



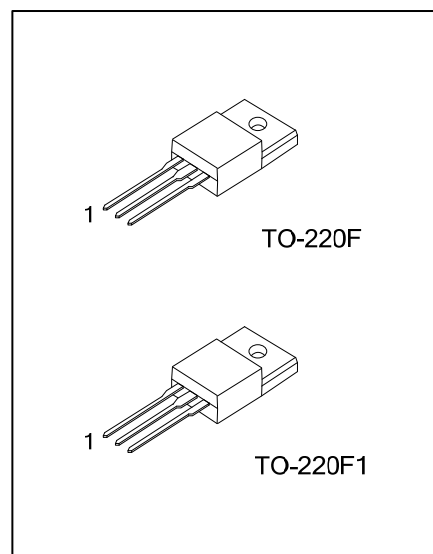
## 2SA1837

### PNP EPITAXIAL SILICON TRANSISTOR

POWER AMPLIFIER  
APPLICATIONS DRIVER  
STAGE AMPLIFIER  
APPLICATIONS

#### ■ FEATURES

- \* High Transition Frequency:  $f_T=70\text{MHz}$  (Typ.)
- \* Complementary to UTC **2SC4793**



#### ■ ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Lead Free	Halogen-Free		1	2	3	
2SA1837L-TF3-T	2SA1837G-TF3-T	TO-220F	B	C	E	Tube
2SA1837L-TF1-T	2SA1837G-TF1-T	TO-220F1	B	C	E	Tube

Note: Pin Assignment: B: Base C: Collector E: Emitter

<p>2SA1837L-TF3-T</p> <ul style="list-style-type: none"><li>(1) Packing Type</li><li>(2) Package Type</li><li>(3) Lead Plating</li></ul>	<p>(1) T: Tube</p> <p>(2) TF3: TO-220F, TF1: TO-220F1</p> <p>(3) L: Lead Free Plating, G: Halogen Free</p>
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■ ABSOLUTE MAXIMUM RATING ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	$V_{CBO}$	-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	$T_A=25^\circ\text{C}$	2	W
	$T_C=25^\circ\text{C}$	20	
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 ~ 150	$^\circ\text{C}$

