

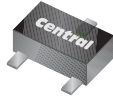
CMUSH05-4

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



www.centrasemi.com

ULTRAmⁱⁿⁱ



**LOW
V_F**

SOT-523 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMUSH05-4 is a HIGH CURRENT, LOW V_F 40 volt Schottky Diode packaged in a space saving SOT-523 surface mount case. This ULTRAmⁱⁿⁱ™ device has been designed for small signal general purpose applications when small size and operational efficiency are prime requirements.

MARKING CODE: U54

SPECIFICATIONS:

- Low V_F = 0.35V max @ 100mA
- V_{RRM} = 40V
- I_F = 500mA

MAXIMUM RATINGS: (T_A=25°C)

Peak Repetitive Reverse Voltage
 Continuous Forward Current
 Peak Repetitive Forward Current, tp≤1.0ms
 Peak Forward Surge Current, tp=8.0ms
 Power Dissipation
 Operating and Storage Junction Temperature
 Thermal Resistance

SYMBOL

V_{RRM} 40
 I_F 500
 I_{FRM} 3.5
 I_{FSM} 10
 P_D 250
 T_J, T_{stg} -65 to +150
 Θ_{JA} 500

UNITS

V
 mA
 A
 A
 mW
 °C
 °C/W

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

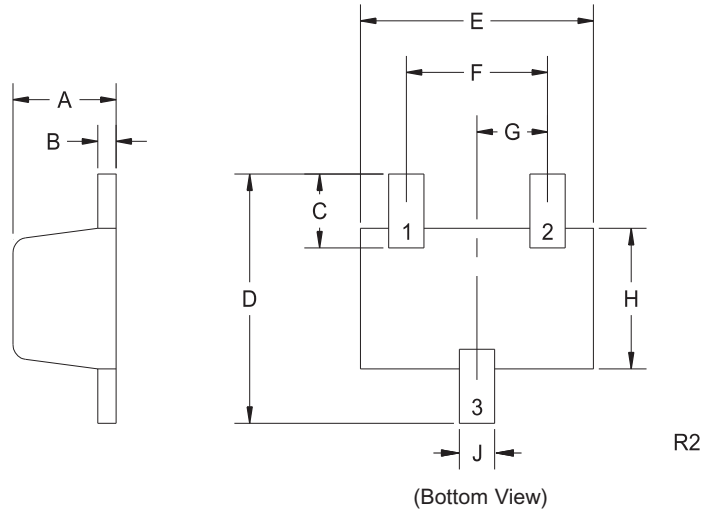
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _R	V _R =10V		20	μA
I _R	V _R =30V		100	μA
BV _R	I _R =500μA	40		V
V _F	I _F =100μA		0.13	V
V _F	I _F =1.0mA		0.21	V
V _F	I _F =10mA		0.27	V
V _F	I _F =100mA		0.35	V
V _F	I _F =500mA		0.47	V
C _T	V _R =1.0V, f=1.0MHz		50	pF

CMUSH05-4

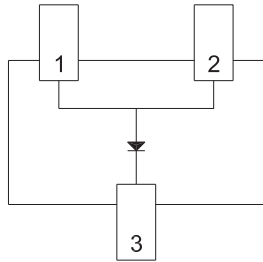
**SURFACE MOUNT
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SOT-523 CASE - MECHANICAL OUTLINE



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) Anode
- 3) Cathode

MARKING CODE: U54

R1 (9-February 2010)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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