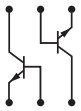
CMLT8099

SURFACE MOUNT SILICON DUAL NPN TRANSISTOR





SOT-563 CASE

APPLICATIONS:
- Small signal general purpose amplifiers

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:
The CENTRAL SEMICONDUCTOR CMLT8099 consists of two individual, isolated 8099 NPN silicon transistors, manufactured by the epitaxial planar process and epoxy molded in an SOT-563 surface mount package. This device has been designed for small signal general purpose amplifier applications.

MARKING CODE: C89

FEATURES:
- Device is ***Halogen Free*** by design
- Current I_C=500mA
- Voltage V_{CEO}=80V

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	6.0	V
Continous Collector Current	I_C	500	mA
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	357	°C/W

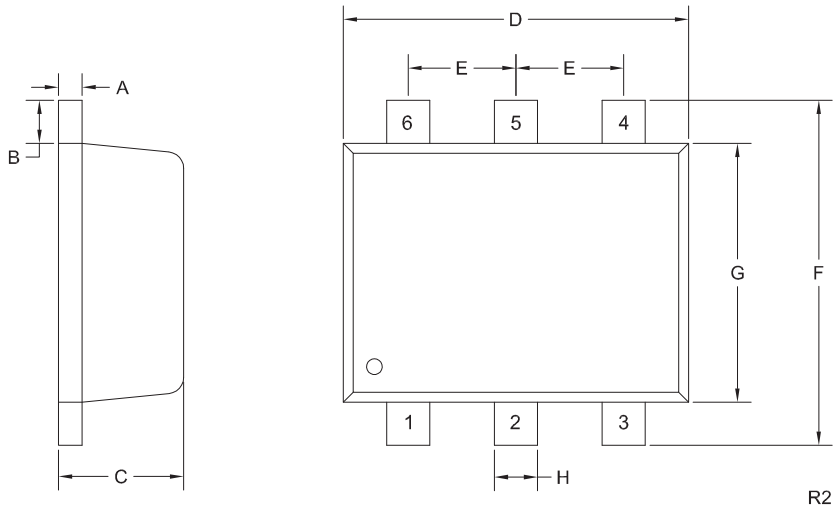
ELECTRICAL CHARACTERISTICS PER TRANSISTOR: (T_A=25°C unless otherwise noted)

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		60	pF

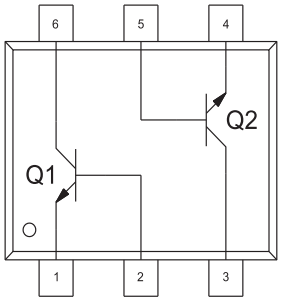
CMLT8099

SURFACE MOUNT SILICON
DUAL NPN TRANSISTOR

SOT-563 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.0027	0.007	0.07	0.18
B	0.008		0.20	
C	0.017	0.024	0.45	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.059	0.067	1.50	1.70
G	0.043	0.051	1.10	1.30
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R2)

LEAD CODE:
1) Emitter Q1
2) Base Q1
3) Collector Q2
4) Emitter Q2
5) Base Q2
6) Collector Q1

MARKING CODE: C89

R4 (2-May 2019)

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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