

CTLSH2-40M832
SURFACE MOUNT
LOW V_F
SILICON SCHOTTKY RECTIFIER



MARKING CODE: CFB

CentralTM

Semiconductor Corp.

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.

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

APPLICATIONS:

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

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

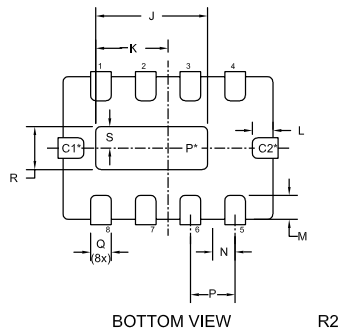
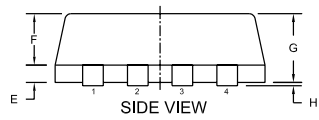
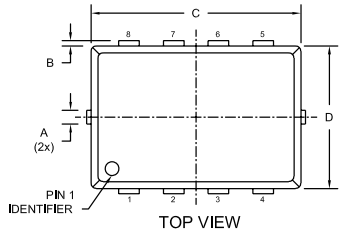
	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Continuous Forward Current	I_F	2.0	A
Peak Forward Surge Current ($t_p=8ms$)	I_{FSM}	TBD	A
Power Dissipation	P_D	1.9	W*
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +125	$^\circ C$
Thermal Resistance	θ_{JA}	52.6	$^\circ C/W^*$

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
BV_R	$I_R= 100\mu A$	40			V
V_F	$I_F= 1A$			0.45	V
V_F	$I_F= 2A$			0.50	V
C_D	$V_R= 10V, f=1.0$ MHz		80		pF

*FR-4 Epoxy PCB with copper mounting pad area of 54mm²

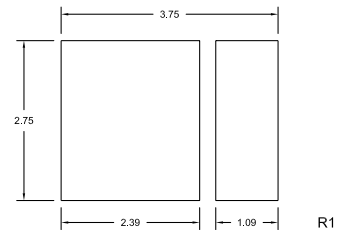
TLM832 CASE - MECHANICAL OUTLINE



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)

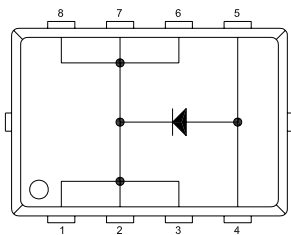
Suggested mounting pad layout for maximum power dissipation (Dimensions in mm)



* 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, 6, 7, 8
- Exposed metallized connection C2 internally connected to pin 5

For standard mounting refer to TLM832 Package Details



LEAD CODE:

- 1) CATHODE
- 2) CATHODE
- 3) CATHODE
- 4) ANODE
- 5) ANODE
- 6) CATHODE
- 7) CATHODE
- 8) CATHODE

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R1 (27-April 2006)