

CentralTM Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMUSH2-4L is a High Current Low V_F Silicon Schottky Diode in an SOT-523 Surface Mount Package.

SPECIFICATIONS:

- $I_F = 200\text{mA}$ max.
- $BV_R = 40\text{V}$ min.
- $V_F = 0.5\text{V}$ max @ 200mA
- $I_{FSM} = 1.0\text{A}$

MARKING CODE: U24

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

Peak Repetitive Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current
Forward Surge Current, $t_p = 10\text{ms}$
Power Dissipation
Operating and Storage
Junction Temperature
Thermal Resistance

SYMBOL

SYMBOL		UNITS
V_{RRM}	40	V
I_F	200	mA
I_{FRM}	350	mA
I_{FSM}	1.0	A
P_D	250	mW
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
θ_{JA}	500	$^\circ\text{C/W}$

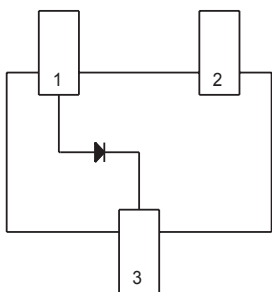
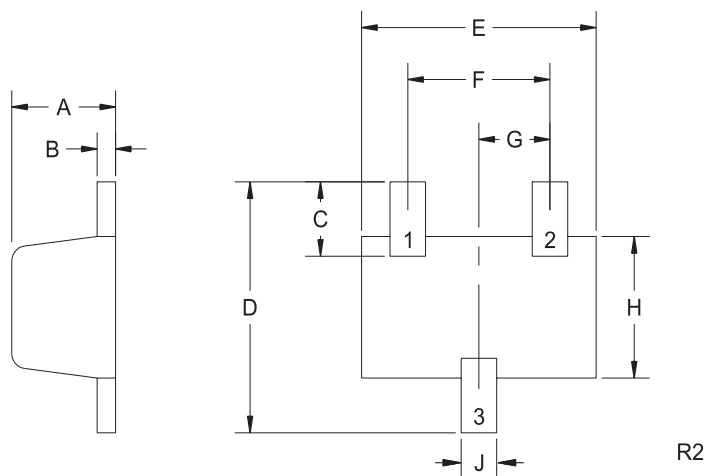
ELECTRICAL CHARACTERISTICS: ($T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R = 20\text{V}$		11	50	μA
BV_R	$I_R = 100\mu\text{A}$	40	53		V
V_F	$I_F = 10\text{mA}$		0.24	0.325	V
V_F	$I_F = 100\text{mA}$		0.35	0.4	V
V_F	$I_F = 200\text{mA}$		0.42	0.5	V
C_T	$V_R = 4.0\text{V}, f = 1.0\text{MHz}$		8.5	10	pF
t_{rr}	$I_F = I_R = 10\text{mA}, I_{rr} = 1.0\text{mA}, R_L = 100\Omega$		4.0	5.0	ns

R1 (17-September 2004)

SOT-523 CASE - MECHANICAL OUTLINE

BOTTOM VIEW



LEAD CODE:

- 1) Anode
- 2) NC
- 3) Cathode

MARKING CODE: U24

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	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)