

CTLT8099-M322S
SURFACE MOUNT
NPN SILICON TRANSISTOR



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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°C)

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

SYMBOL		UNITS
V _{CBO}	80	V
V _{CEO}	80	V
V _{EBO}	6.0	V
I _C	500	mA
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)

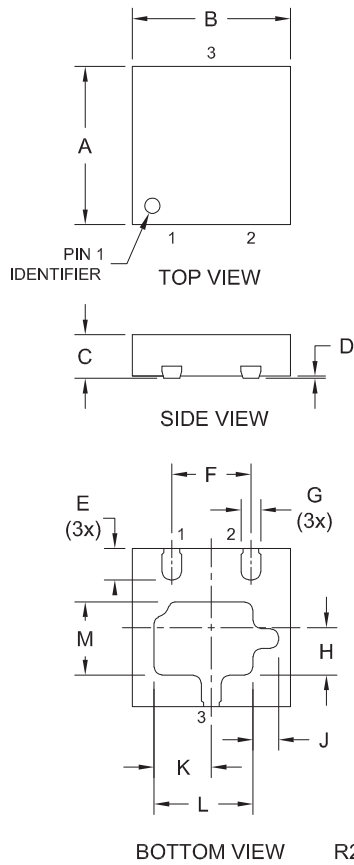
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =80V		0.1	μA
I _{EBO}	V _{BE} =6.0V		0.1	μA
BV _{CBO}	I _C =100μA	80		V
BV _{CEO}	I _C =10mA	80		V
BV _{EBO}	I _E =10μA	6.0		V
V _{CE(SAT)}	I _C =100mA, I _B =5.0mA		0.4	V
V _{CE(SAT)}	I _C =100mA, I _B =10mA		0.3	V
V _{BE(ON)}	V _{CE} =5.0V, I _C =10mA	0.6	0.8	V
h _{FE}	V _{CE} =5.0V, I _C =1.0mA	100	300	
h _{FE}	V _{CE} =5.0V, I _C =10mA	100		
h _{FE}	V _{CE} =5.0V, I _C =100mA	75		
f _T	V _{CE} =5.0V, I _C =10mA, f=100MHz	150		MHz
C _{ob}	V _{CB} =10V, I _E =0, f=1.0MHz		6.0	pF
C _{ib}	V _{BE} =0.5V, I _C =0, f=1.0MHz		25	pF

R5 (10-October 2012)

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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)