

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1162

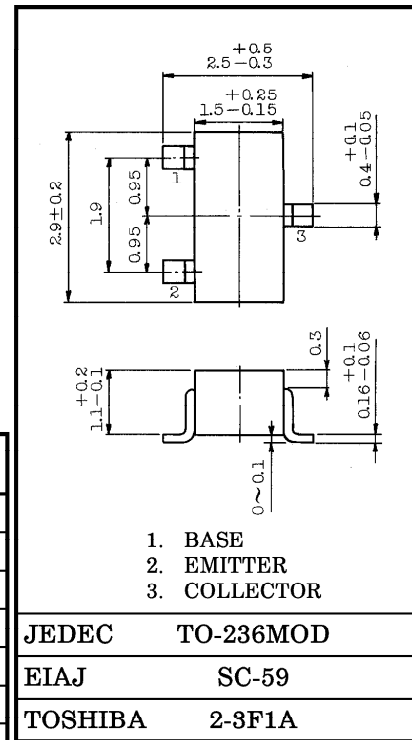
AUDIO FREQUENCY GENERAL PURPOSE AMPLIFIER APPLICATIONS.

Unit in mm

- High Voltage and High Current
: $V_{CEO} = -50V$, $I_C = -150mA$ (Max.)
- Excellent h_{FE} Linearity
: $h_{FE}(I_C = -0.1mA) / h_{FE}(I_C = -2mA) = 0.95$ (Typ.)
- High h_{FE} : $h_{FE} = 70 \sim 400$
- Low Noise : $NF = 1dB$ (Typ.), $10dB$ (Max.)
- Complementary to 2SC2712
- Small Package

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-150	mA
Base Current	I_B	-30	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature Range	T_{stg}	-55~125	$^\circ C$

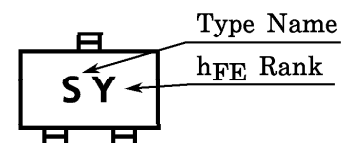


ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -50V$, $I_E = 0$	—	—	-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V$, $I_C = 0$	—	—	-0.1	μA
DC Current Gain	$h_{FE}(\text{Note})$	$V_{CE} = -6V$, $I_C = -2mA$	70	—	400	
Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C = -100mA$, $I_B = -10mA$	—	-0.1	-0.3	V
Transition Frequency	f_T	$V_{CE} = -10V$, $I_C = -1mA$	80	—	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V$, $I_E = 0$, $f = 1MHz$	—	4	7	pF
Noise Figure	NF	$V_{CE} = -6V$, $I_C = 0.1mA$, $f = 1kHz$, $R_g = 10k\Omega$	—	1.0	10	dB

