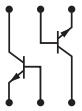
CMLT5551

SURFACE MOUNT
DUAL NPN SMALL SIGNAL
HIGH VOLTAGE
SILICON SWITCHING TRANSISTORS

PICOmini™



SOT-563 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLT5551 consists of two individual, isolated NPN silicon transistors, manufactured by the epitaxial planar process and epoxy molded in an SOT-563 suface mount package. This PICOmini™ devices has been designed for high voltage amplifier applications.

MARKING CODE: 5C5

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Collector-Base Voltage	V_{CBO}	180	V
Collector-Emitter Voltage	V_{CEO}	160	V
Emitter-Base Voltage	V_{EBO}	6.0	V
Continuous Collector Current	I_C	600	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}=120V		50	nA
I_{CBO}	V_{CB}=120V, T_A=100°C		50	µA
BV_{CBO}	I_C=100µA	180		V
BV_{CEO}	I_C=1.0mA	160		V
BV_{EBO}	I_E=10µA	6.0		V
$V_{CE(SAT)}$	I_C=10mA, I_B=1.0mA		0.15	V
$V_{CE(SAT)}$	I_C=50mA, I_B=5.0mA		0.20	V
$V_{BE(SAT)}$	I_C=10mA, I_B=1.0mA		1.00	V
$V_{BE(SAT)}$	I_C=50mA, I_B=5.0mA		1.00	V
h_{FE}	V_{CE}=5.0V, I_C=1.0mA	80		
h_{FE}	V_{CE}=5.0V, I_C=10mA	80	250	
h_{FE}	V_{CE}=5.0V, I_C=50mA	30		
f_T	V_{CE}=10V, I_C=10mA, f=100MHz	100	300	MHz
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz		6.0	pF
h_{fe}	V_{CE}=10V, I_C=1.0mA, f=1.0kHz	50	200	
NF	V_{CE}=5.0V, I_C=200µA, R_S=10Ω, f=10Hz to 15.7kHz		8.0	dB

R1 (20-January 2010)

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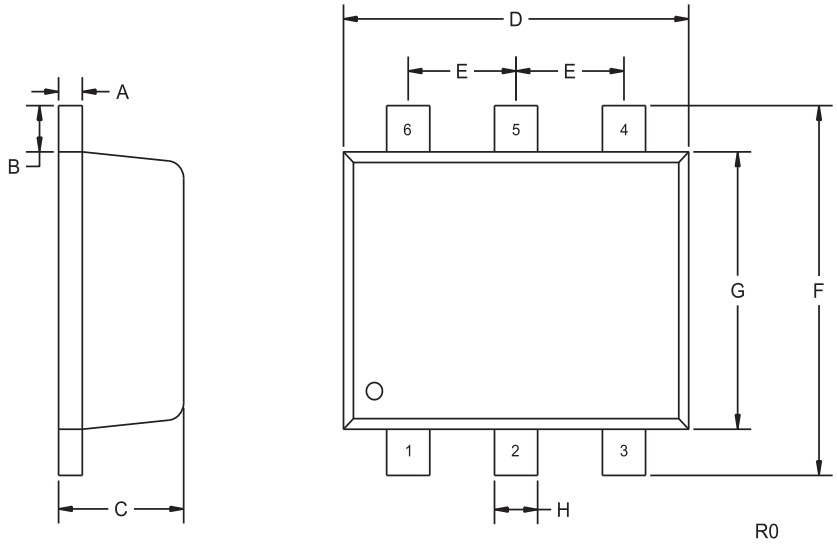
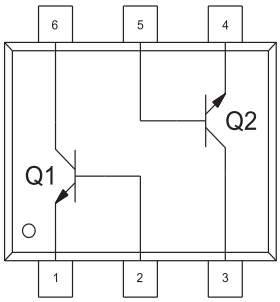
SOT-563 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.004	0.007	0.10	0.18
B	0.008		0.20	
C	0.022	0.024	0.56	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.061	0.067	1.55	1.70
G	0.047		1.20	
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R0)

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

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