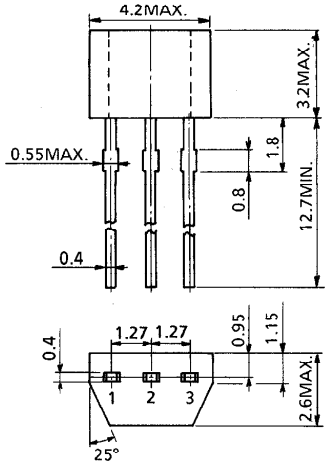
TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1150

LOW FREQUENCY AMPLIFIER APPLICATIONS

Unit in mm

- High h_{FE} : h_{FE} = 100~320
- Complementary to 2SC2710.



1. EMITTER
2. COLLECTOR
3. BASE

JEDEC	—
EIAJ	—
TOSHIBA	2-4E1A

Weight : 0.13g

MAXIMUM RATINGS (Ta = 25°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	°C
Storage Temperature Range	T_{stg}	−55~150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

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

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

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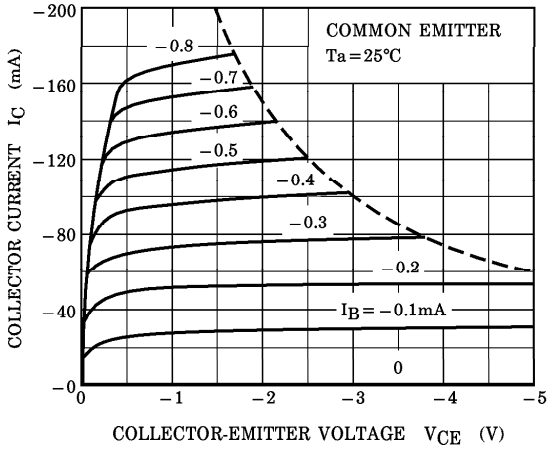
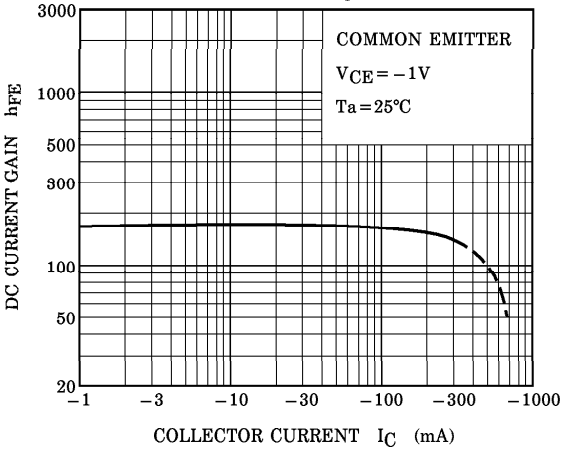
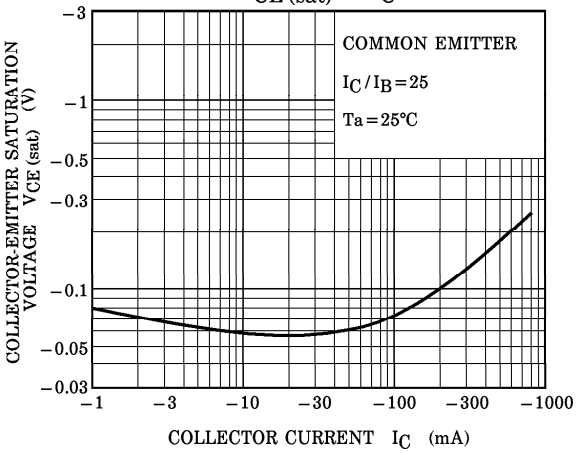
I_C – V_{CE}



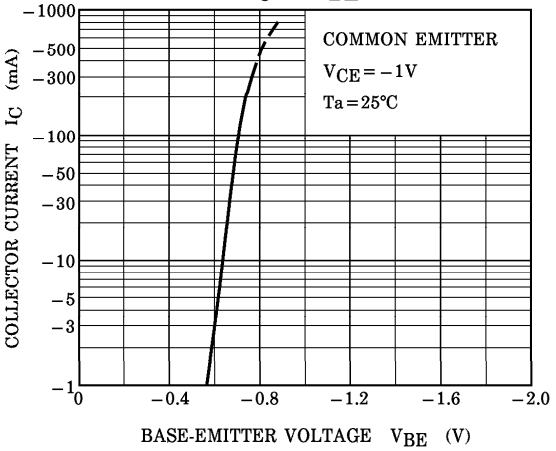
h_{FE} – I_C



$V_{CE\,(sat)}$ – I_C



I_C – V_{BE}



P_C – Ta