

TOSHIBA Transistor Silicon PNP Epitaxial Type

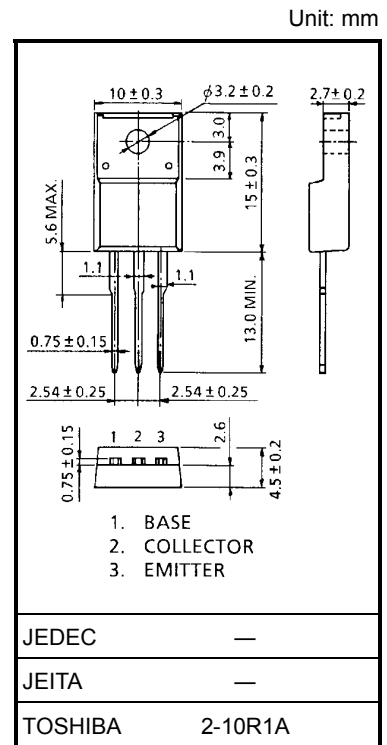
2SA1837

Power Amplifier Applications
Driver Stage Amplifier Applications

- High transition frequency: $f_T = 70$ MHz (typ.)
- Complementary to 2SC4793

Maximum Ratings (Tc = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-230	V
Collector-emitter voltage	V_{CEO}	-230	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-1	A
Base current	I_B	-0.1	A
Collector power dissipation	P_C	Ta = 25°C	2.0
		Tc = 25°C	20
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-55 to 150	°C

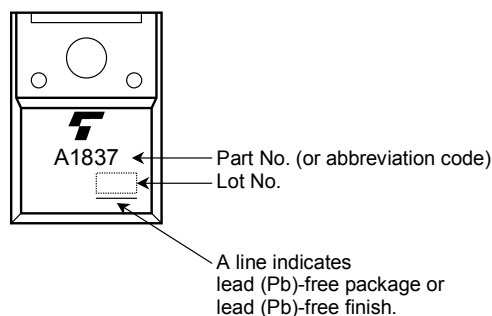


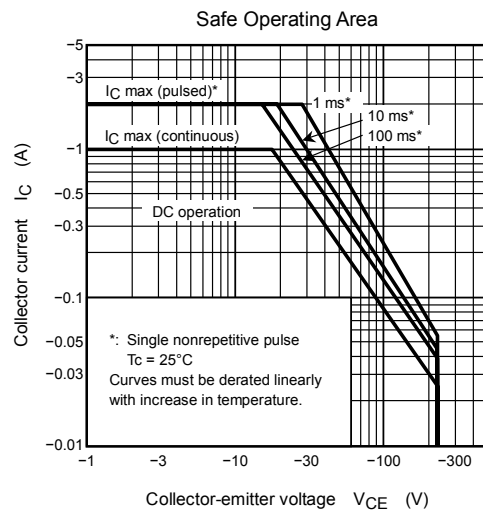
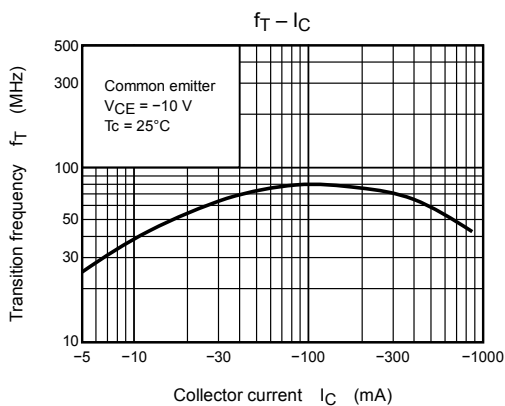
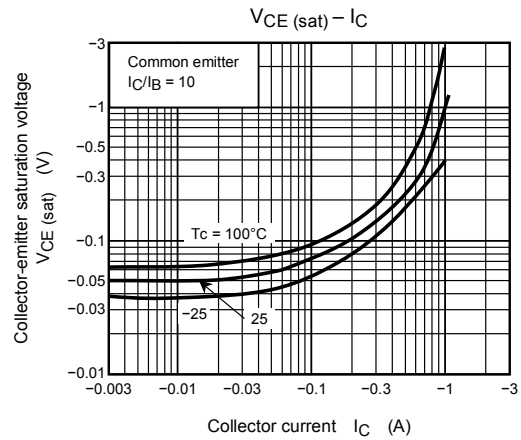
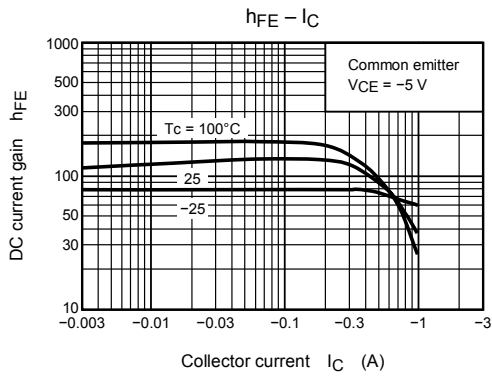
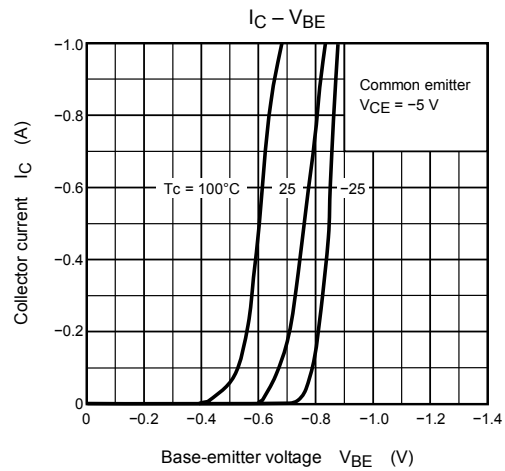
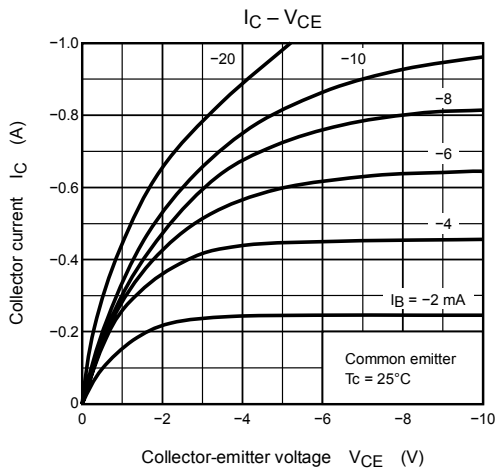
Weight: 1.7 g (typ.)

Electrical Characteristics (Tc = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB} = -230$ V, $I_E = 0$	—	—	-1.0	μ A
Emitter cut-off current	I_{EBO}	$V_{EB} = -5$ V, $I_C = 0$	—	—	-1.0	μ A
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10$ mA, $I_B = 0$	-230	—	—	V
DC current gain	h_{FE}	$V_{CE} = -5$ V, $I_C = -100$ mA	100	—	320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500$ mA, $I_B = -50$ mA	—	—	-1.5	V
Base-emitter voltage	V_{BE}	$V_{CE} = -5$ V, $I_C = -500$ mA	—	—	-1.0	V
Transition frequency	f_T	$V_{CE} = -10$ V, $I_C = -100$ mA	—	70	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10$ V, $I_C = 0$, $f = 1$ MHz	—	30	—	pF

Marking





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