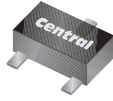


CMUSH2-4  
 CMUSH2-4A  
 CMUSH2-4C  
 CMUSH2-4S

**SURFACE MOUNT  
 SILICON SCHOTTKY DIODES**

**ULTRAmi<sup>TM</sup>**



**SOT-523 CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMUSH2-4 series types are silicon Schottky diodes, epoxy molded in a ULTRAmi<sup>TM</sup> SOT-523 surface mount package, designed for fast switching applications requiring a low forward voltage drop.

**CMUSH2-4:** SINGLE  
**CMUSH2-4A:** DUAL, COMMON ANODE  
**CMUSH2-4C:** DUAL, COMMON CATHODE  
**CMUSH2-4S:** DUAL, IN SERIES

**MARKING CODE: C42**  
**MARKING CODE: C4A**  
**MARKING CODE: C4C**  
**MARKING CODE: C4S**

**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C)

Peak Repetitive Reverse Voltage  
 Continuous Forward Current  
 Peak Repetitive Forward Current  
 Peak Forward Surge Current, tp=10ms  
 Power Dissipation  
 Operating and Storage Junction Temperature  
 Thermal Resistance

**SYMBOL**

V<sub>R</sub>RRM 40  
 I<sub>F</sub> 200  
 I<sub>FRM</sub> 300  
 I<sub>FSM</sub> 600  
 P<sub>D</sub> 250  
 T<sub>J</sub>, T<sub>stg</sub> -65 to +150  
 Θ<sub>JA</sub> 500

**UNITS**

V  
 mA  
 mA  
 mA  
 mW  
 °C  
 °C/W

**ELECTRICAL CHARACTERISTICS PER DIODE:** (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =25V		170	500	nA
I <sub>R</sub>	V <sub>R</sub> =25V, T <sub>A</sub> =100°C		25	100	μA
BV <sub>R</sub>	I <sub>R</sub> =100μA	40	55		V
V <sub>F</sub>	I <sub>F</sub> =100μA		240	260	mV
V <sub>F</sub>	I <sub>F</sub> =500μA		285	310	mV
V <sub>F</sub>	I <sub>F</sub> =1.0mA		305	330	mV
V <sub>F</sub>	I <sub>F</sub> =50mA		535	600	mV
V <sub>F</sub>	I <sub>F</sub> =100mA		670	750	mV
C <sub>J</sub>	V <sub>R</sub> =1.0V, f=1.0MHz			10	pF
t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =1.0mA, R <sub>L</sub> =100Ω			5.0	ns

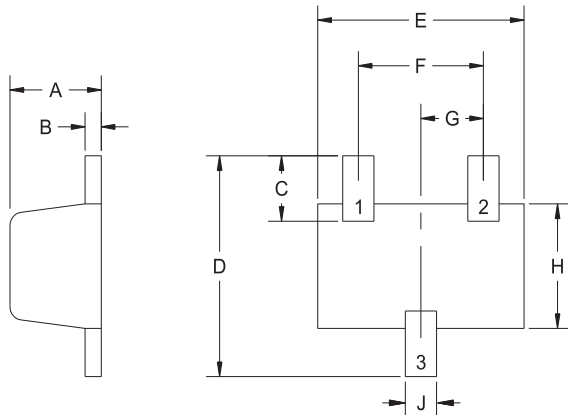
R2 (1-May 2012)

CMUSH2-4  
 CMUSH2-4A  
 CMUSH2-4C  
 CMUSH2-4S

**SURFACE MOUNT  
 SILICON SCHOTTKY DIODES**



**SOT-523 CASE - MECHANICAL OUTLINE**



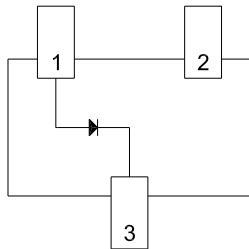
(Bottom View)

R2

SYMBOL	DIMENSIONS			
	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)

**PIN CONFIGURATIONS**

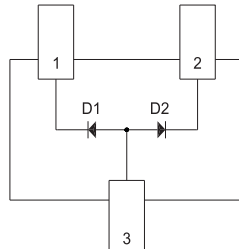


**CMUSH2-4**

**LEAD CODE:**

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

**MARKING CODE: C42**

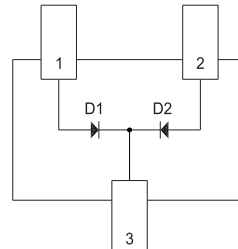


**CMUSH2-4A**

**LEAD CODE:**

- 1) Cathode D1
- 2) Cathode D2
- 3) Anode D1, D2

**MARKING CODE: C4A**

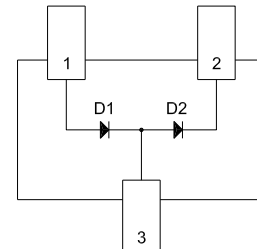


**CMUSH2-4C**

**LEAD CODE:**

- 1) Anode D1
- 2) Anode D2
- 3) Cathode D1, D2

**MARKING CODE: C4C**



**CMUSH2-4S**

**LEAD CODE:**

- 1) Anode D1
- 2) Cathode D2
- 3) Anode D2, Cathode D1

**MARKING CODE: C4S**

R2 (1-May 2012)