TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SC3325

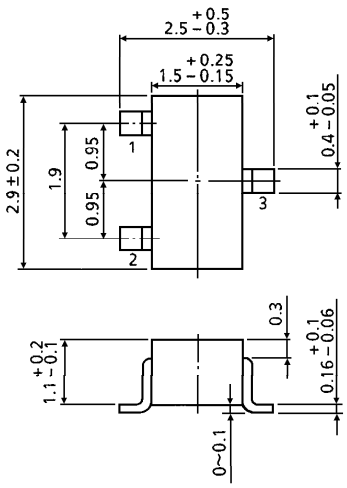
AUDIO FREQUENCY LOW POWER AMPLIFIER APPLICATIONS

DRIVER STAGE AMPLIFIER APPLICATIONS

SWITCHING APPLICATIONS

- Excellent h_{FE} Linearity : $h_{FE\,(2)} = 25$ (Min.) ($V_{CE} = 6$ V, $I_C = 400$ mA)
- High Voltage : $V_{CEO} = 50$ V (Min.)
- Complementary to 2SA1313
- Small Package

Unit in mm



1. BASE
2. EMITTER
3. COLLECTOR

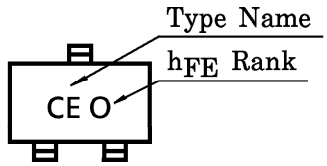
JEDEC	TO-236MOD
EIAJ	SC-59
TOSHIBA	2-3F1A

Weight : 0.012 g

MAXIMUM RATINGS (Ta = 25°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	500	mA
Base Current	I_B	50	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−55~150	°C

MARKING

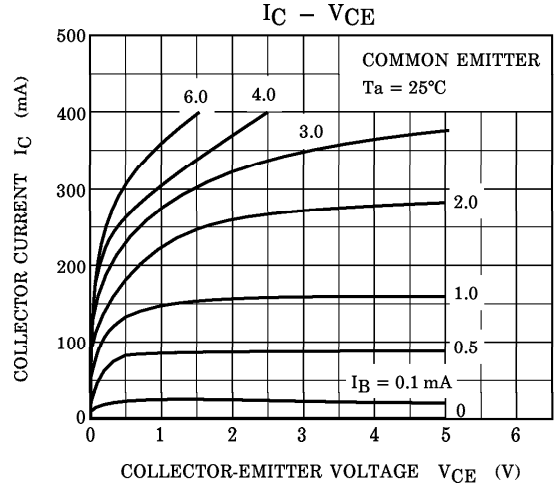


ELECTRICAL CHARACTERISTICS (Ta = 25°C)

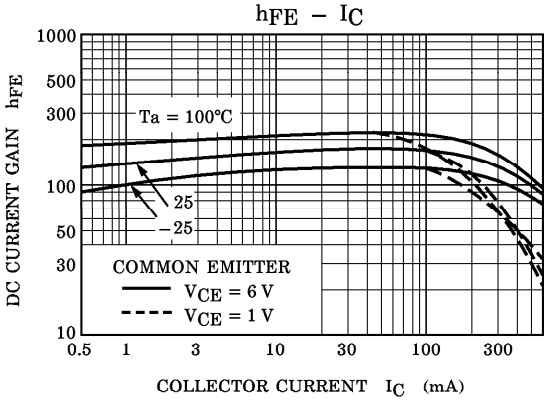
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB} = 50 V, I_E = 0	—	—	0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB} = 5 V, I_C = 0	—	—	0.1	μA
DC Current Gain	h_{FE} (1) (Note)	V_{CE} = 1 V, I_C = 100 mA	70	—	240	
	h_{FE} (2) (Note)	V_{CE} = 6 V, I_C = 400 mA	25	—	—	
Collector-Emitter Saturation Voltage	$V_{CE\ (sat)}$	I_C = 100 mA, I_B = 10 mA	—	0.1	0.25	V
Base-Emitter Voltage	V_{BE}	V_{CE} = 1 V, I_C = 100 mA	—	0.8	1.0	V
Transition Frequency	f_T	V_{CE} = 6 V, I_C = 20 mA	—	300	—	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = 6 V, I_E = 0, f = 1 MHz	—	7	—	pF

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

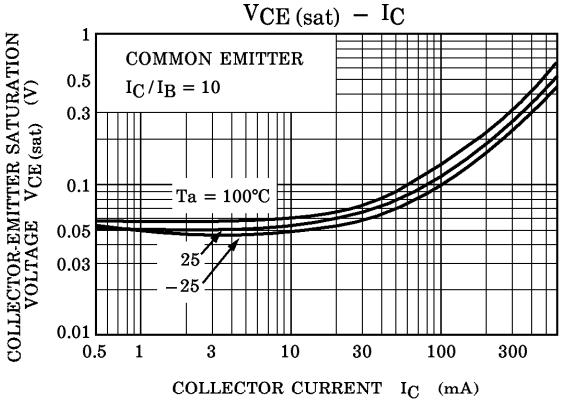
$I_C - V_{CE}$



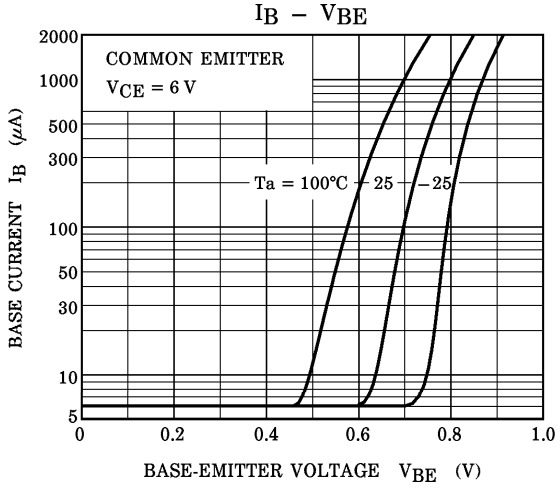
$h_{FE} - I_C$



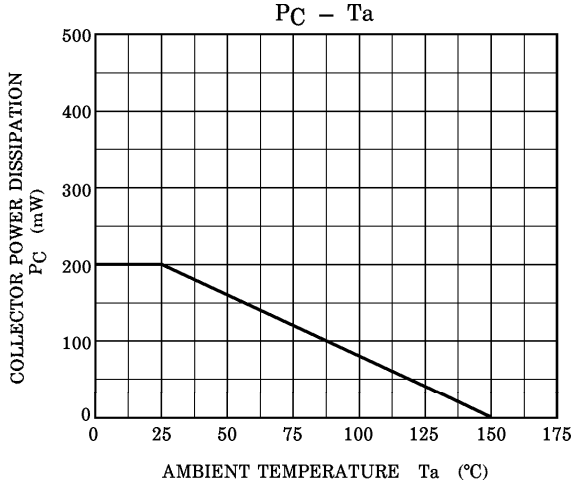
$V_{CE\,(sat)} - I_C$



$I_B - V_{BE}$



$P_C - Ta$



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