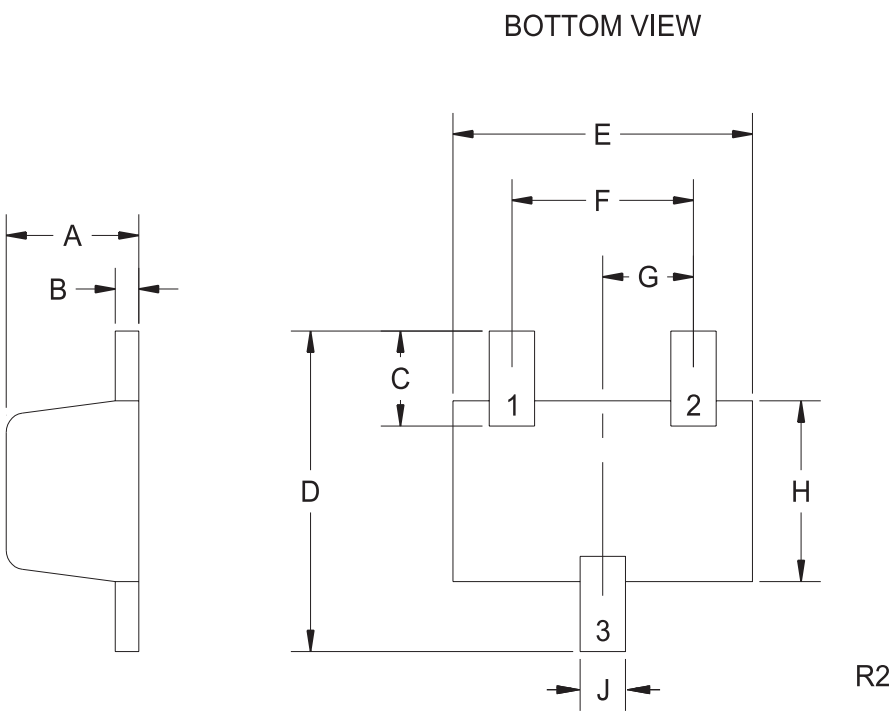
SOT-523 CASE - MECHANICAL OUTLINE



LEAD CODE:

1) ANODE
2) NO CONNECTION
3) CATHODE

MARKING CODE: DAA

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.023	0.031	0.58	0.78
B	0.002	0.008	0.04	0.20
C	0.013	0.021	0.34	0.54
D	0.059	0.067	1.50	1.70
E	0.059	0.067	1.50	1.70
F	0.035	0.043	0.90	1.10
G	0.020		0.50	
H	0.031	0.039	0.78	0.98
J	0.010	0.014	0.25	0.35

SOT-523 (REV: R2)

R1 (12-February 2003)