

SANYO	No.4135	2SA1855/2SC4837
	PNP/NPN Epitaxial Planar Silicon Transistors	
50V/4A Switing Applications		

Applications

- Power supplies, relay drivers, lamp drivers.

Features

- Adoption of FBET and MBIT processes.
- Large allowable collector dissipation.
- Low saturation voltage.
- Wide ASO and large current capacity.
- Usage of radial taping to meet automatic mounting.

() : 2SA1855

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector-to-Base Voltage	V _{CB0}	(-)60	V
Collector-to-Emitter Voltage	V _{CEO}	(-)50	V
Emitter-to-Base Voltage	V _{EBO}	(-)6	V
Collector Current	I _C	(-)4	A
Collector Current (Pulse)	I _{CP}	(-)6	A
Collector Dissipation	P _C	1.5	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

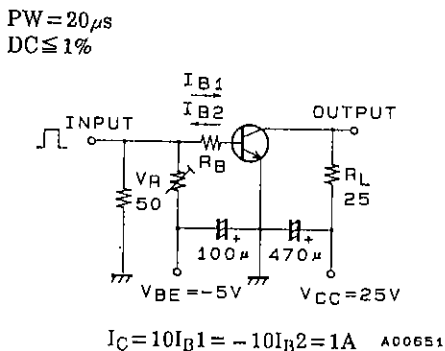
			min	typ	max	unit
Collector Cutoff Current	I _{CBO}	V _{CB} = (-)40V, I _E = 0			(-)1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} = (-)4V, I _C = 0			(-)1	μA
DC Current Gain	h _{FE} (1)	V _{CE} = (-)2V, I _C = (-)100mA	100※		400※	
			h _{FE} (2)	40		
Gain Bandwidth Product	f _T	V _{CE} = (-)10V, I _C = (-)50mA		150		MHz
Output Capacitance	C _{ob}	V _{CB} = (-)10V, f = 1MHz		(39)25		pF

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※ : The 2SA1855/2SC4837 are classified by 100mA h_{FE} as follows :

100 R 200	140 S 280	200 T 400
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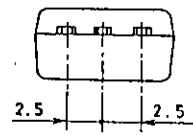
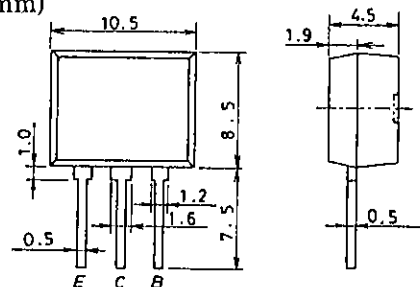
Switching Time Test Circuit



Unit (Resistance : Ω, Capacitance : F)

Package Dimensions 2084

(unit : mm)



