

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL (PCT PROCESS)

2SA1588

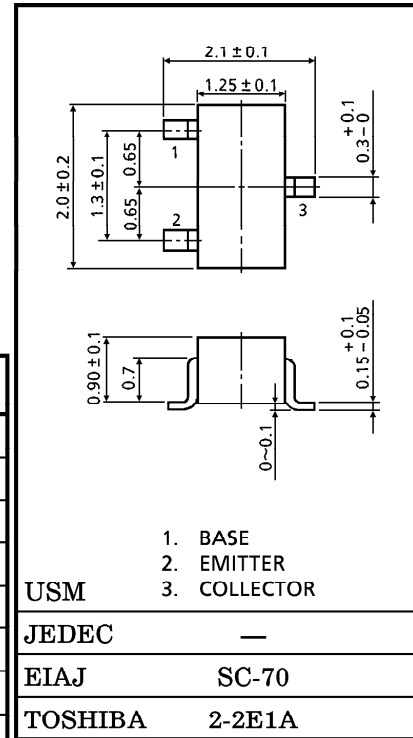
AUDIO FREQUENCY LOW POWER AMPLIFIER APPLICATIONS
 DRIVER STAGE AMPLIFIER APPLICATIONS
 SWITCHING APPLICATIONS

Unit in mm

- Excellent h_{FE} Linearity
 : $h_{FE}(2) = 25$ (Min.) at $V_{CE} = -6V, I_C = -400mA$
- Complementary to 2SC4118

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	-50	mA
Collector Power Dissipation	P_C	100	mW
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature Range	T_{stg}	-55~125	$^\circ C$



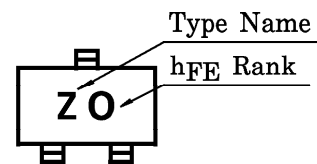
Weight : 0.006g

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 (Note)	$h_{FE}(1)$	$V_{CE} = -1V, I_C = -100mA$	70	—	240	
	$h_{FE}(2)$	$V_{CE} = -6V, I_C = -400mA$	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	$V_{CE} = -6V, I_C = -20mA$	—	200	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -6V, I_E = 0, f = 1MHz$	—	13	—	pF

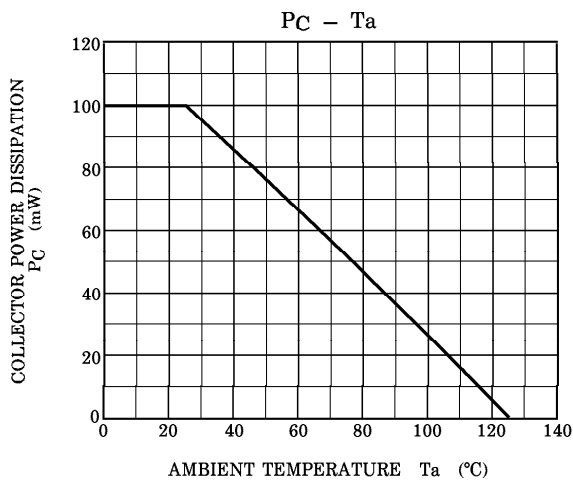
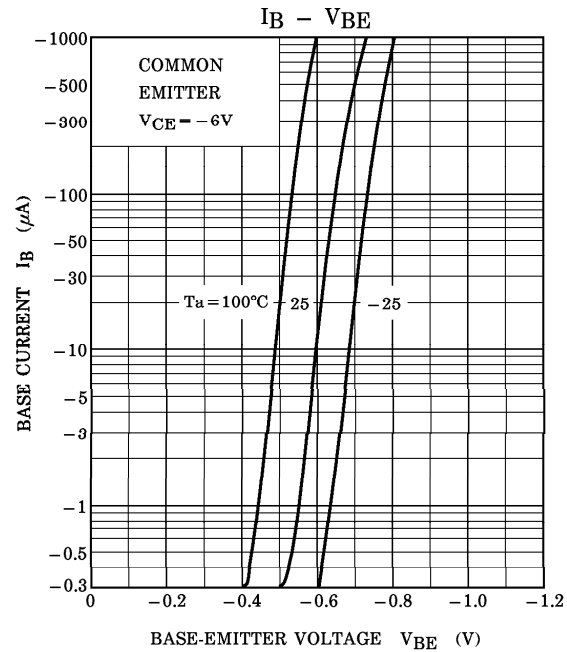
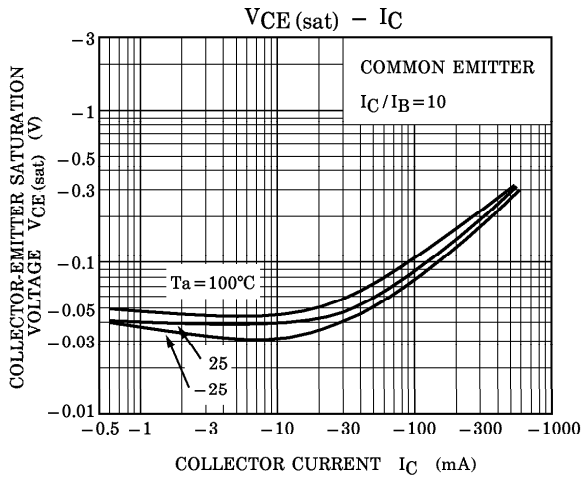
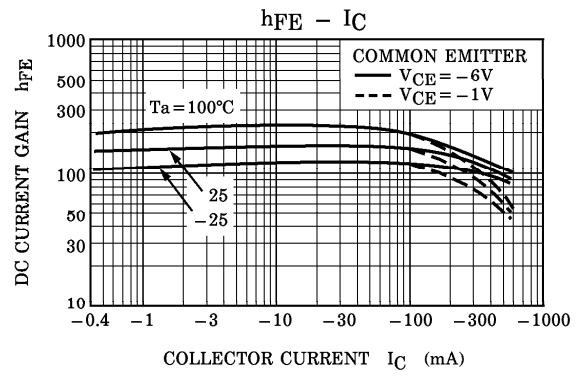
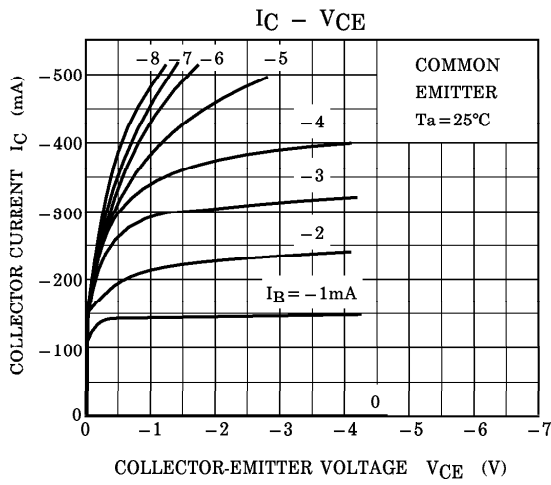
Note : $h_{FE}(1)$ Classification O : 70~140, Y : 120~240
 $h_{FE}(2)$ Classification O : 25 (Min.), Y : 40 (Min.)

Marking



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