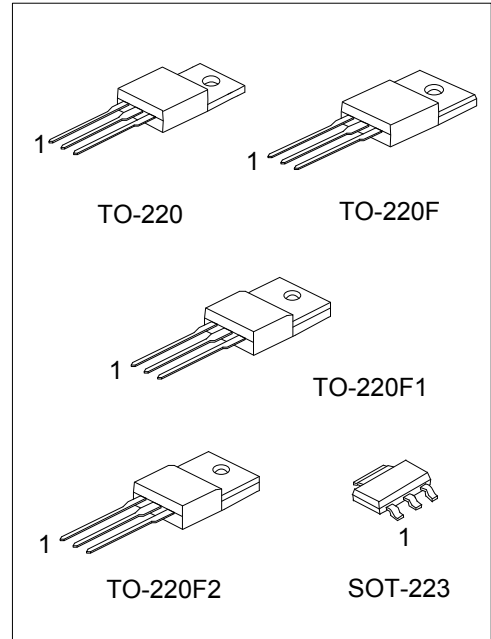




2SA1837

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>2SA1837 □ □ □ □ □ □ □ □ □ 1</p> <p>L: Lead Free G: Halogen Free Data Code</p>	<p>UTC 2SA1837 □ □ □ □ □ □ □ □ □ Lot Code ← 1 → Data Code</p> <p>L: Lead Free G: Halogen Free Data Code</p>

■ ABSOLUTE MAXIMUM RATING ($T_A=25^\circ\text{C}$, unless otherwise specified)

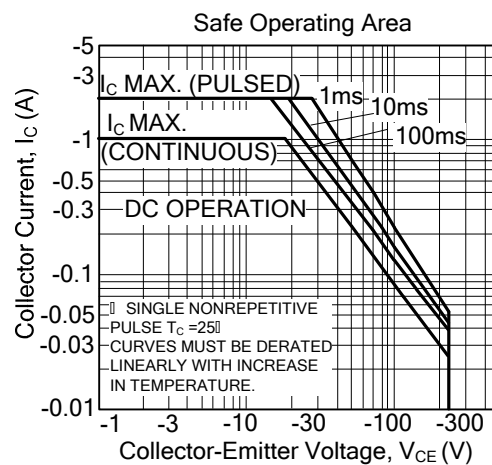
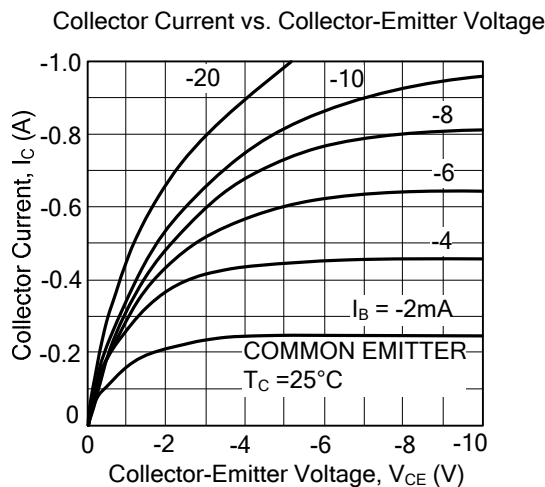
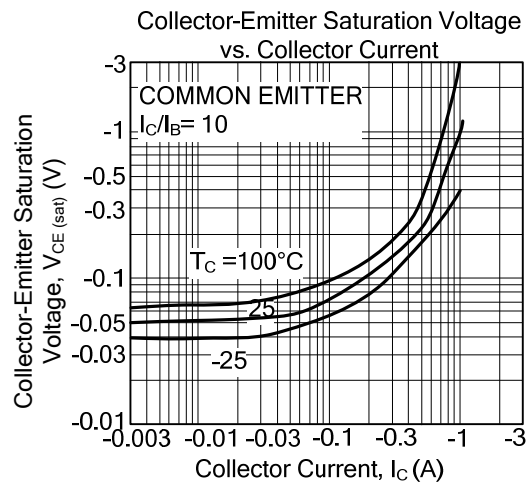
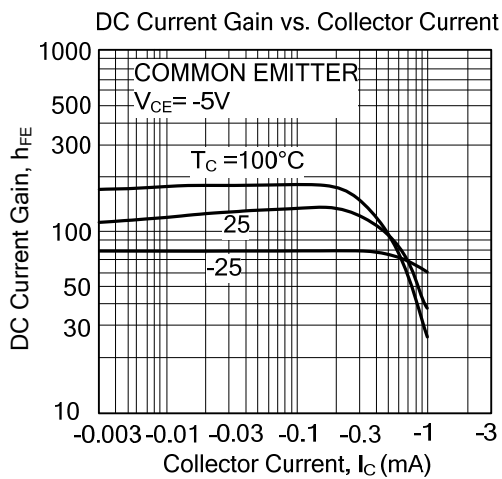
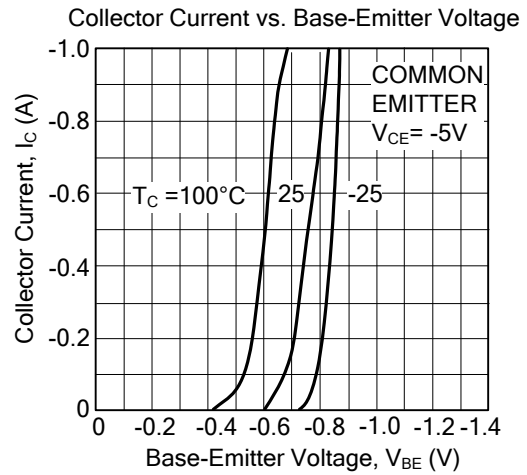
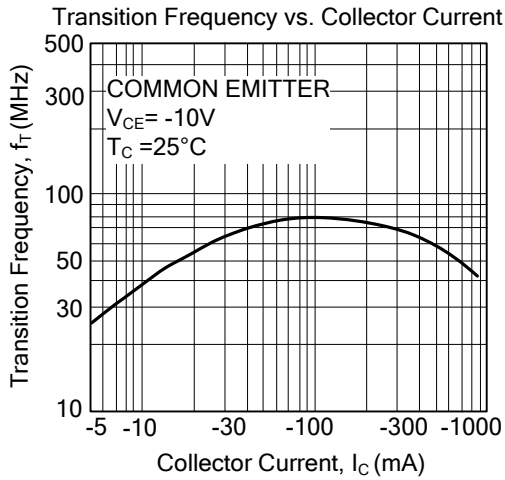
PARAMETER		SYMBOL	RATINGS	UNIT	
Collector-Base Voltage		V_{CBO}	-230	V	
Collector-Emitter Voltage		V_{CEO}	-230	V	
Emitter-Base Voltage		V_{EBO}	-5	V	
Collector Current		I_C	-1	A	
Base Current		I_B	-0.1	A	
Collector Power Dissipation	$T_A=25^\circ\text{C}$	SOT-223	1	W	
		TO-220 TO-220F TO-220F1 TO-220F2	2	W	
	$T_C=25^\circ\text{C}$	SOT-223	15	W	
		TO-220 TO-220F TO-220F1 TO-220F2	20	W	
		P_C			
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



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.