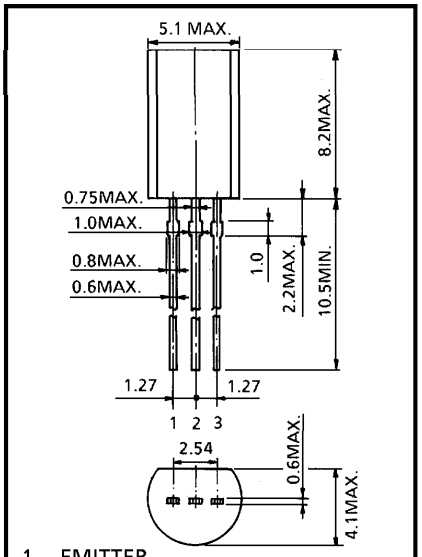
TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE (PCT PROCESS)

2SA1321

HIGH VOLTAGE SWITCHING APPLICATIONS.
COLOR TV CHROMA OUTPUT APPLICATIONS.

- High Voltage : $V_{CEO} = -250V$
- Low C_{re} : 1.8pF (Max.)
- Complementary to 2SC3334

Unit in mm



JEDEC	TO-92MOD
JEITA	—
TOSHIBA	2-5J1A

Weight : 0.36g (Typ.)

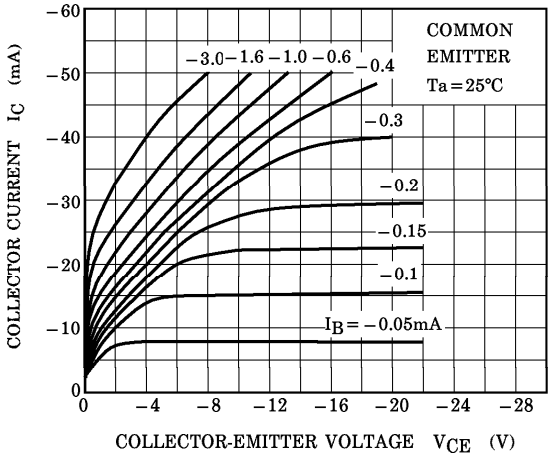
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	−250	V
Collector-Emitter Voltage		V_{CEO}	−250	V
Emitter-Base Voltage		V_{EBO}	−5	V
Collector Current	DC	I_C	−50	mA
	Peak	I_{CP}	−100	
Base Current		I_B	−20	mA
Collector Power Dissipation		P_C	0.9	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	−55~150	°C

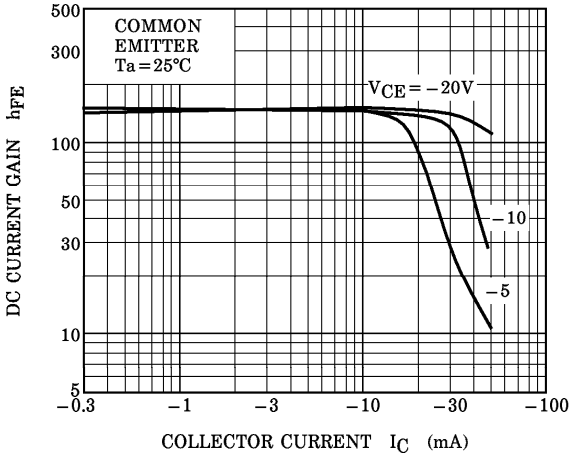
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -200V$, $I_E = 0$	—	—	−1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V$, $I_C = 0$	—	—	−1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1mA$, $I_B = 0$	−250	—	—	V
DC Current Gain	h_{FE}	$V_{CE} = -20V$, $I_C = -25mA$	50	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -10mA$, $I_B = -1mA$	—	—	−1.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -20V$, $I_C = -25mA$	—	−0.75	—	V
Transition Frequency	f_T	$V_{CE} = -10V$, $I_C = -10mA$	60	80	—	MHz
Reverse Transfer Capacitance	C_{re}	$V_{CB} = -30V$, $I_E = 0$, f = 1MHz	—	—	1.8	pF

