

Transistor

Silicon NPN Epitaxial Planar Type

Power Amplifier, Driver Stage Applications

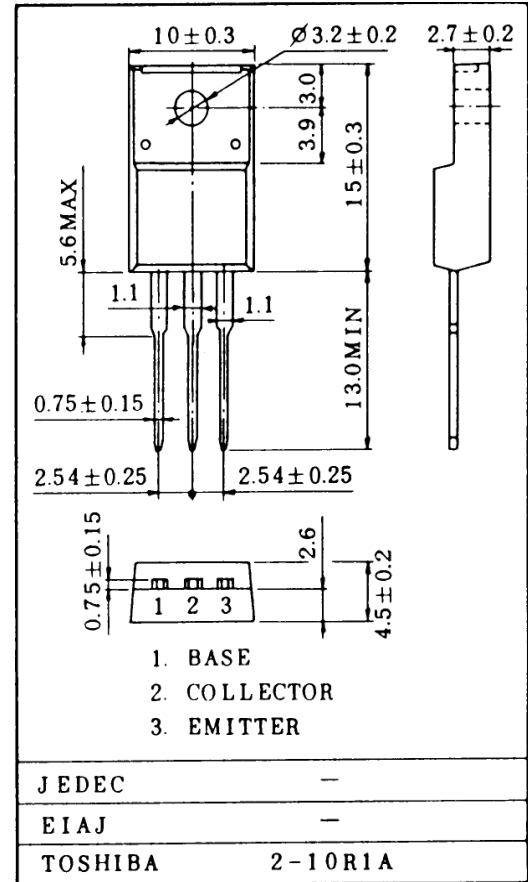
Features

- High Transistion: $f_T = 100\text{MHz}$
- Complementary to 2SA1837

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	230	V
Collector-Emitter Voltage	V_{CE0}	230	V
Collector-Base Voltage	V_{EB0}	5	V
Collector Current	I_C	1	mA
Base Current	I_B	0.1	mA
Collector Power Dissipation	$T_a = 25^\circ\text{C}$	2.0	mW
	$T_c = 25^\circ\text{C}$	20	
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 125	$^\circ\text{C}$

