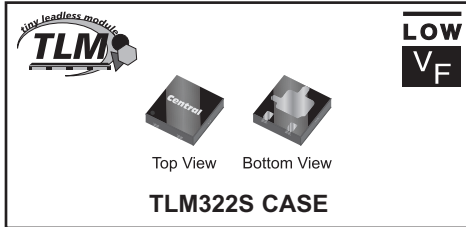


CTLSH1-40M322S

**SURFACE MOUNT
HIGH CURRENT, LOW V_F
SILICON SCHOTTKY RECTIFIER**



www.centrasemi.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)

Peak Repetitive Reverse Voltage
 Continuous Forward Current
 Peak Repetitive Forward Current, tp≤1.0ms
 Peak Forward Surge Current, tp=8.0ms
 Power Dissipation (Note 1)
 Operating and Storage Junction Temperature
 Thermal Resistance (Note 1)

SYMBOL		UNITS
V _{RRM}	40	V
I _F	1.0	A
I _{FRM}	3.5	A
I _{FSM}	10	A
P _D	1.45	W
T _J , T _{stg}	-65 to +150	°C
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 21mm².

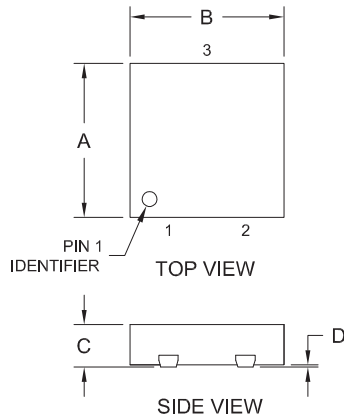
R0 (27-September 2012)

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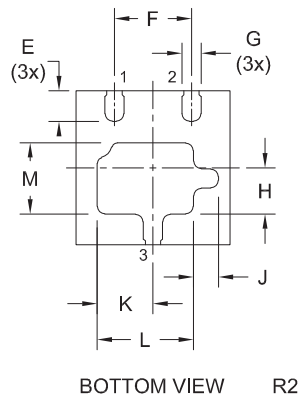


TLM322S CASE - MECHANICAL OUTLINE

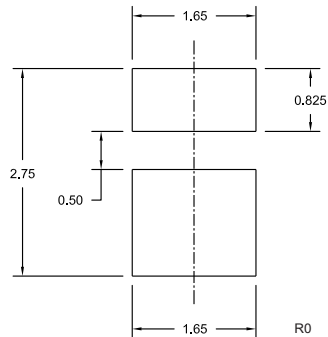


SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.076	0.081	1.95	2.05
B	0.076	0.081	1.95	2.05
C	0.019	0.024	0.50	0.60
D	0.000	0.002	0.00	0.05
E	0.011	0.020	0.30	0.50
F	0.039		1.00	
G	0.007	0.012	0.18	0.30
H	0.017	0.028	0.45	0.70
J	0.008	0.017	0.22	0.43
K	0.024	0.033	0.62	0.83
L	0.043	0.054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

TLM322S (REV:R2)

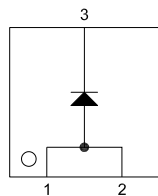


**SUGGESTED MOUNTING PADS
For Maximum Power Dissipation
(Dimensions in mm)**



For standard mounting refer
to TLM322S Package Details

PIN CONFIGURATION



LEAD CODE:

- 1) Anode
- 2) Anode
- 3) Cathode

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