NEC

SILICON TRANSISTOR
2SC1623

AUDIO FREQUENCY GENERAL PURPOSE AMPLIFIER
NPN SILICON EPITAXIAL TRANSISTOR
MINI MOLD

FEATURES

- High DC Current Gain: h_{FE} = 200 TYP.
  (V_{CE} = 6.0 V, I_C = 1.0 mA)
- High Voltage: V_{CEO} = 50 V

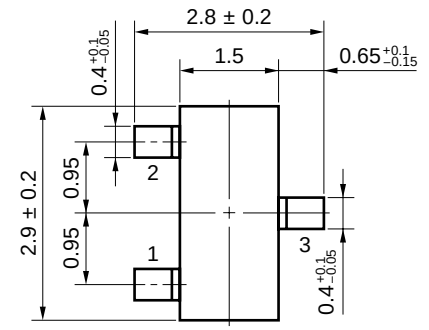
ABSOLUTE MAXIMUM RATINGS

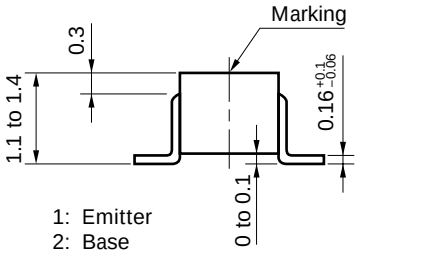
Maximum Voltages and Current (TA = 25 ˚C)

Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current (DC)	I_C	100	mA
Maximum Power Dissipation			
Total Power Dissipation			
at 25 ˚C Ambient Temperature	P_T	200	mW
Maximum Temperatures			
Junction Temperature	T_j	150	˚C
Storage Temperature Range	T_{stg}	–55 to +150	˚C

PACKAGE DIMENSIONS

in millimeters





1: Emitter
2: Base
3: Collector

ELECTRICAL CHARACTERISTICS (T_A = 25 ˚C)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector Cutoff Current	I_{CBO}			0.1	μA	V_{CB} = 60 V, I_E = 0
Emitter Cutoff Current	I_{EBO}			0.1	μA	V_{EB} = 5.0 V, I_C = 0
DC Current Gain	h_{FE}	90	200	600		V_{CE} = 6.0 V, I_C = 1.0 mA*
Collector Saturation Voltage	$V_{CE(sat)}$		0.15	0.3	V	I_C = 100 mA, I_B = 10 mA*
Base to Saturation Voltage	$V_{BE(sat)}$		0.86	1.0	V	I_C = 100 mA, I_B = 10 mA*
Base Emitter Voltage	V_{BE}	0.55	0.62	0.65	V	V_{CE} = 6.0 V, I_C = 1.0 mA*
Gain Bandwidth Product	f_T		250		MHz	V_{CE} = 6.0 V, I_E = –10 mA
Output Capacitance	C_{ob}		3.0		pF	V_{CB} = 6.0 V, I_E = 0, f = 1.0 MHz

* Pulsed: PW ≤ 350 μs, Duty Cycle ≤ 2 %

h_{FE} Classification

Marking	L4	L5	L6	L7
h_{FE}	90 to 180	135 to 270	200 to 400	300 to 600

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