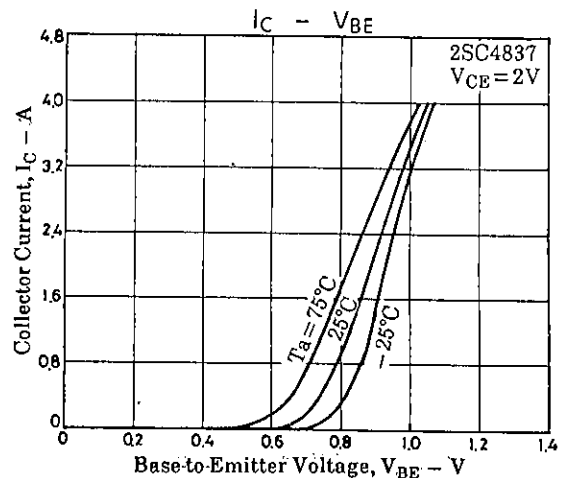
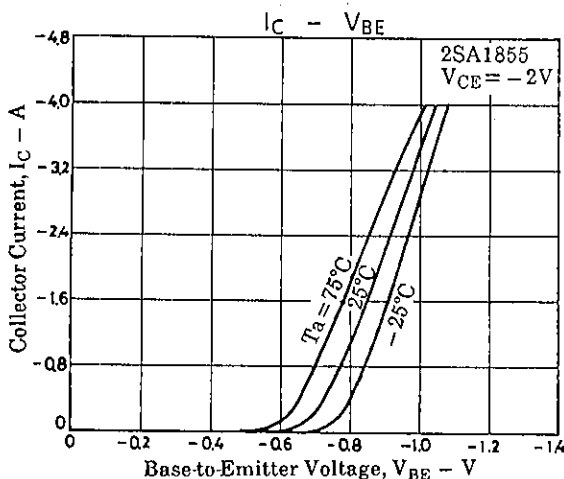
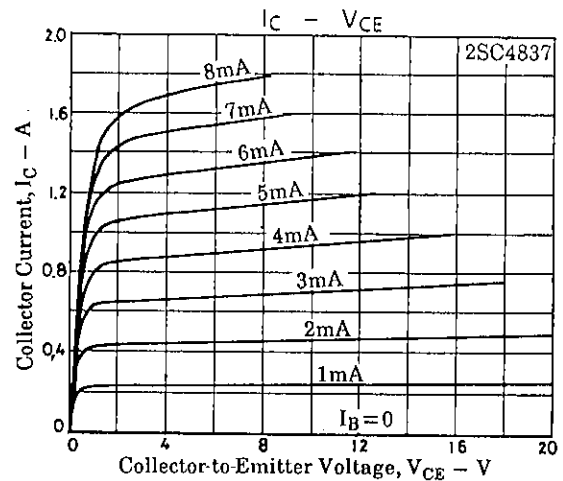
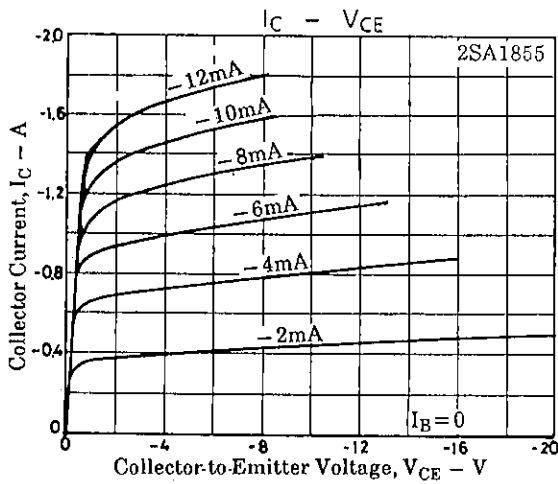
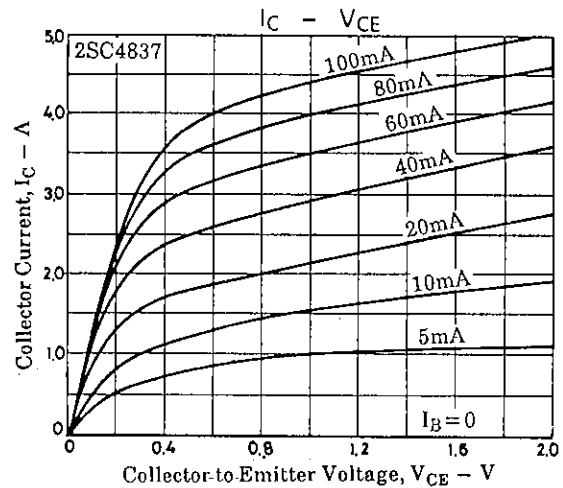
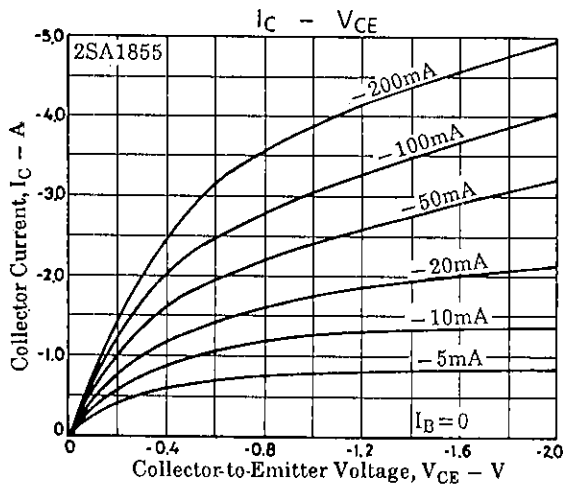
E : Emitter
C : Collector
B : Base

