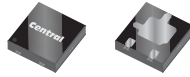


CTLT8099-M322S

**SURFACE MOUNT
NPN SILICON TRANSISTOR**



Top View Bottom View

TLM322S CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLT8099-M322S is a silicon transistor manufactured by the epitaxial planar process, epoxy molded in a low profile, 2x2mm TLM™ surface mount package, designed for general purpose amplification and switching in energy efficient applications.

MARKING CODE: 89C

APPLICATIONS:

- Load switching
- Display drive
- Power management
- Gate drive

MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$)

Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Continuous Collector Current
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_{CBO}	80
V_{CEO}	80
V_{EBO}	6.0
I_C	500
P_D	1.45
T_J, T_{stg}	-65 to +150
θ_{JA}	86.2

UNITS

V
V
V
mA
W
 $^{\circ}\text{C}$
 $^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=80\text{V}$		0.1	μA
I_{EBO}	$V_{BE}=6.0\text{V}$		0.1	μA
BV_{CBO}	$I_C=100\mu\text{A}$	80		V
BV_{CEO}	$I_C=10\text{mA}$	80		V
BV_{EBO}	$I_E=10\mu\text{A}$	6.0		V
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=5.0\text{mA}$		0.4	V
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		0.3	V
$V_{BE(ON)}$	$V_{CE}=5.0\text{V}, I_C=10\text{mA}$	0.6	0.8	V
h_{FE}	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}$	100	300	
h_{FE}	$V_{CE}=5.0\text{V}, I_C=10\text{mA}$	100		
h_{FE}	$V_{CE}=5.0\text{V}, I_C=100\text{mA}$	75		
f_T	$V_{CE}=5.0\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	150		MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		6.0	pF
C_{ib}	$V_{BE}=0.5\text{V}, I_C=0, f=1.0\text{MHz}$		25	pF

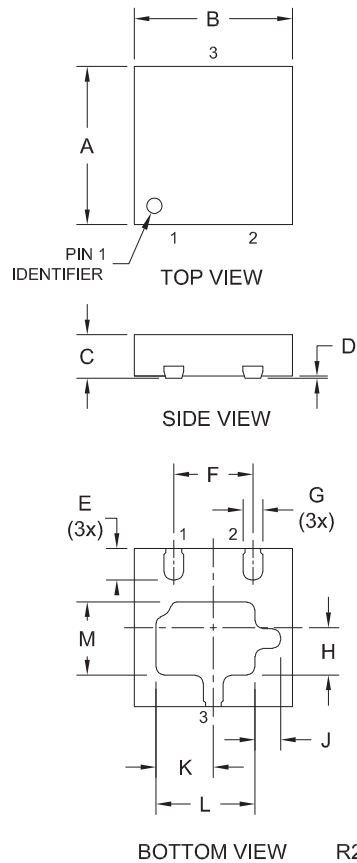
R5 (10-October 2012)

CTLT8099-M322S

SURFACE MOUNT
NPN SILICON TRANSISTOR



TLM322S CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	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)				

LEAD CODE:

- 1) Base
- 2) Emitter
- 3) Collector

MARKING CODE: 89C

R5 (10-October 2012)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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Worldwide Distributors:
www.centalsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centalsemi.com/terms



<http://www.centrasemi.com>

Product End of Life Notification

PDN ID:	PDN01106
Notification Date:	9/25/18
Last Buy Date:	3/25/19
Last Shipment Date	9/25/19

Summary: All devices in the TLM322S package are discontinued and now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Management Process. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

<u>Central Part Number</u>	<u>Replacement</u>
CTL5H1-40M322S BK	N/A, Stock Only
CTL5H1-40M322S TR	N/A, Stock Only
CTLT8099-M322S TR	N/A, Stock Only

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. Please email your requests to engineering@centrasemi.com.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.