

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1150

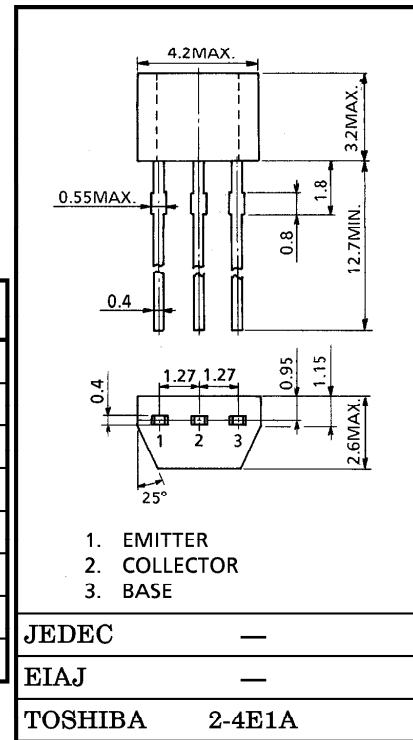
LOW FREQUENCY AMPLIFIER APPLICATIONS

Unit in mm

- High h_{FE} : $h_{FE}=100\sim320$
- Complementary to 2SC2710.

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

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	-800	mA
Base Current	I_B	-160	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$



Weight : 0.13g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -30\text{V}, I_E = 0$	—	—	-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$	—	—	-0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-30	—	—	V
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	100	—	320	
	$h_{FE}(2)$	$V_{CE} = -1\text{V}, I_C = -700\text{mA}$	35	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -20\text{mA}$	—	—	-0.7	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -1\text{V}, I_C = -10\text{mA}$	-0.5	—	-0.8	V
Transition Frequency	f_T	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$	—	120	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$	—	19	—	pF

Note : $h_{FE}(1)$ Classification O : 100~200 Y : 160~320

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