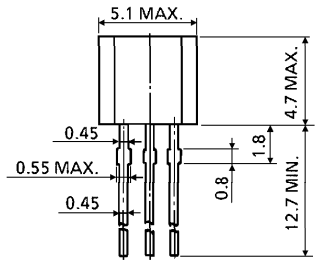
TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

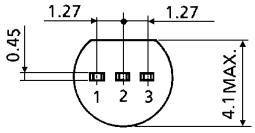
2SC1627

DRIVER STAGE AMPLIFIER APPLICATIONS
VOLTAGE AMPLIFIER APPLICATIONS

- Complementary to 2SA817
- Driver Stage Application of 20 to 25 Watts Amplifiers.

Unit in mm





1. EMITTER
2. COLLECTOR
3. BASE

JEDEC	TO-92
EIAJ	SC-43
TOSHIBA	2-5F1B

Weight : 0.21g

MAXIMUM RATINGS (Ta = 25°C)

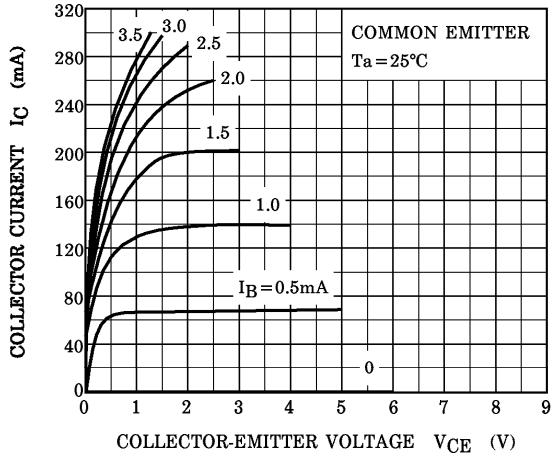
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	300	mA
Base Current	I_B	60	mA
Collector Power Dissipation	P_C	600	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−55~125	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

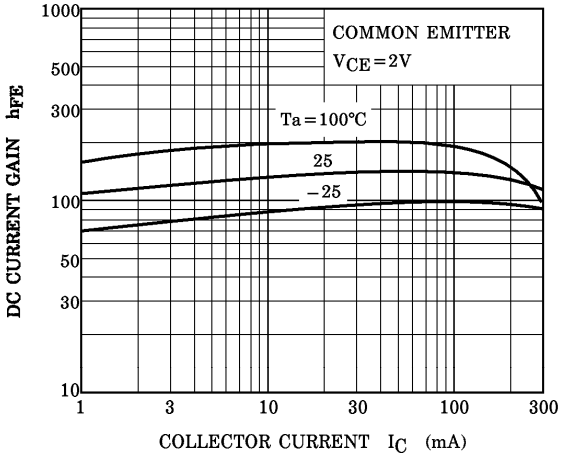
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB} = 50V, I_E = 0	—	—	0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB} = 5V, I_C = 0	—	—	0.1	μA
Collector-Emitter Saturation Voltage	$V_{(BR)CEO}$	I_C = 5mA, I_B = 0	80	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note)	V_{CE} = 2V, I_C = 50mA	70	—	240	
	$h_{FE(2)}$	V_{CE} = 2V, I_C = 200mA	40	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 200mA, I_B = 10mA	—	—	0.5	V
Base-Emitter Voltage	V_{BE}	V_{CE} = 2V, I_C = 5mA	0.55	—	0.8	V
Transition Frequency	f_T	V_{CE} = 10V, I_C = 10mA	—	100	—	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = 10V, I_E = 0, f = 1MHz	—	10	—	pF

Note : $h_{FE(1)}$ Classification 0 : 70~140, Y : 120~240

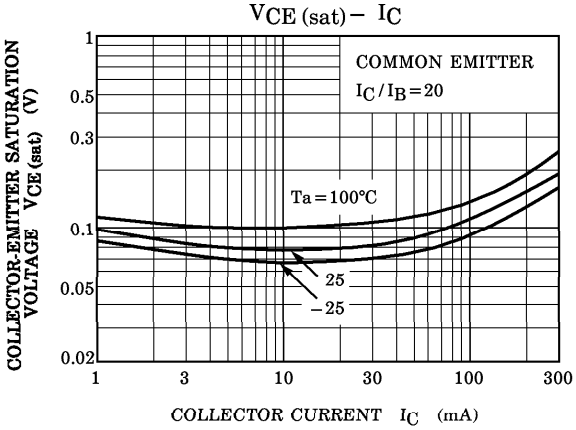
I_C – V_{CE}



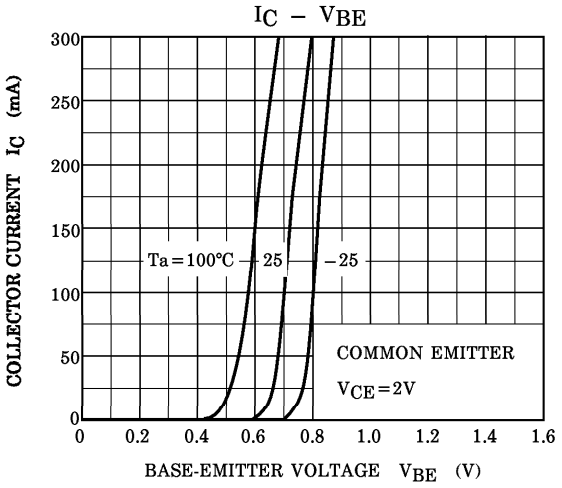
h_{FE} – I_C



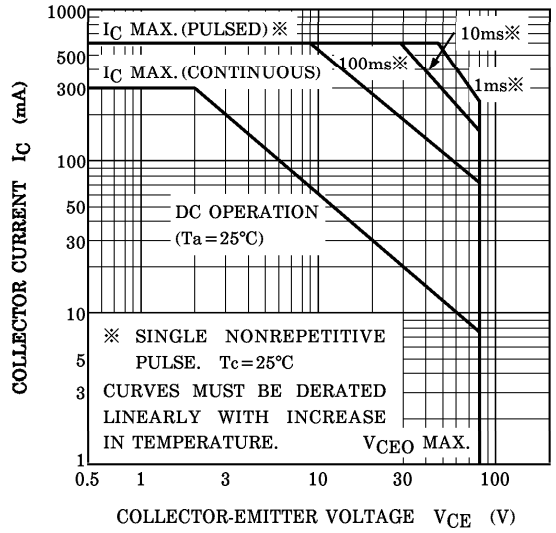
$V_{CE\,(sat)}$ – I_C



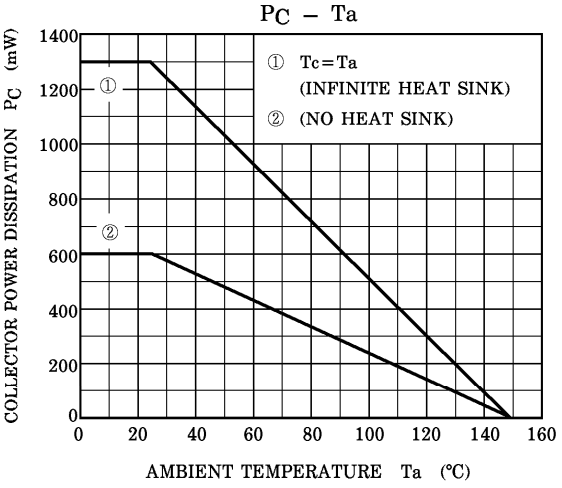
I_C – V_{BE}



SAFE OPERATING AREA



P_C – Ta



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