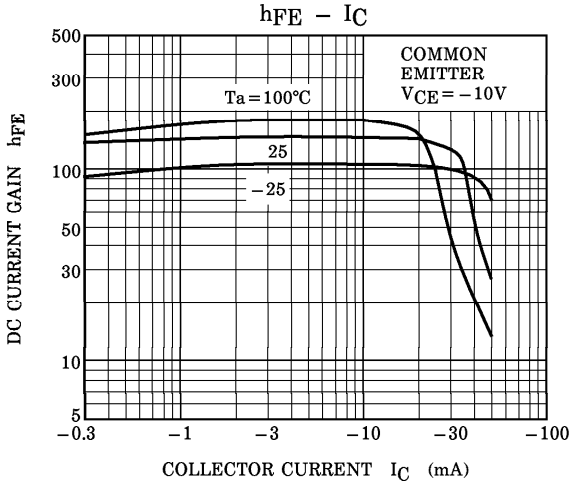
I_C – V_{CE} (LOW VOLTAGE REGION)



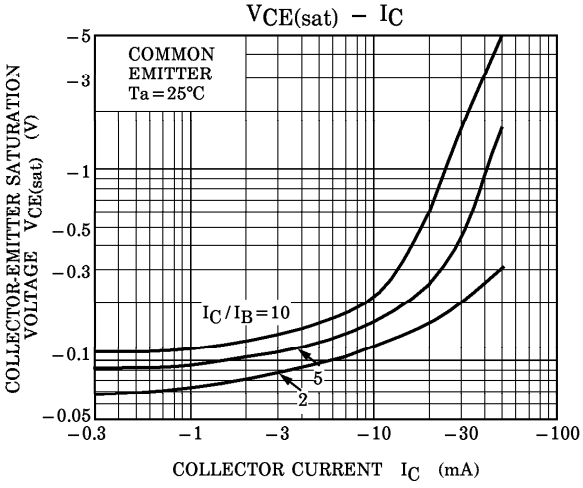
h_{FE} – I_C



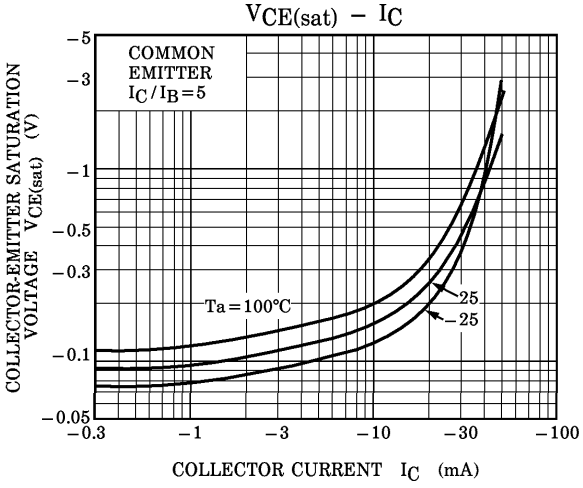
h_{FE} – I_C



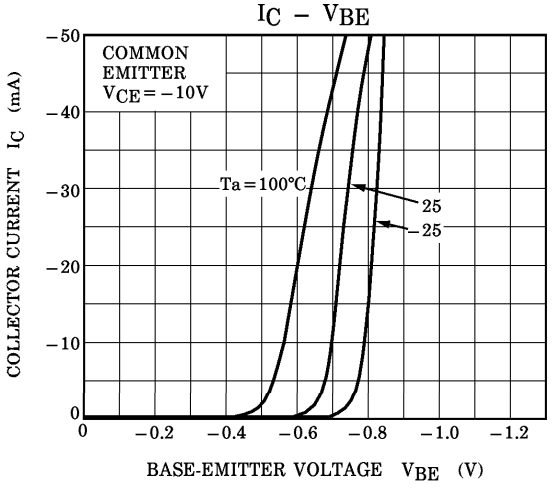
$V_{CE(sat)}$ – I_C



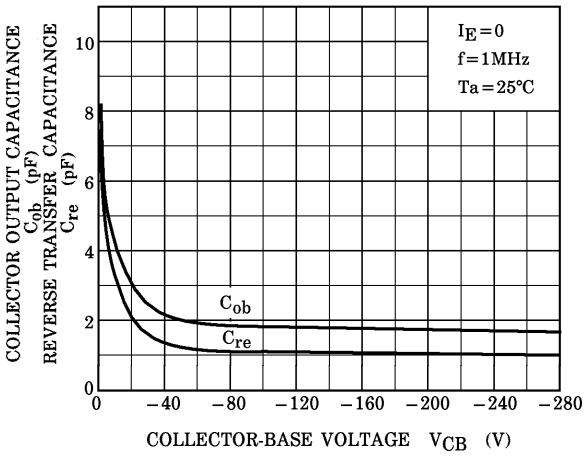
