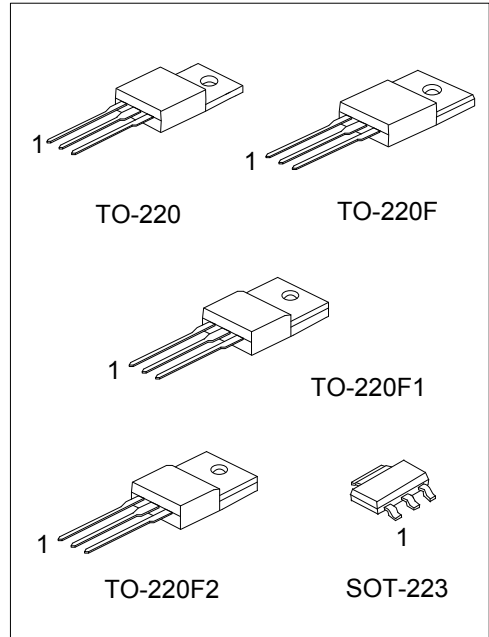




2SA1837

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-AA3-T	2SA1837G-AA3-T	SOT-223	B	C	E	Tape Reel
2SA1837L-TA3-T	2SA1837G-TA3-T	TO-220	B	C	E	Tube
2SA1837L-TF1-T	2SA1837G-TF1-T	TO-220F1	B	C	E	Tube
2SA1837L-TF2-T	2SA1837G-TF2-T	TO-220F2	B	C	E	Tube
2SA1837L-TF3-T	2SA1837G-TF3-T	TO-220F	B	C	E	Tube

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

<p>2SA1837G-AA3-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) T: Tube, R: Tape Reel (2) AA3: SOT-223, TA3: TO-220, TF1: TO-220F1, TF2: TO-220F2, TF3: TO-220F (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING

SOT-223	TO-220 / TO-220F / TO-220F1 / TO-220F2
<p>L: Lead Free G: Halogen Free Data Code Lot Code</p>	<p>UTC L: Lead Free G: Halogen Free Data Code Lot Code</p>

■ 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	$T_A=25^\circ\text{C}$	SOT-223	1	W	
		TO-220 TO-220F TO-220F1 TO-220F2	2	W	
	$T_C=25^\circ\text{C}$	SOT-223	15	W	
		TO-220 TO-220F TO-220F1 TO-220F2	20	W	
		P_C			
		P_C			
Junction Temperature		T_J	+150	$^\circ\text{C}$	
Storage Temperature Range		T_{STG}	-55 ~ +150	$^\circ\text{C}$	

