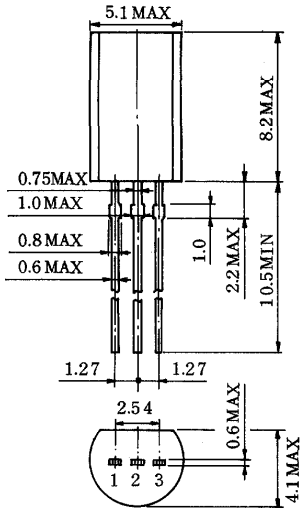
TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE

2SA1811

LOW FREQUENCY AMPLIFIER APPLICATIONS.
DRIVER STAGE AMPLIFIER APPLICATIONS.
SWITCHING APPLICATIONS.

- Excellent h_{FE} Linearity
  : $h_{FE(2)}$ = 35 (Min.), (V_{CE} = −2V, I_C = −300mA)
- Complementary to 2SC4707

Unit in mm



1. EMITTER
2. COLLECTOR
3. BASE

JEDEC	TO-92MOD
EIAJ	—
TOSHIBA	2-5J1A

Weight : 0.36g

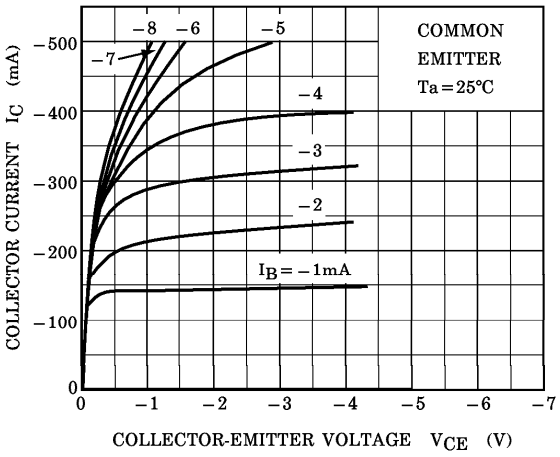
MAXIMUM RATINGS (Ta = 25°C)

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	−500	mA
Base Current	I_B	−100	mA
Collector Power Dissipation	P_C	800	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−55~150	°C

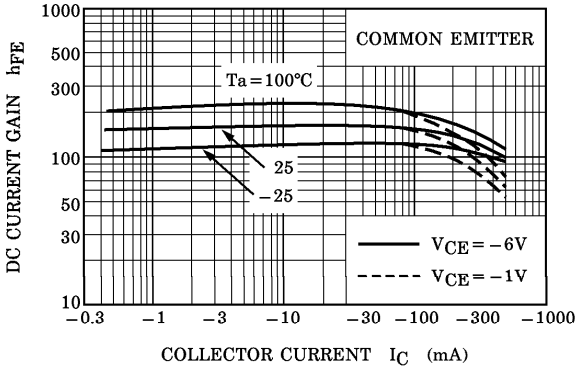
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB} = −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	$h_{FE(1)}$	V_{CE} = −2V, I_C = −100mA	100	—	300	
	$h_{FE(2)}$	V_{CE} = −2V, I_C = −300mA	35	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = −300mA, I_B = −30mA	—	−0.2	−0.5	V
Base-Emitter Voltage	V_{BE}	V_{CE} = −2V, 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	—	9	—	pF

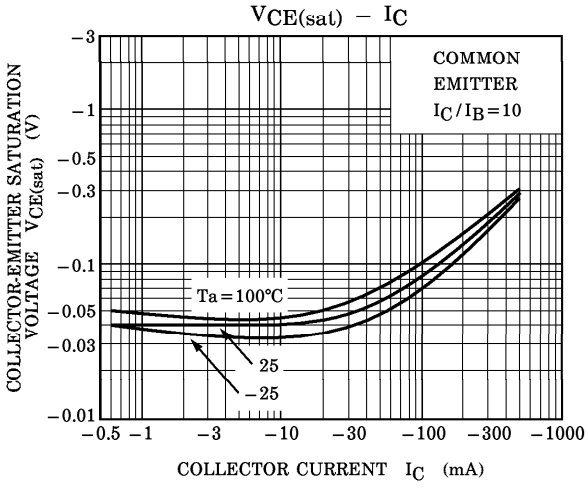
$I_C - V_{CE}$



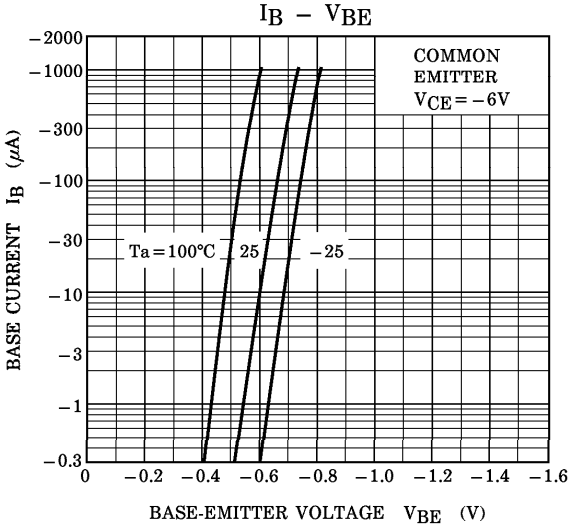
$h_{FE} - I_C$



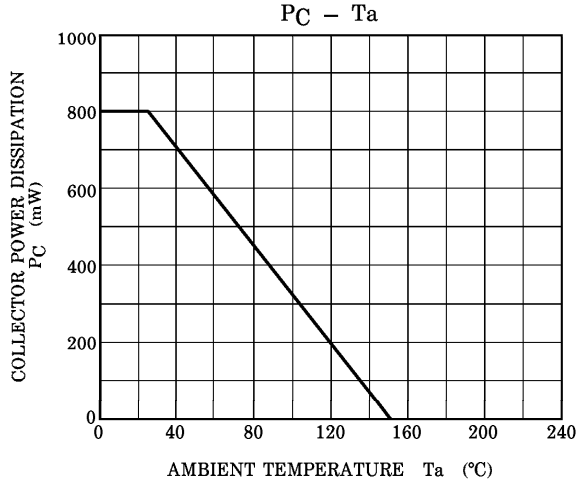
$V_{CE(sat)} - I_C$



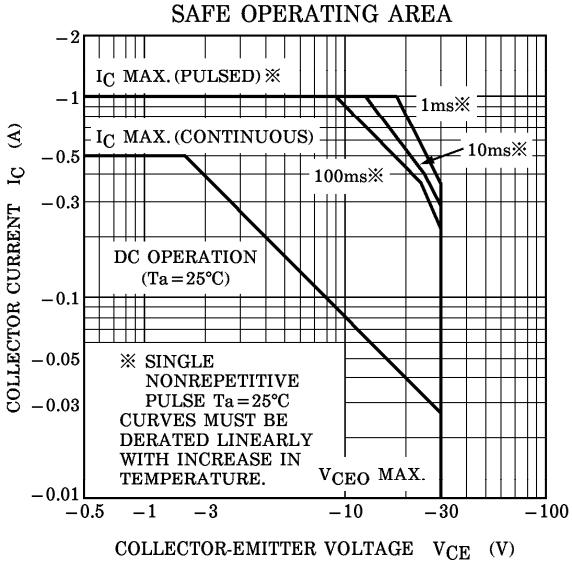
$I_B - V_{BE}$



$P_C - Ta$



SAFE OPERATING AREA



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