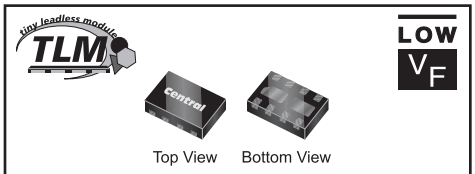
CTLSH1-50M832DS

SURFACE MOUNT
DUAL, HIGH CURRENT
LOW V_F
SILICON SCHOTTKY RECTIFIERS



TLM832DS CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLSH1-50M832DS Dual, Isolated, Low V_F Silicon Schottky rectifiers are designed for applications where small size and operational efficiency 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.

MARKING CODE: CFX

APPLICATIONS:

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

FEATURES:

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

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	50	V
Continuous Forward Current	I_F	1.0	A
Peak Repetitive Forward Current, tp≤1.0ms	I_{FRM}	3.5	A
Peak Forward Surge Current, tp=8.0ms	I_{FSM}	10	A
Power Dissipation (Note 1)	P_D	1.65	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance (Note 1)	Θ_{JA}	75.8	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	V_R=5.0V			10	μA
I_R	V_R=8.0V			20	μA
I_R	V_R=15V			50	μA
I_R	V_R=50V			0.5	mA
I_R	V_R=50V, T_A=100°C			50	mA
BV_R	I_R=100μA	50			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

Notes: (1) FR-4 Epoxy PC Board with copper mounting pad area of 54mm^2

R1 (23-September 2011)

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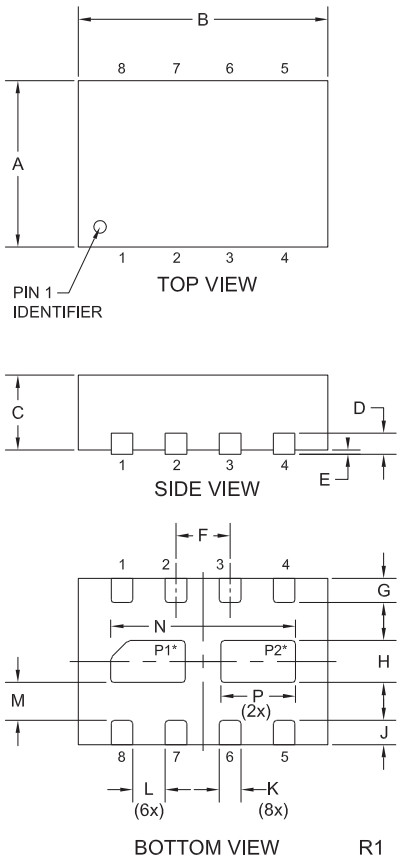
TLM832DS CASE - MECHANICAL OUTLINE

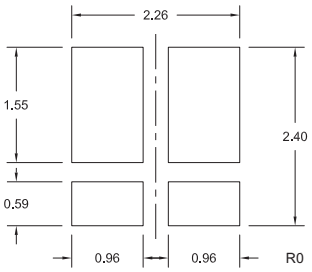


* Exposed pad P1 common to pins 7 and 8
Exposed pad P2 common to pins 5 and 6

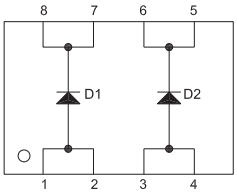
DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.077	0.081	1.95	2.05
B	0.116	0.120	2.95	3.05
C	0.031	0.039	0.80	1.00
D	0.006	0.010	0.16	0.25
E	0.000	0.002	0.00	0.05
F	0.026		0.65	
G	0.008	0.016	0.19	0.40
H	0.014	0.024	0.35	0.61
J	0.008	0.016	0.19	0.40
K	0.008	0.012	0.21	0.31
L	0.013	0.017	0.34	0.44
M	0.006	--	0.15	--
N	0.087		2.22	
P	0.029	0.039	0.74	1.00

TLM832DS (REV:R1)

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



PIN CONFIGURATION



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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