

CMUSH2-4
 CMUSH2-4A
 CMUSH2-4C
 CMUSH2-4S
 SURFACE MOUNT
 ULTRAmimi™
 SILICON SCHOTTKY DIODES

ULTRAmimi™



SOT-523 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMUSH2-4 Series types are Silicon Schottky Diodes, epoxy molded in a ULTRAmimi™ 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_A=25°C)

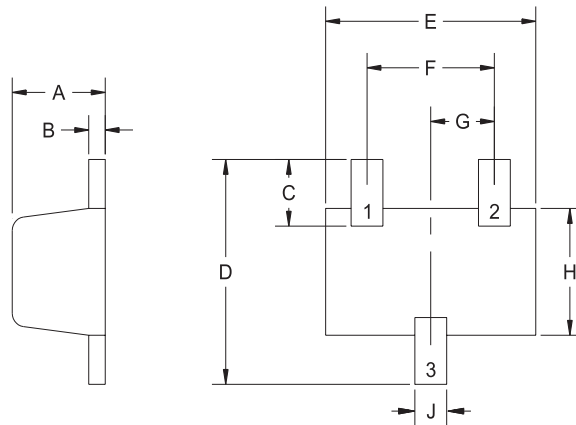
	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	40	V
Continuous Forward Current	I _F	200	mA
Peak Repetitive Forward Current	I _{FRM}	300	mA
Forward Surge Current, t _p =10ms	I _{FSM}	600	mA
Power Dissipation	P _D	250	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	θ _{JA}	500	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _R	V _R =35V		170	500	nA
I _R	V _R =35V, T _A =100°C		25	100	μA
BV _R	I _R =100μA	40	55		V
V _F	I _F =100μA		240	260	mV
V _F	I _F =500μA		285	310	mV
V _F	I _F =1.0mA		305	330	mV
V _F	I _F =50mA		535	600	mV
V _F	I _F =100mA		670	750	mV
C _T	V _R =1.0V, f=1 MHz			10	pF
t _{rr}	I _F =I _R =10mA, I _{rr} =1.0mA, R _L =100Ω			5.0	ns

SOT-523 CASE - MECHANICAL OUTLINE

BOTTOM VIEW

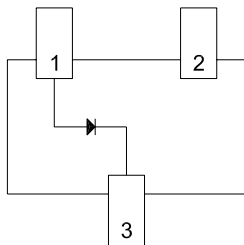


SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.023	0.031	0.58	0.78
B	0.002	0.008	0.04	0.20
C	0.013	0.021	0.34	0.54
D	0.059	0.067	1.50	1.70
E	0.059	0.067	1.50	1.70
F	0.035	0.043	0.90	1.10
G	0.020		0.50	
H	0.031	0.039	0.78	0.98
J	0.010	0.014	0.25	0.35

R2

SOT-523 (REV: R2)

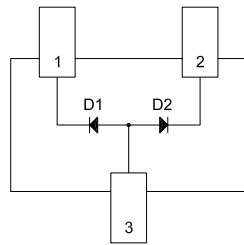
PIN CONFIGURATION



CMUSH2-4

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

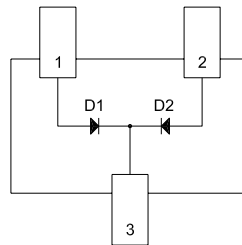
MARKING CODE:
C42



CMUSH2-4A

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

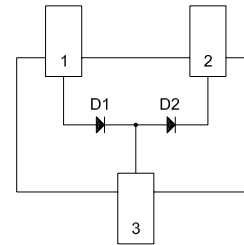
MARKING CODE:
C4A



CMUSH2-4C

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

MARKING CODE:
C4C



CMUSH2-4S

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

MARKING CODE:
C4S