

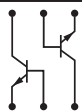
CMLT5551

**SURFACE MOUNT
DUAL NPN SMALL SIGNAL
HIGH VOLTAGE
SILICON SWITCHING TRANSISTORS**



www.centrasemi.com

PICOmini™



SOT-563 CASE

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 surface mount package. This PICOmini™ devices has been designed for high voltage amplifier applications.

MARKING CODE: 5C5

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

V_{CBO} 180
V_{CEO} 160
V_{EBO} 6.0
I_C 600
P_D 350
T_J, T_{stg} -65 to +150
θ_{JA} 357

UNITS

V
V
V
mA
mW
°C
°C/W

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

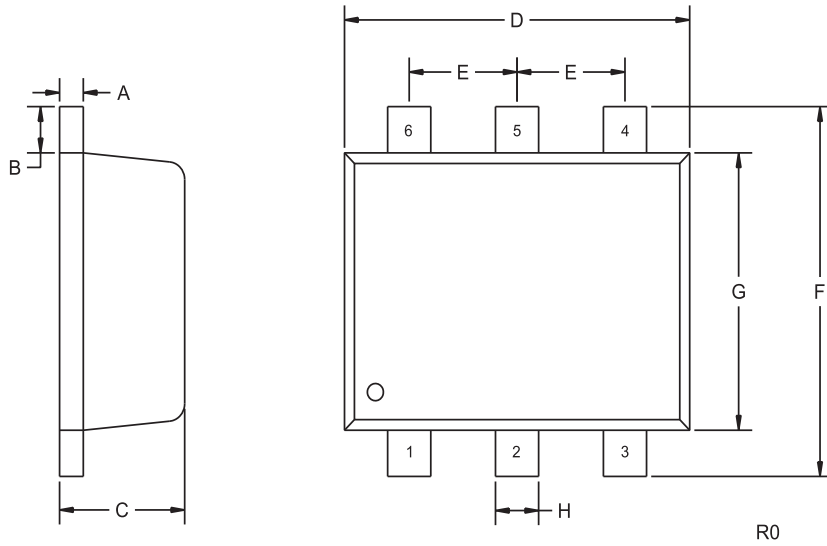
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =120V		50	nA
I _{CBO}	V _{CB} =120V, T _A =100°C		50	µA
BV _{CBO}	I _C =100µA	180		V
BV _{CEO}	I _C =1.0mA	160		V
BV _{EBO}	I _E =10µA	6.0		V
V _{CE(SAT)}	I _C =10mA, I _B =1.0mA		0.15	V
V _{CE(SAT)}	I _C =50mA, I _B =5.0mA		0.20	V
V _{BE(SAT)}	I _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)

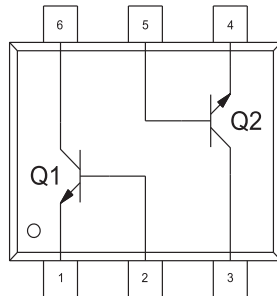
CMLT5551
SURFACE MOUNT
DUAL NPN SMALL SIGNAL
HIGH VOLTAGE
SILICON SWITCHING TRANSISTORS



SOT-563 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



SYMBOL	INCHES		MILLIMETERS	
	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 Q1
- 4) Emitter Q2
- 5) Base Q2
- 6) Collector Q2

MARKING CODE: 5C5

R1 (20-January 2010)