

CMUSH2-4L

SURFACE MOUNT  
ULTRAmi™  
HIGH CURRENT, LOW  $V_F$   
SILICON SCHOTTKY DIODE

ULTRAmi™



SOT-523 CASE

**Central**™  
**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:**

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

**MARKING CODE: U24**

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

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Continuous Forward Current	$I_F$	200	mA
Peak Repetitive Forward Current	$I_{FRM}$	350	mA
Forward Surge Current, $t_p=10\text{ms}$	$I_{FSM}$	1.0	A
Power Dissipation	$P_D$	250	mW
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	500	$^\circ\text{C/W}$

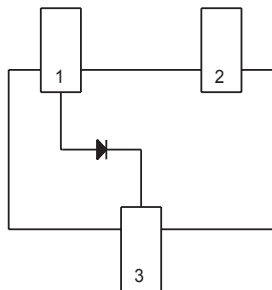
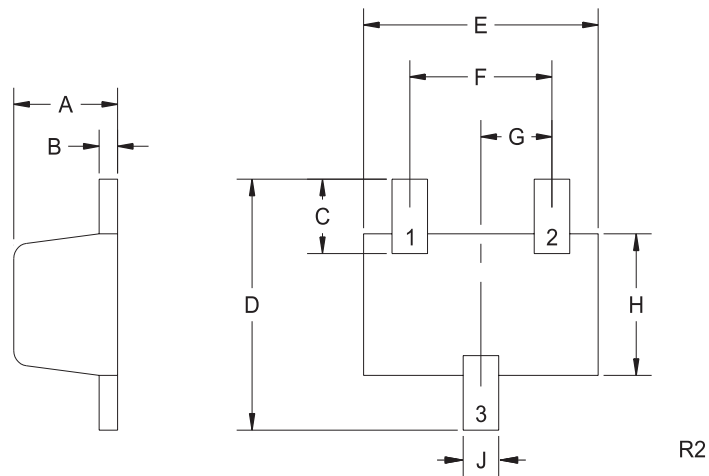
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=20\text{V}$		11	50	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	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**

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)