TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1721

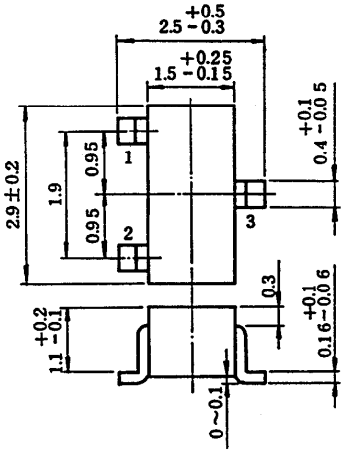
Unit in mm

HIGH VOLTAGE CONTROL APPLICATIONS.

PLASMA DISPLAY, NIXIE TUBE DRIVER APPLICATIONS.

CATHODE RAY TUBE BRIGHTNESS CONTROL APPLICATIONS.

- High Voltage : $V_{CBO} = -300V$, $V_{CEO} = -300V$
- Low Saturation Voltage : $V_{CE\ (sat)} = -0.5V$ (Max.)
- Small Collector Output Capacitance : $C_{ob} = 5.5pF$ (Typ.)
- Complementary to 2SC4497



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

Weight : 0.012g

MAXIMUM RATINGS (Ta = 25°C)

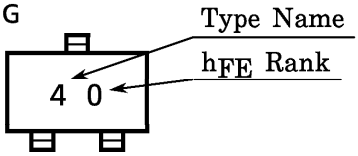
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	−300	V
Collector-Emitter Voltage	V_{CEO}	−300	V
Emitter-Base Voltage	V_{EBO}	−5	V
Collector Current	I_C	−100	mA
Base Current	I_B	−20	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−55~150	°C

ELECTRICAL CHARACTERISTIC (Ta = 25°C)

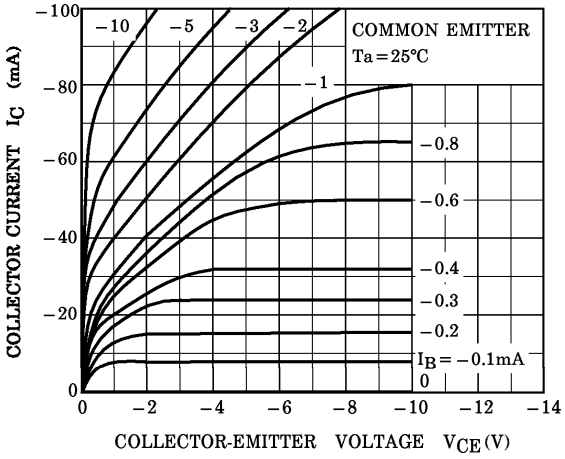
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -300V$, $I_E = 0$	—	—	−0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = -5V$, $I_C = 0$	—	—	−0.1	μA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -0.1mA$, $I_E = 0$	−300	—	—	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1mA$, $I_B = 0$	−300	—	—	V
DC Current Gain	$h_{FE(1)}$(Note)	$V_{CE} = -10V$, $I_C = -20mA$	30	—	150	
	$h_{FE\ (2)}$	$V_{CE} = -10V$, $I_C = -1mA$	20	—	—	
Collector-Emitter Saturation Voltage	$V_{CE\ (sat)}$	$I_C = -20mA$, $I_B = -2mA$	—	—	−0.5	V
Base-Base Saturation Voltage	$V_{BE\ (sat)}$	$I_C = -20mA$, $I_B = -2mA$	—	—	−1.2	V
Transition Frequency	f_T	$V_{CE} = -10V$, $I_C = -20mA$	50	55	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -20V$, $I_E = 0$, $f = 1MHz$	—	5.5	6.0	pF

Note : $h_{FE\ (1)}$ Classification R : 30~90 O : 50~150

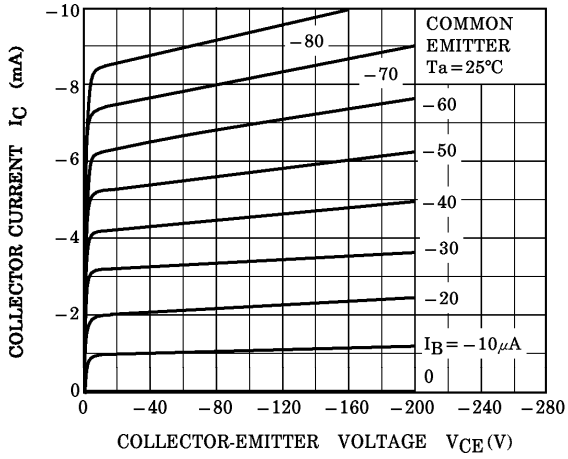
MARKING



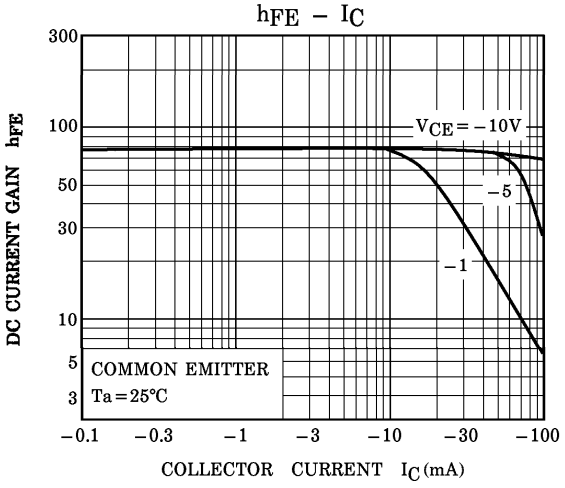
$I_C - V_{CE}$ (LOW VOLTAGE REGION)