$V_{CE(sat)}$ – I_C



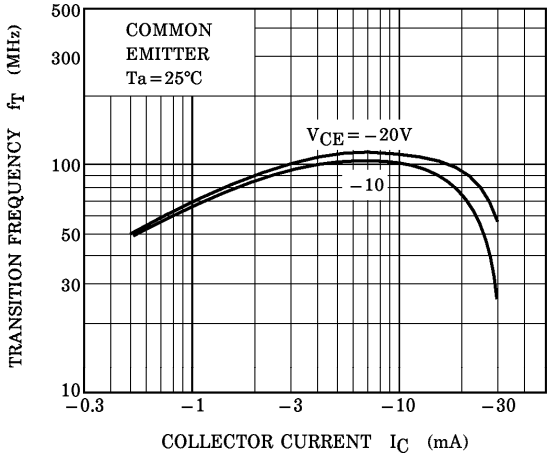
I_C – V_{BE}



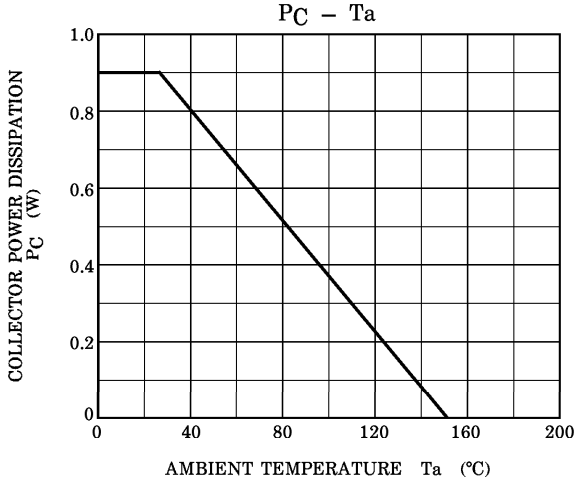
C_{ob}, C_{re} – V_{CB}



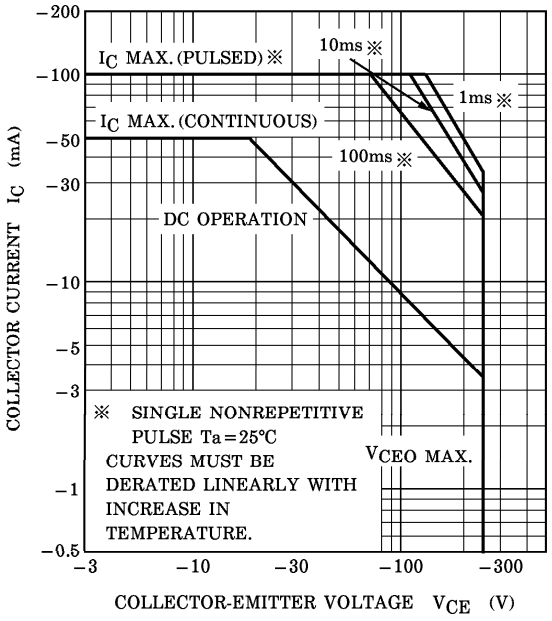
f_T – I_C



P_C – Ta



SAFE OPERATING AREA



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