

TOSHIBA

2SC1959

TOSHIBA TRANSISTOR SILOCON PNP EPITAXIAL TYPE (PCT PROCESS)

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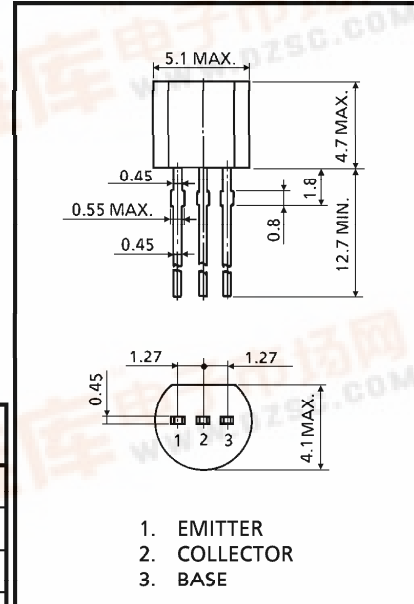
AUDIO FREQUENCY LOW POWER AMPLIFIER APPLICATIONS
 DRIVER STAGE AMPLIFIER APPLICATIONS
 SWITCHING APPLICATIONS

Unit in mm

- Excellent h_{FE} Linearity
 : $h_{FE}(2) = 25$ (Min.) : $V_{CE} = 6V$, $I_C = 400mA$
- 1 Watt Amplifier Applications.
- Complementary to 2SA562TM.

MAXIMUM RATINGS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	35	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA
Base Current	I_B	100	mA
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$



JEDEC	TO-92
EIAJ	SC-43
TOSHIBA	2-5F1B

Weight : 0.21g

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 35V, I_E = 0$	—	—	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	—	—	0.1	μA
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE} = 1V, I_C = 100mA$	70	—	400	
	$h_{FE}(2)$ (Note)	$V_{CE} = 6V, I_C = 400mA$	25	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 10mA$	—	0.1	0.25	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 1V, I_C = 100mA$	—	0.8	1.0	V
Transition Frequency	f_T	$V_{CE} = 6V, I_C = 20mA$	—	300	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 6V, I_E = 0, f = 1MHz$	—	7	—	pF

Note : $h_{FE}(1)$ Classification O : 70~140, Y : 120~240, GR : 200~400
 $h_{FE}(2)$ Classification O : 25 (Min.), Y : 40 (Min.)

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