SANYO : FLP

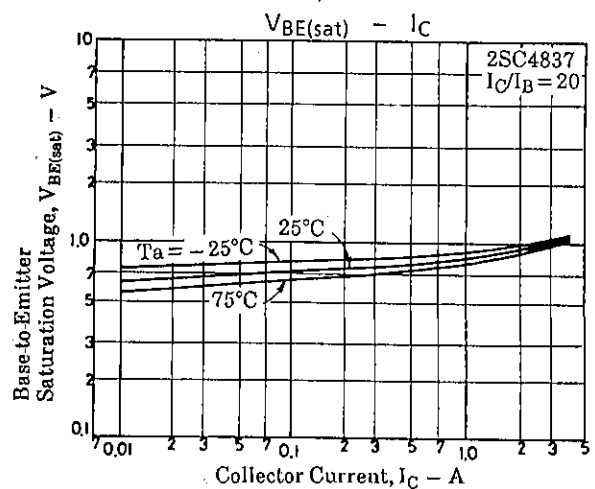
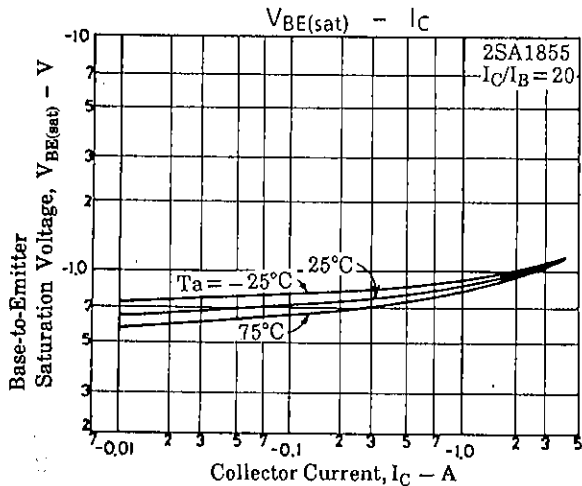
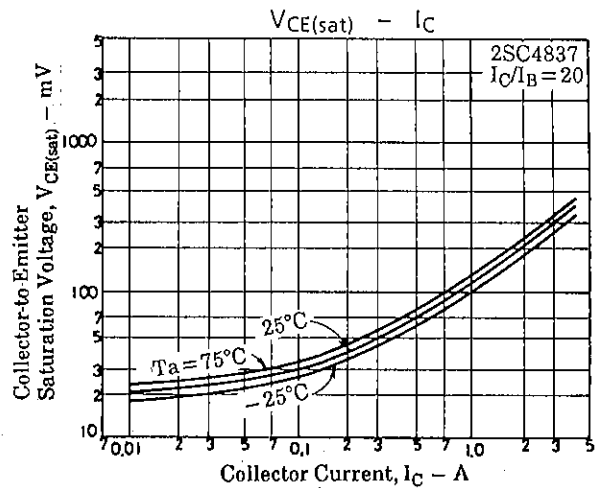
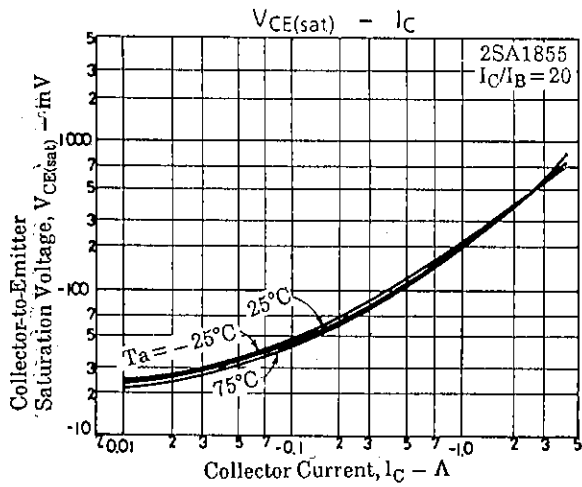
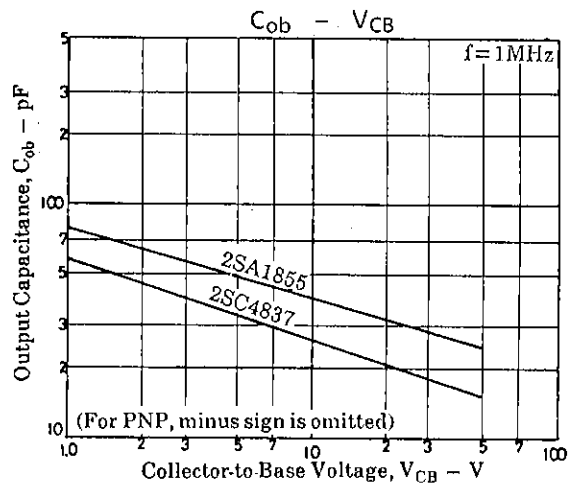
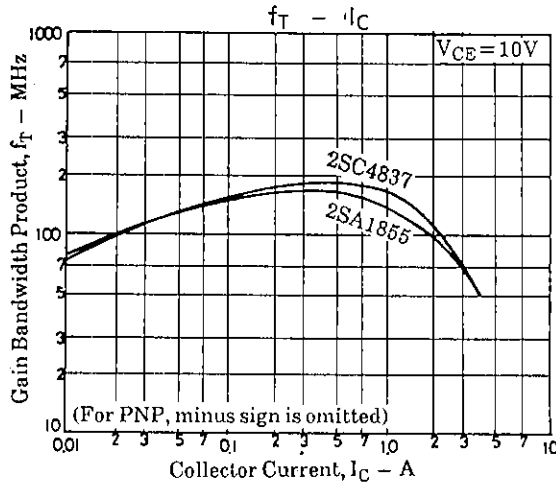
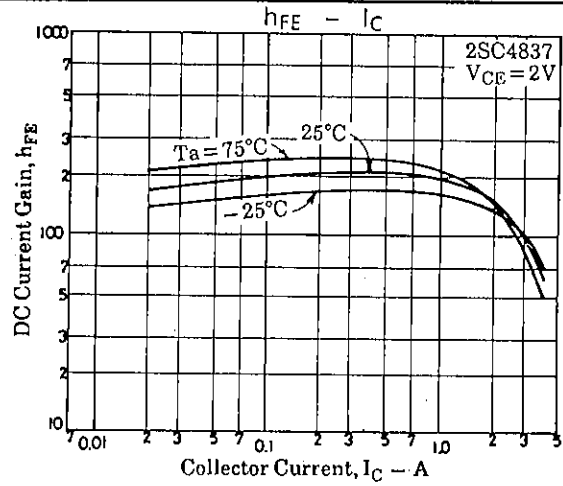
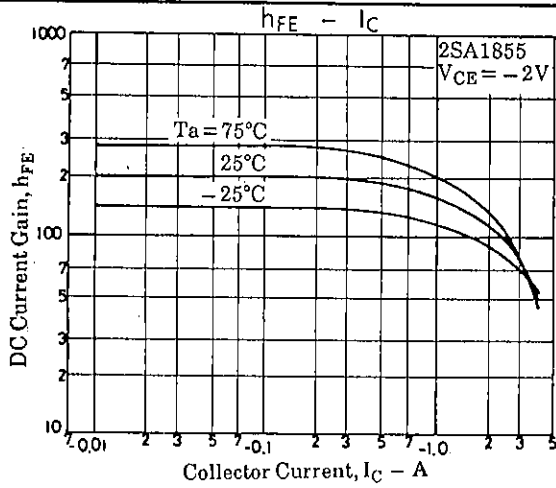
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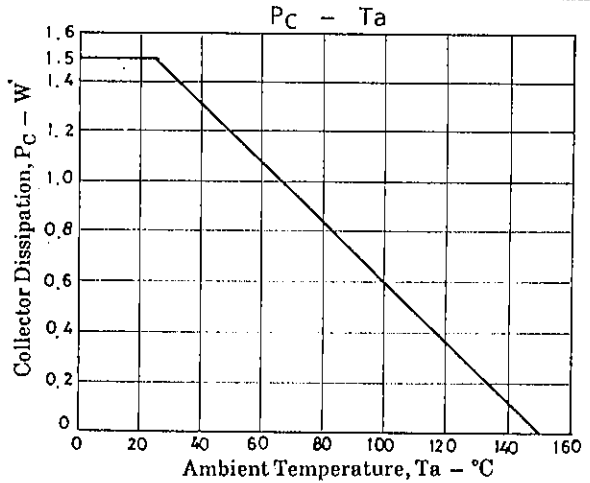
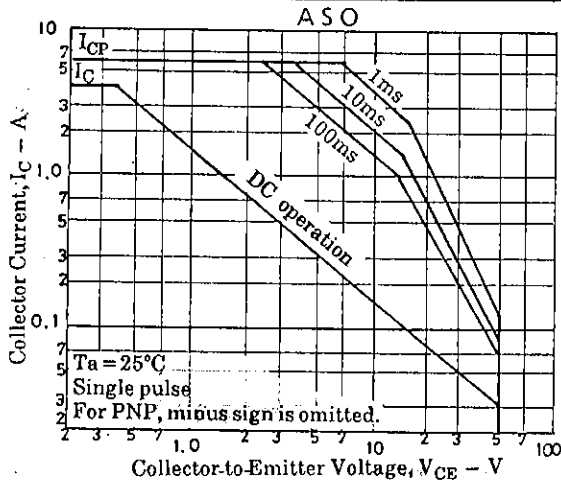
			min	typ	max	unit
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)2A, I_B = (-)100mA$	(-350)	(-700)		mV
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)2A, I_B = (-)100mA$	(-)0.94	(-)1.2		V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	(-)60			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1mA, R_{BE} = \infty$	(-)50			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	(-)6			V
Turn ON Time	t_{on}	See specified Test Circuit.		70		ns
Storage Time	t_{stg}	"	(450)650			ns
Fall Time	t_f	"	(30)35			ns



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