TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

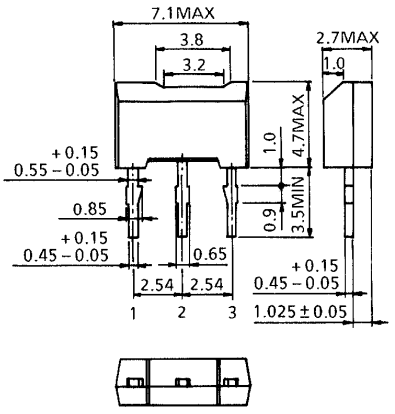
2SA1425

POWER AMPLIFIER APPLICATIONS

DRIVER STAGE AMPLIFIER APPLICATIONS

- Complementary to 2SC3665.

Unit in mm



1. BASE
2. COLLECTOR
3. EMITTER

JEDEC	—
JEITA	—
TOSHIBA	2-7D101A

Weight : 0.2g (Typ.)

MAXIMUM RATINGS (Ta = 25°C)

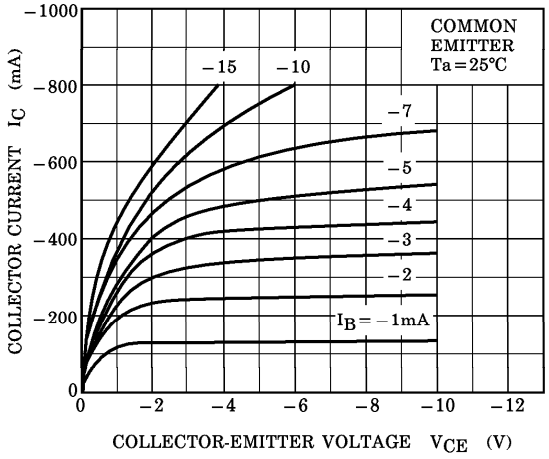
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	−120	V
Collector-Emitter Voltage	V_{CEO}	−120	V
Emitter-Base Voltage	V_{EBO}	−5	V
Collector Current	I_C	−800	mA
Base Current	I_B	−80	mA
Collector Power Dissipation	P_C	1000	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−55~150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

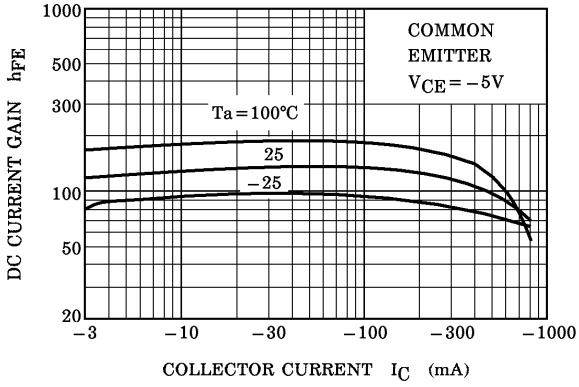
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB} = −120V, I_E = 0	—	—	−100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB} = −5V, I_C = 0	—	—	−100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = −10mA, I_B = 0	−120	—	—	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = −1mA, I_C = 0	−5	—	—	V
DC Current Gain	h_{FE} (Note)	V_{CE} = −5V, I_C = −100mA	80	—	240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = −500mA, I_B = −50mA	—	—	−1.0	V
Base-Emitter Voltage	V_{BE}	V_{CE} = −5V, I_C = −500mA	—	—	−1.0	V
Transition Frequency	f_T	V_{CE} = −5V, I_C = −100mA	—	120	—	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = −10V, I_E = 0, f = 1MHz	—	—	40	pF

(Note) : h_{FE} Classification O : 80~160, Y : 120~240

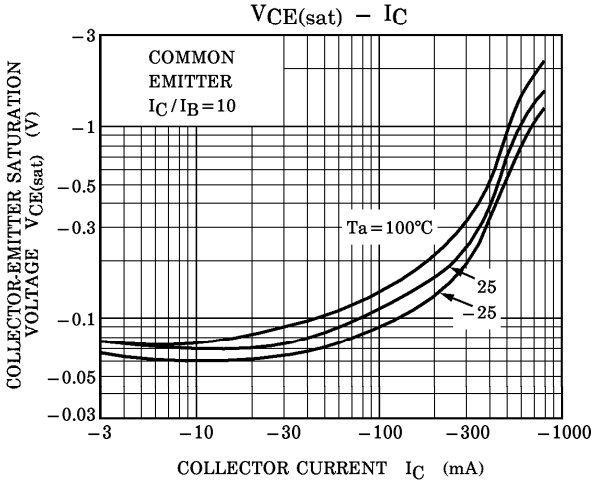
I_C – V_{CE}



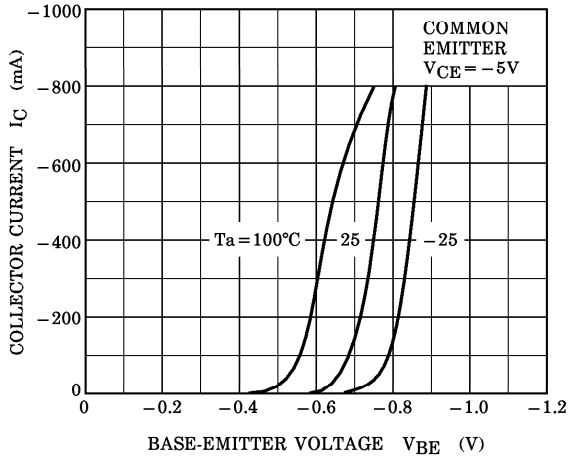
h_{FE} – I_C



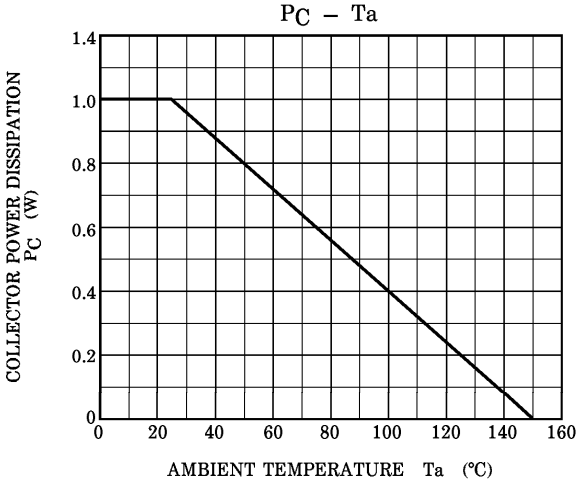
$V_{CE(sat)}$ – I_C



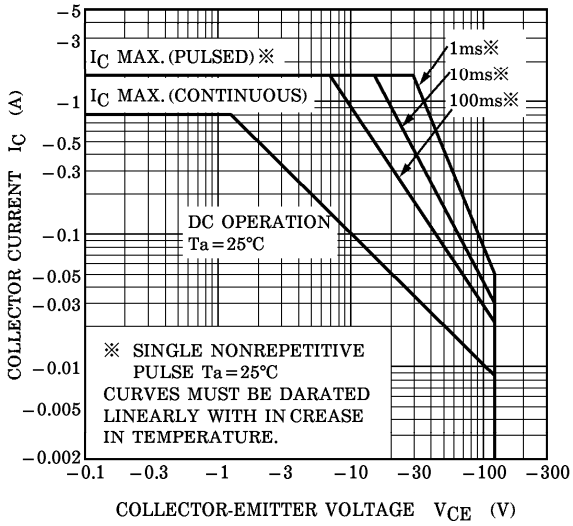
I_C – V_{BE}



P_C – Ta



SAFE OPERATING AREA



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