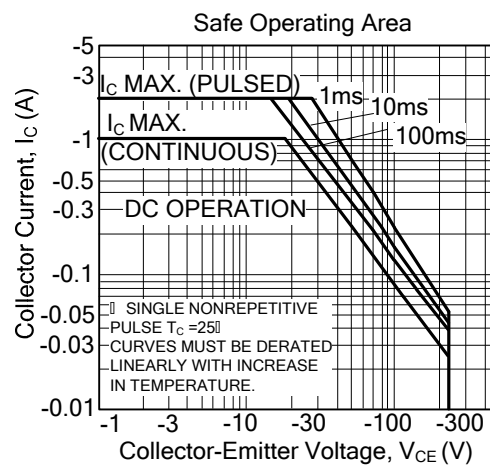
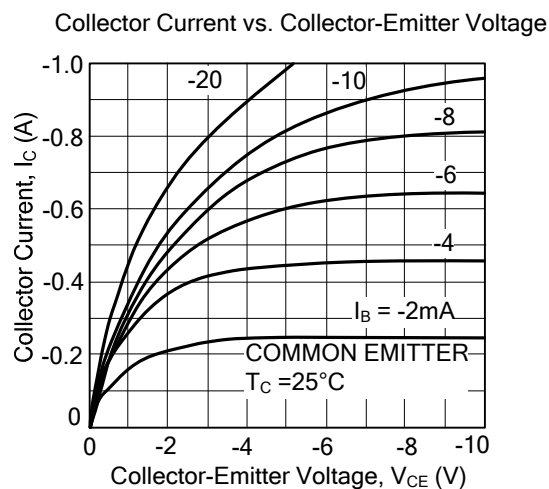
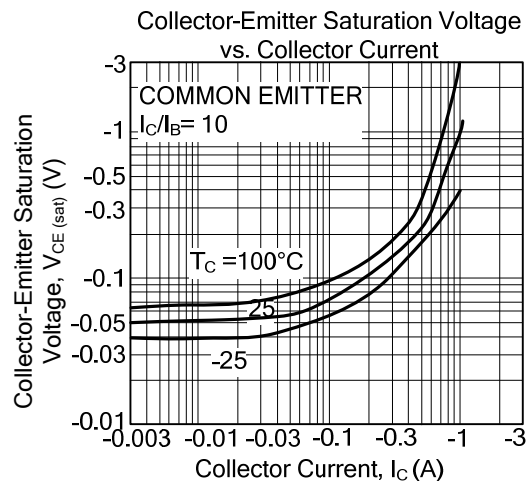
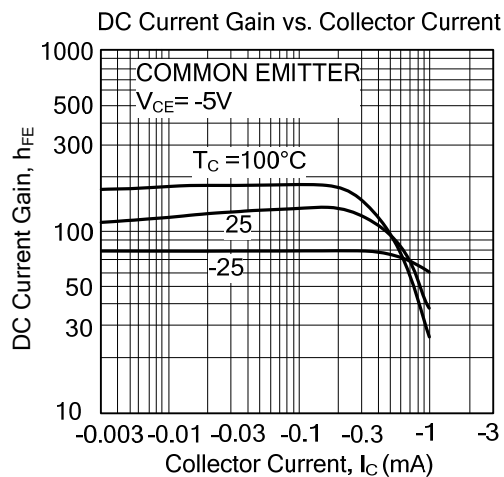
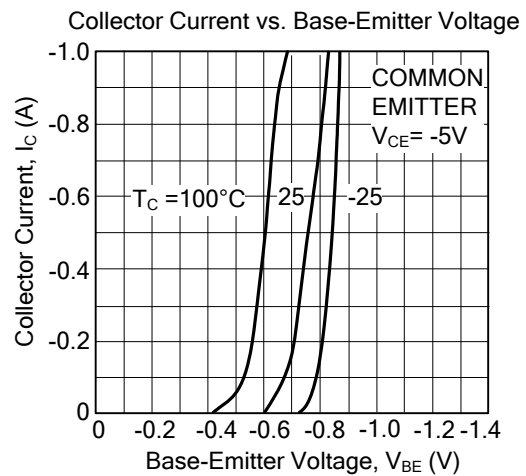
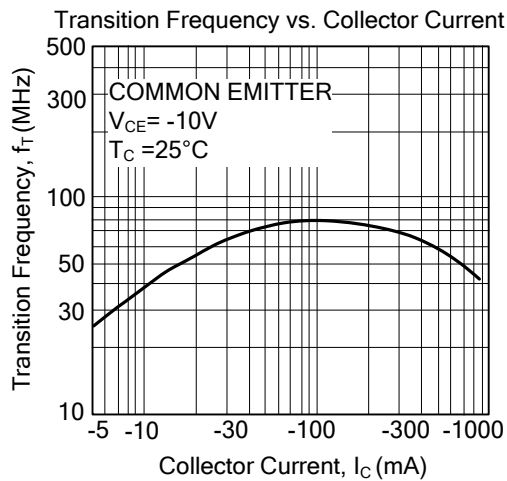
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C = -10\text{mA}$ , $I_B = 0$	-230			V
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -230\text{V}$ , $I_E = 0$			-1.0	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5\text{V}$ , $I_C = 0$			-1.0	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE} = -5\text{V}$ , $I_C = -100\text{mA}$	100		320	
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -500\text{mA}$ , $I_B = -50\text{mA}$			-1.5	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$V_{CE} = -5\text{V}$ , $I_C = -500\text{mA}$			-1.0	V
Transition Frequency	$f_T$	$V_{CE} = -10\text{V}$ , $I_C = -100\text{mA}$		70		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10\text{V}$ , $I_C = 0$ , $f = 1\text{MHz}$		30		pF

■ TYPICAL CHARACTERISTICS



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