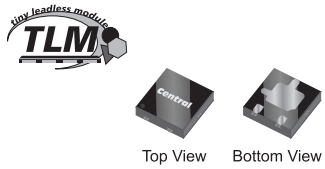
CTLSH1-40M322S

SURFACE MOUNT
HIGH CURRENT, LOW V_F
SILICON SCHOTTKY RECTIFIER



TLM322S CASE

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLSH1-40M322S is a low V_F Schottky rectifier designed for applications where small size and operational efficiency are prime requirements. With a maximum power dissipation of 1.45W, and a very small package footprint (approximately equal to the SOT-363), this Tiny Leadless Module (TLM) is capable of dissipating up to 4 times the power of similar devices in a comparable surface mount package.

MARKING CODE: CBAS

APPLICATIONS:

- DC-DC converters
- Reverse battery protection
- Battery powered devices including cell phones, PDAs, digital cameras, MP3 players, etc.

FEATURES:

- High forward current (I_F=1.0A)
- Low forward voltage drop (V_F=0.55V MAX @ 1.0A)
- High thermal efficiency

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≤1.0ms	I_{FRM}	3.5	A
Peak Forward Surge Current, tp=8.0ms	I_{FSM}	10	A
Power Dissipation (Note 1)	P_D	1.45	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance (Note 1)	Θ_{JA}	86.2	°C/W

ELECTRICAL CHARACTERISTICS: (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=40V			0.2	mA
I_R	V_R=40V, T_A=100°C			20	mA
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
t_{rr}	I_F=I_R=500mA, I_{rr}=50mA, R_L=50Ω		15		ns

Notes: (1) FR-4 Epoxy PC Board with copper mounting pad area of 21mm^2.

R0 (27-September 2012)

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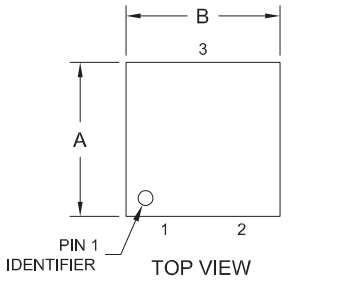
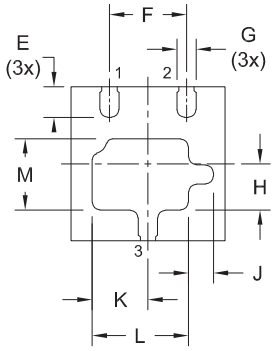
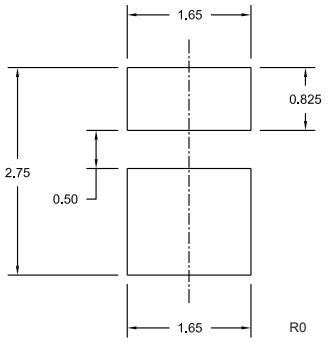
TLM322S CASE - MECHANICAL OUTLINE





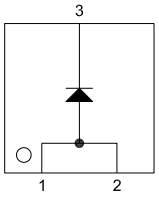
DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.076	0.081	1.95	2.05
B	0.076	0.081	1.95	2.05
C	0.019	0.024	0.50	0.60
D	0.000	0.002	0.00	0.05
E	0.011	0.020	0.30	0.50
F	0.039		1.00	
G	0.007	0.012	0.18	0.30
H	0.017	0.028	0.45	0.70
J	0.008	0.017	0.22	0.43
K	0.024	0.033	0.62	0.83
L	0.043	0.054	1.10	1.35
M	0.030	0.041	0.77	1.03
			TLM322S (REV:R2)	

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



For standard mounting refer
to TLM322S Package Details

PIN CONFIGURATION



LEAD CODE:
1) Anode
2) Anode
3) Cathode

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