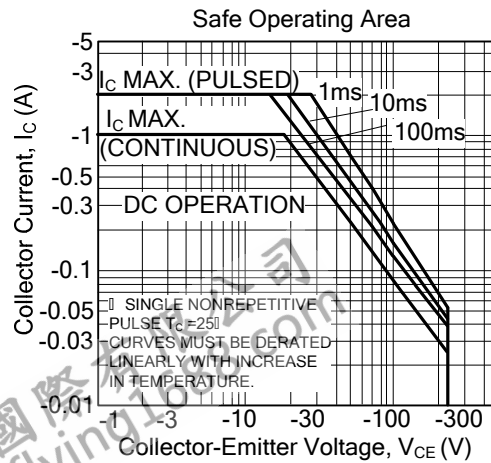
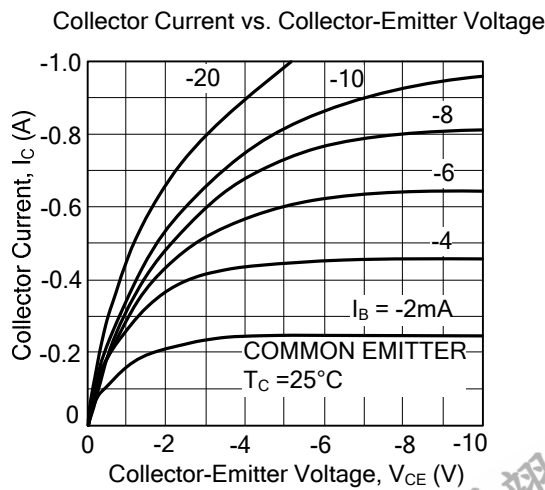
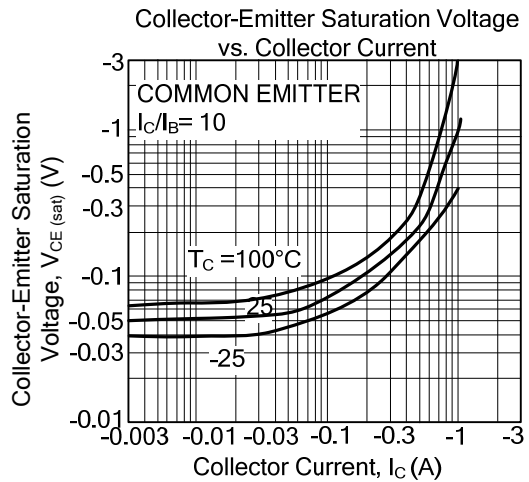
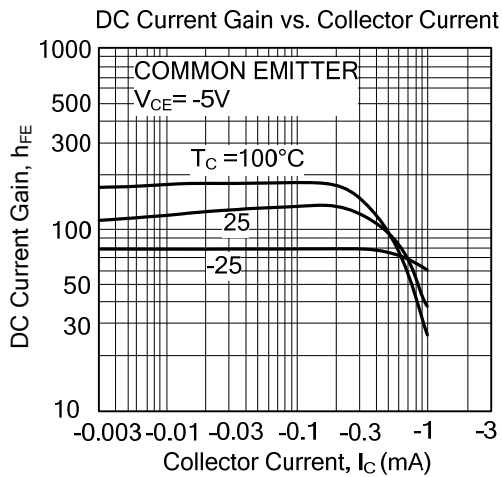
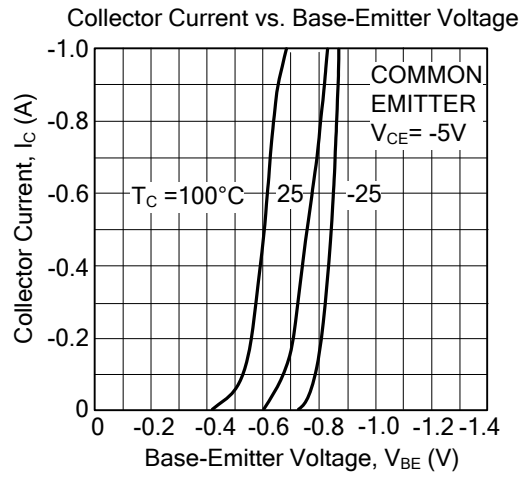
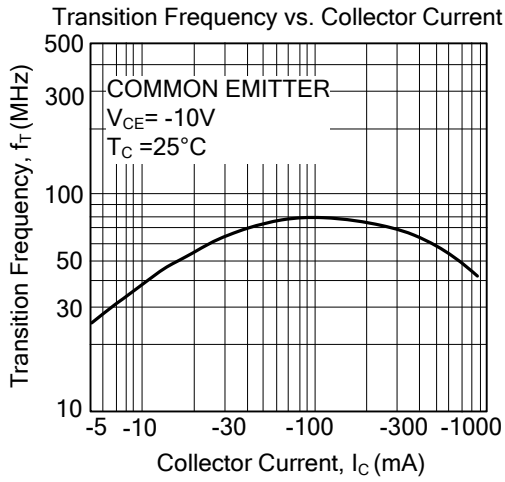
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

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	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5\text{V}$, $I_C = 0$			-1.0	μA
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 Voltage	V_{BE}	$V_{CE} = -5\text{V}$, $I_C = -500\text{mA}$			-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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