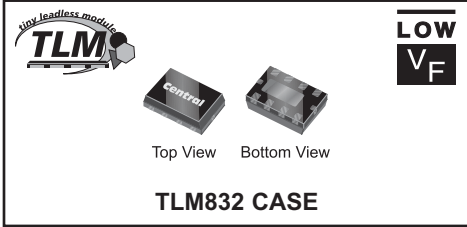


**CTLSH2-40M832**  
**SURFACE MOUNT**  
**LOW  $V_F$**   
**SILICON SCHOTTKY RECTIFIER**



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



• Device is **Halogen Free** by design

**APPLICATIONS:**

- DC/DC Converters
- Reverse Battery Protection
- Battery Powered Portable Equipment

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CTLSH2-40M832 Low  $V_F$  Schottky Rectifier is a high quality Schottky Rectifier designed for applications where small size and operational efficiency are the prime requirements. With a maximum power dissipation of 1.9W, and a very small package footprint (approximately equal to the SOT-23), this leadless package design is capable of dissipating up to 5 times the power of similar devices in comparable sized surface mount packages.

**MARKING CODE: CFB**

**FEATURES:**

- High Current ( $I_F=2.0A$ )
- Low Forward Voltage Drop ( $V_F=0.5V$  MAX @ 2.0A)
- High Thermal Efficiency
- Small TLM 3x2mm case

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

Peak Repetitive Reverse Voltage  
 Continuous Forward Current  
 Peak Forward Surge Current,  $t_p=8.3ms$   
 Power Dissipation (Note 1)  
 Operating and Storage Junction Temperature  
 Thermal Resistance (Note 1)

SYMBOL		UNITS
$V_{RRM}$	40	V
$I_F$	2.0	A
$I_{FSM}$	15	A
$P_D$	1.9	W
$T_J, T_{stg}$	-65 to +125	$^\circ C$
$\theta_{JA}$	52.6	$^\circ C/W$

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

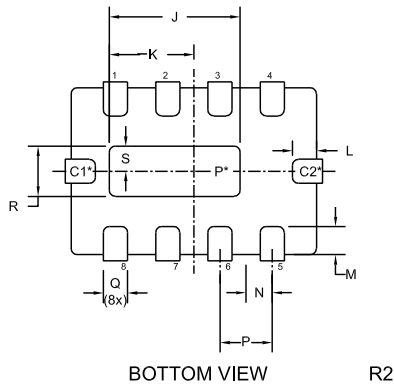
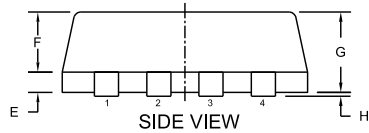
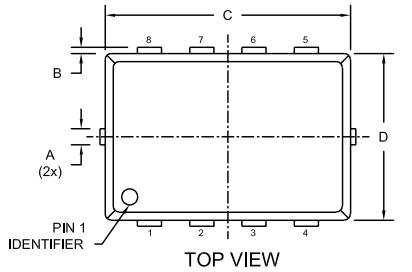
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=40V$			0.2	mA
$I_R$	$V_R=40V, T_A=100^\circ C$			25	mA
$BV_R$	$I_R=100\mu A$	40			V
$V_F$	$I_F=1.0A$			0.45	V
$V_F$	$I_F=2.0A$			0.50	V
$C_D$	$V_R=10V, f=1.0MHz$		80		pF

Notes: (1) FR-4 Epoxy PC Board with copper mounting pad area of 54mm<sup>2</sup>.

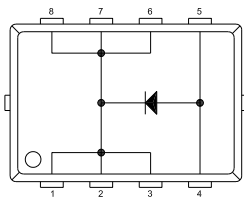
**CTLSH2-40M832**  
**SURFACE MOUNT**  
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**TLM832 CASE - MECHANICAL OUTLINE**



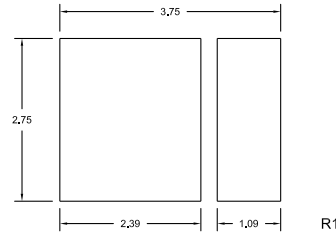
- \* Note:  
 - Exposed pad P internally connected to pins 1,2,3,6,7,8  
 - Exposed metallized connection C1 internally connected to pins 1,2,3  
 - Exposed metallized connection C2 internally connected to pin 5



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.007	0.012	0.170	0.300
B	-	0.005	-	0.125
C	0.114	0.122	2.900	3.100
D	0.075	0.083	1.900	2.100
E	0.006	0.010	0.150	0.250
F	0.026	0.030	0.650	0.750
G	0.031	0.039	0.800	1.000
H	0.000	0.002	0.000	0.050
J	0.059	0.067	1.500	1.700
K	0.036	0.044	0.910	1.110
L	0.008	0.018	0.200	0.450
M	0.008	0.018	0.200	0.450
N	0.013		0.325	
P	0.026		0.650	
Q	0.009	0.013	0.240	0.340
R	0.017	0.025	0.430	0.630
S	0.006	0.014	0.160	0.360

TLM832 (REV: R2)

**SUGGESTED MOUNTING PADS**  
**For Maximum Power Dissipation**  
 (Dimensions in mm)



For standard mounting refer  
 to TLM832D Package Details

**LEAD CODE:**

- |            |            |
|------------|------------|
| 1) Cathode | 5) Anode   |
| 2) Cathode | 6) Cathode |
| 3) Cathode | 7) Cathode |
| 4) Anode   | 8) Cathode |

**MARKING CODE: CFB**

R4 (19-February 2010)