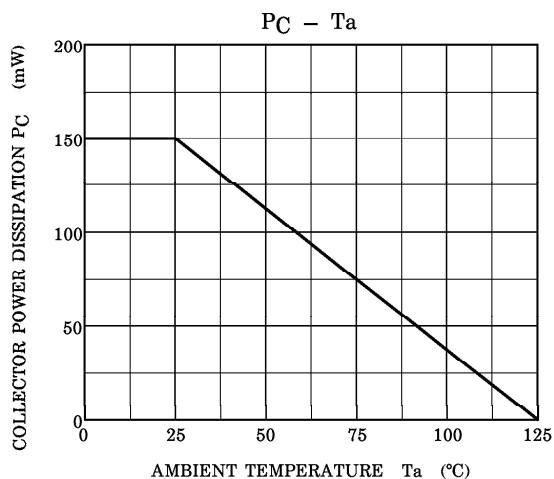
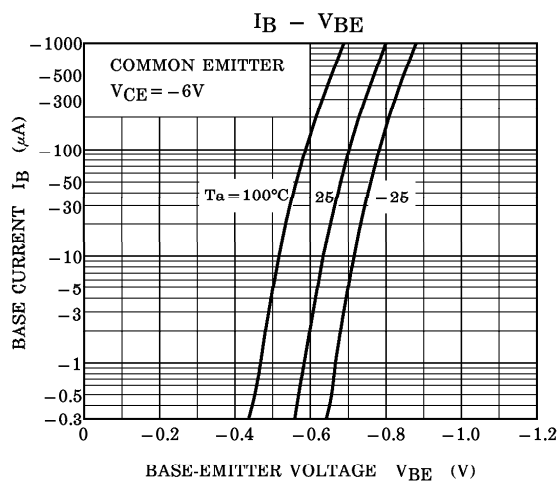
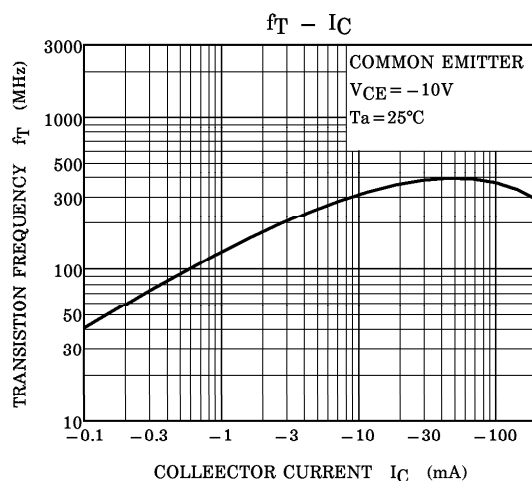
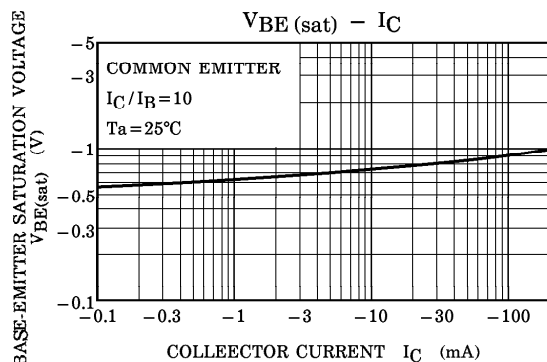
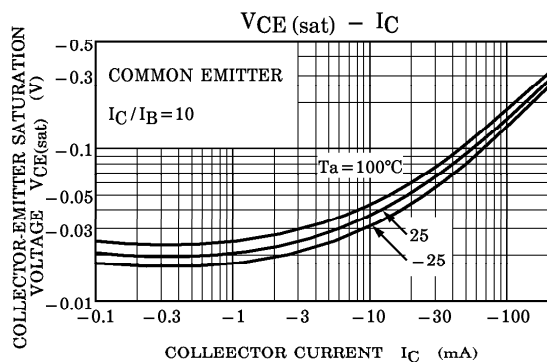
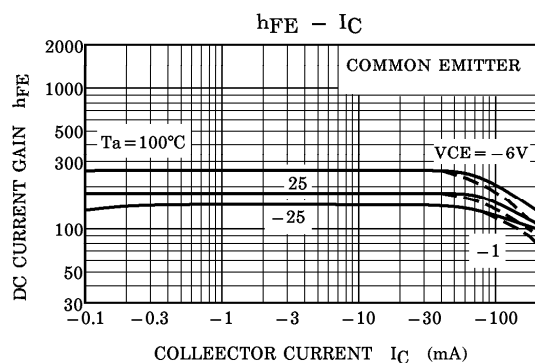
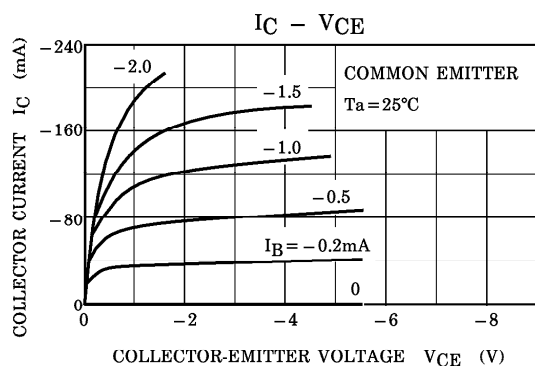
Note : h_{FE} Classification O(O): 70~140, Y(Y): 120~240,
GR(G): 200~400 () Marking Symbol

MARKING



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