

CMUSH2-4L

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



www.centrasemi.com

**DESCRIPTION:**

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

**MARKING CODE: U24**

**SPECIFICATIONS:**

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



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

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

**SYMBOL**

$V_{RRM}$  40  
 $I_F$  200  
 $I_{FRM}$  350  
 $I_{FSM}$  1.0  
 $P_D$  250  
 $T_J, T_{stg}$  -65 to +150  
 $\Theta_{JA}$  500

**UNITS**

V  
mA  
mA  
A  
mW  
 $^\circ\text{C}$   
 $^\circ\text{C/W}$

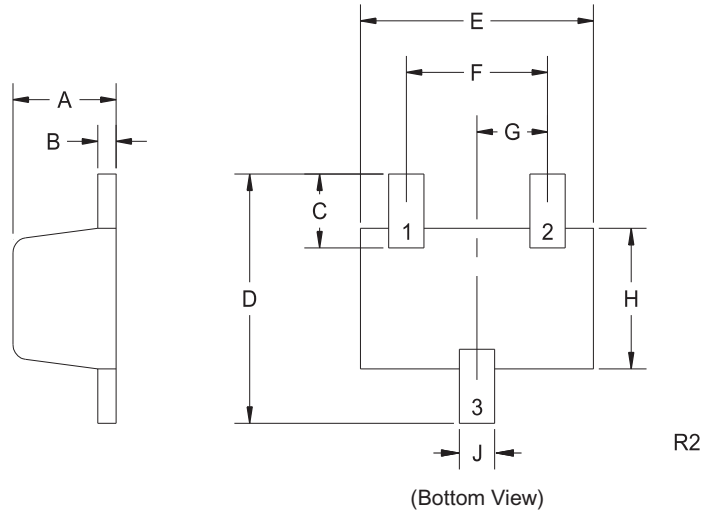
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

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

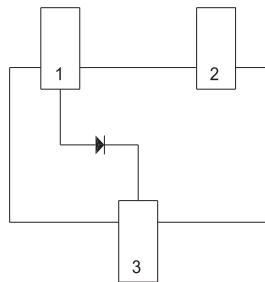
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SOT-523 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



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)

LEAD CODE:

- 1) Anode
- 2) No Connection
- 3) Cathode

MARKING CODE: U24

R2 (9-February 2010)