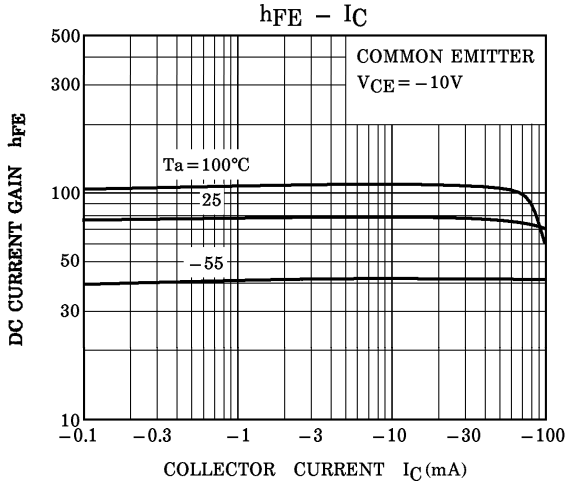
$I_C - V_{CE}$ (LOW CURRENT REGION)



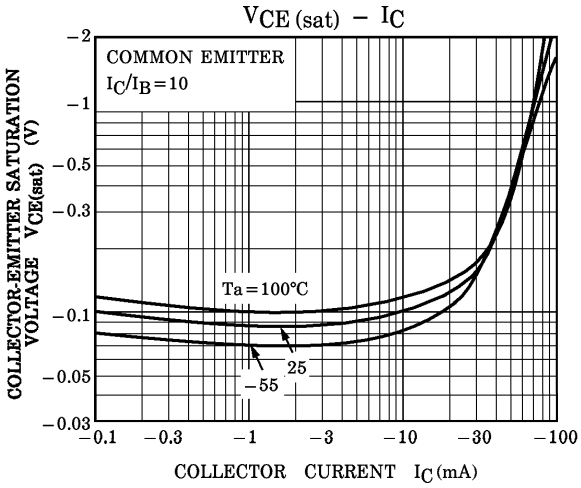
$h_{FE} - I_C$



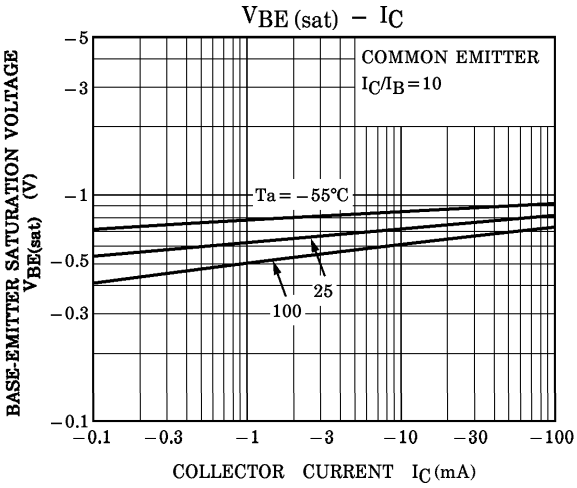
$h_{FE} - I_C$

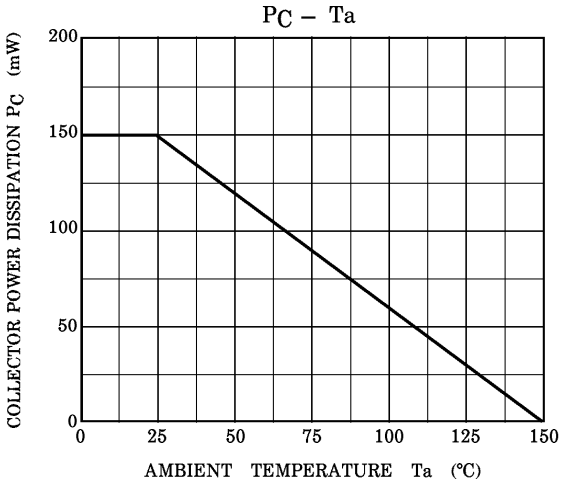


$V_{CE\,(sat)} - I_C$



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




P_C – Ta
COLLECTOR POWER DISSIPATION P_C (mW)
200
150
100
50
0
0
25
50
75
100
125
150
AMBIENT TEMPERATURE Ta (°C)

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000707EAA

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