CTLSH1-40M832D

SURFACE MOUNT
DUAL, HIGH CURRENT, LOW V_F
SILICON SCHOTTKY DIODES


Top View


Bottom View

TLM832D CASE

MARKING CODE: CFA

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLSH1-40M832D Dual, Isolated, Low V_F Schottky diodes are designed for applications where small size and operational effciency are the prime requirements. With a maximum power dissipation of 1.65W, and a very small package footprint (approximately equal to the SOT-23), this leadless package design is capable of dissipating up to 4 times the power of similar devices in comparable sized surface mount packages.

FEATURES:

- Dual Chip Device
- High Current (I_F=1.0A)
- Low Forward Voltage Drop (V_F=0.55V MAX @ 1.0A)
- High Thermal Efficiency
- Small TLM 3x2mm case

APPLICATIONS:

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

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Continuous Forward Current	I_F	1.0	A
Peak Repetitive Forward Current, tp ≤ 1ms	I_{FRM}	3.5	A
Forward Surge Current, tp=8ms	I_{FSM}	10	A
Power Dissipation	P_D	1.65	W*
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	75.8	°C/W*

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	V_R= 5V			10	μA
I_R	V_R= 8V			20	μA
I_R	V_R= 15V			50	μA
BV_R	I_R= 100μA	40			V
V_F	I_F= 10mA			0.29	V
V_F	I_F= 100mA			0.36	V
V_F	I_F= 500mA			0.45	V
V_F	I_F= 1.0A			0.55	V
C_J	V_R= 4.0V, f=1.0MHz		50		pF

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

R2 (27-April 2006)

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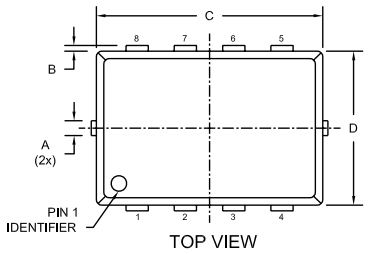
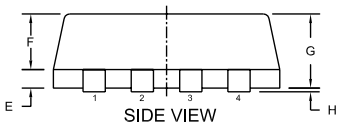
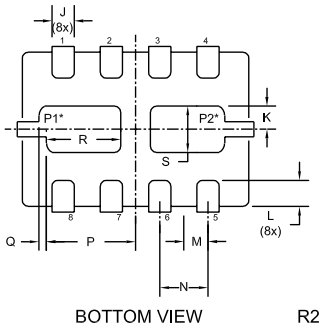
TLM832D CASE - MECHANICAL OUTLINE



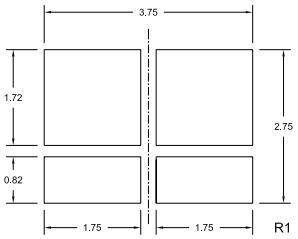




DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.007	0.012	0.170	0.300
B	-	0.005	-	0.125
C	0.114	0.122	2.900	3.100
D	0.075	0.083	1.900	2.100
E	0.006	0.010	0.150	0.250
F	0.026	0.030	0.650	0.750
G	0.031	0.039	0.800	1.000
H	0.000	0.002	0.000	0.050
J	0.009	0.013	0.240	0.340
K	0.006	0.014	0.160	0.360
L	0.008	0.018	0.200	0.450
M	0.013		0.325	
N	0.026		0.650	
P	0.040	0.048	1.010	1.210
Q	0.004		0.100	
R	0.032	0.040	0.820	1.020
S	0.017	0.025	0.430	0.630

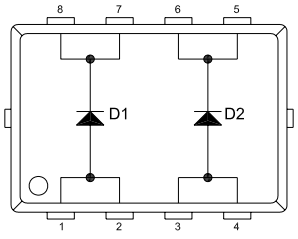
TLM832D (REV: R2)

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



For standard mounting refer
to TLM832D Package Details

* Note:
- Exposed pad P1 common to pins 7 and 8
- Exposed pad P2 common to pins 5 and 6



LEAD CODE:

1) ANODE D1
2) ANODE D1
3) ANODE D2
4) ANODE D2
5) CATHODE D2
6) CATHODE D2
7) CATHODE D1
8) CATHODE D1

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