CTLSH3-2M322HL

SURFACE MOUNT
ULTRA LOW V_F
SILICON
SCHOTTKY RECTIFIER
TINY LEADLESS MODULE™

TLM322 CASE

MARKING CODE: CBB

Central™ Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLSH3-2M322HL is a high performance HiLo™ 3.0A Schottky rectifier designed for applications where small size and operational efficiency are the prime requirements. With a maximum power dissipation of 1.45W, and a very small package footprint (smaller than 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:

- HiLo™ Device Characteristics (High Current/Low V_F)
- Ultra Low Forward Voltage Drop (V_F=0.35V Typ. @ 3.0A)
- High Thermal Efficiency
- Small TLM 2x2mm case
- High Current (I_F=3.0A)

APPLICATIONS:

- DC/DC Converters
- Voltage Clamping
- Protection Circuits
- Battery Powered Portable Equipment

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	20	V
Average Forward Current	I_O	3.0	A
Power Dissipation	P_D	1.45	W *
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	86.2	°C/W *

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	V_R=10V		2.0	3.0	mA
BV_R	I_R=5.0mA	20			V
V_F	I_F=100mA		0.14	0.18	V
V_F	I_F=500mA		0.19	0.23	V
V_F	I_F=1.0A		0.24	0.28	V
V_F	I_F=2.0A		0.29	0.33	V
V_F	I_F=3.0A		0.35	0.40	V
C_T				TBD	pF

* FR-4 Epoxy PCB with copper mounting pad area of 21mm².

R0 (6-January 2006)

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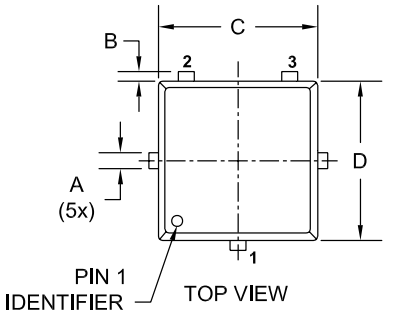
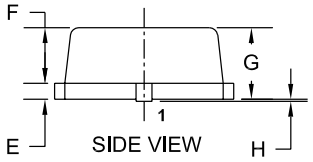
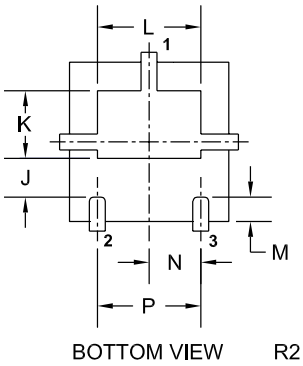
TLM322 CASE - MECHANICAL OUTLINE



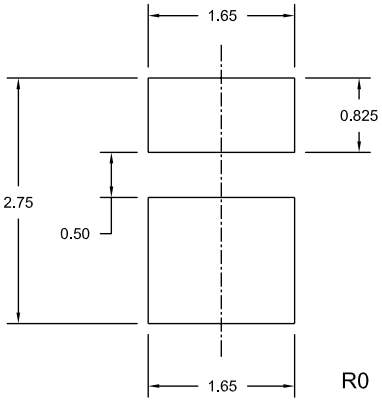


DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.007	0.012	0.17	0.30
B	---	0.005	---	0.125
C	0.075	0.083	1.90	2.10
D	0.075	0.083	1.90	2.10
E	0.006	0.010	0.15	0.25
F	0.026	0.030	0.65	0.75
G	0.031	0.039	0.80	1.00
H	0.000	0.002	0.00	0.05
J	0.024		0.60	
K	0.031	0.035	0.79	0.89
L	0.048	0.056	1.22	1.42
M	0.008	0.018	0.20	0.45
N	0.026		0.65	
P	0.051		1.30	

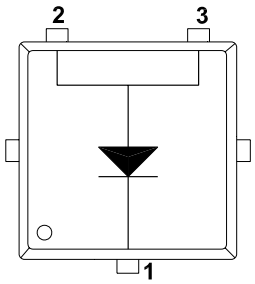
TLM322 (REV:R2)



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



For standard mounting refer
to TLM322 Package Details



LEAD CODE:

1) Cathode
2) Anode
3) Anode

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