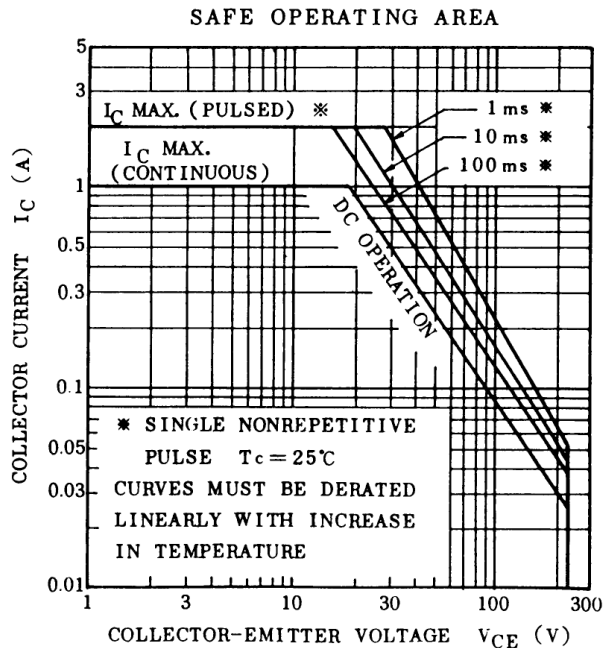
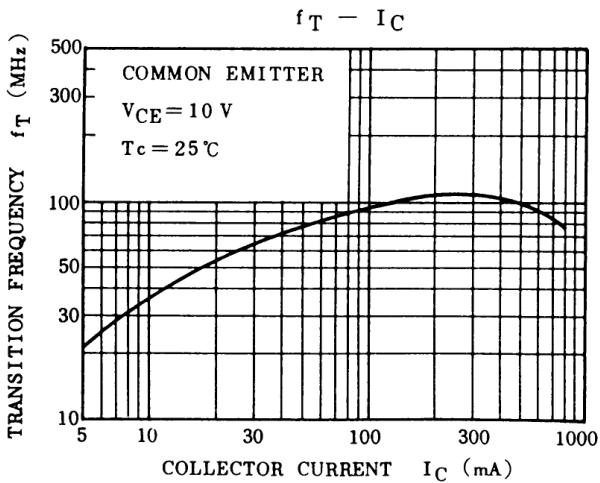
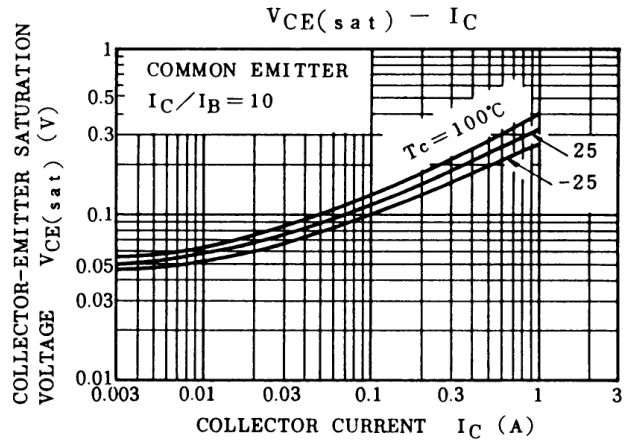
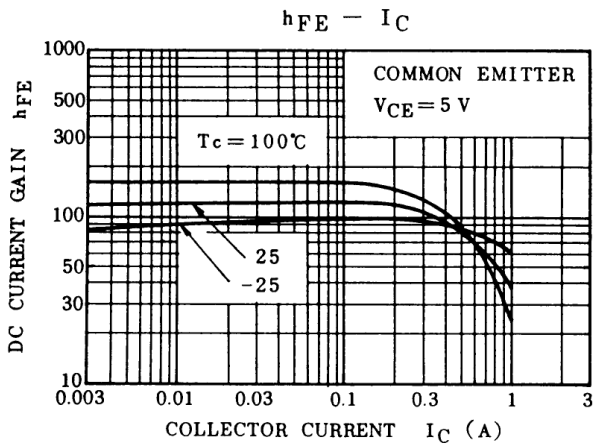
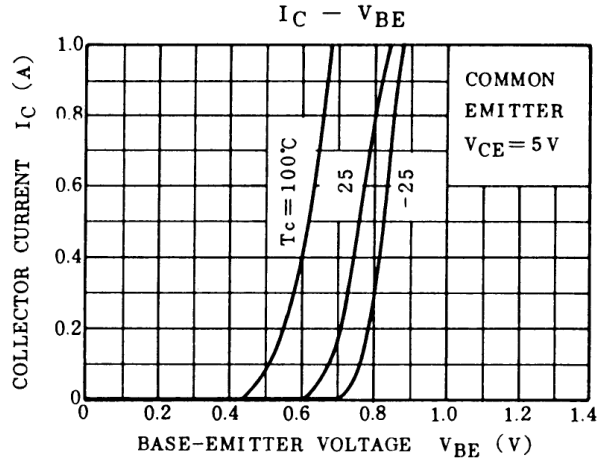
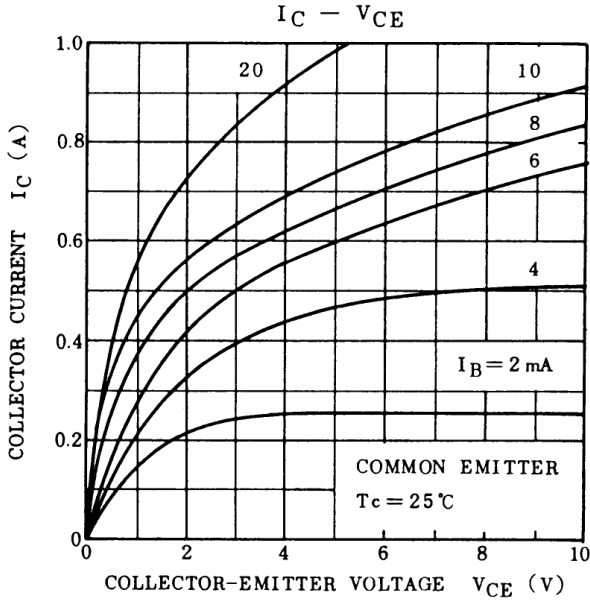
Unit in mm



Weight : 1.7g

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CB0}	$V_{CB} = 230\text{V}, I_E = 0$	—	—	1.0	μA
Emitter Cut-off Current	I_{EB0}	$V_{EB} = 5\text{V}, I_C = 0$	—	—	1.0	μA
Collector-Emmitter Breakdown Voltage	$V_{(BR) CE0}$	$I_C = 10\text{mA}, I_B = 0$	230	—	—	V
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}, I_C = 100\text{mA}$	100	—	320	
Collector-Emmitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 500\text{mA}, I_B = 50\text{mA}$	—	—	1.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 5\text{V}, I_C = 500\text{mA}, f = 1\text{MHz}$	—	—	1.0	μF
Transistion Frequency	f_T	$V_{CE} = 10\text{V}, I_C = 100\text{mA}$	—	100	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_C = 0, f = 1\text{MHz}$	—	20	—	μF



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