

SANYO	No.4718A	2SA1896
		PNP Epitaxial Planar Silicon Transistor DC/DC Converter, Motor Driver Applications

Features

- Adoption of FBET and MBIT processes.
- Large current capacity.
- Low collector-to-emitter saturation voltage.
- Small size making it easy to provide high-density, small-sized hybrid ICs.

Absolute Maximum Ratings at Ta = 25°C

Collector-to-Base Voltage	V_{CB0}		-25	V
Collector-to-Emitter Voltage	V_{CE0}		-20	V
Emitter-to-Base Voltage	V_{EBO}		-7	V
Collector Current	I_C		-2.5	A
Collector Current (Pulse)	I_{CP}		-5	A
Collector Dissipation	P_C	Mounted on ceramic board (250mm ² × 0.8mm)	1.3	W
Junction Temperature	T_j		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

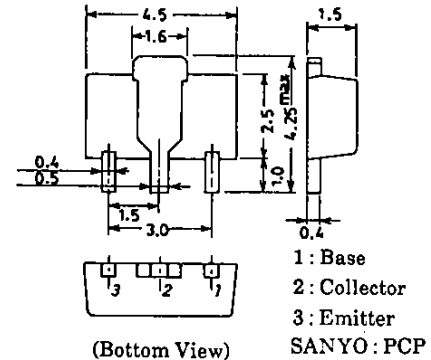
			min	typ		max	
Collector Cutoff Current	I_{CBO}	$V_{CB} = -20V, I_E = 0$				-100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -6V, I_C = 0$				-100	nA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -2V, I_C = -0.5A$	140*			400*	
	$h_{FE(2)}$	$V_{CE} = -2V, I_C = -2.5A$	70				
Gain-Bandwidth Product	f_T	$V_{CE} = -2V, I_C = -0.3A$		400			MHz
Output Capacitance	C_{ob}	$V_{CB} = -10V, f = 1MHz$		26			pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -1.5A, I_B = -30mA$	-220		-400		mV
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = -1.5A, I_B = -30mA$	-0.9		-1.2		V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-25				V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1mA, R_{BE} = \infty$	-20				V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-7				V

* The 2SA1896 is classified by 0.5A h_{FE} as follows:

140 S 280	200 T 400
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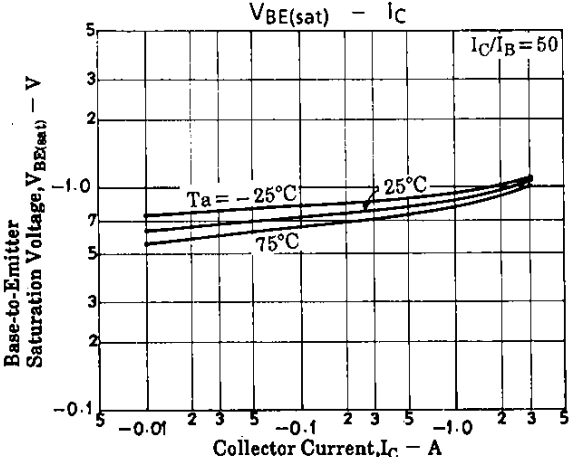
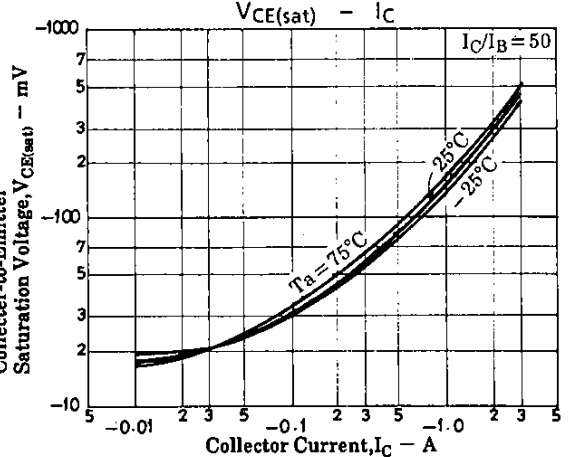
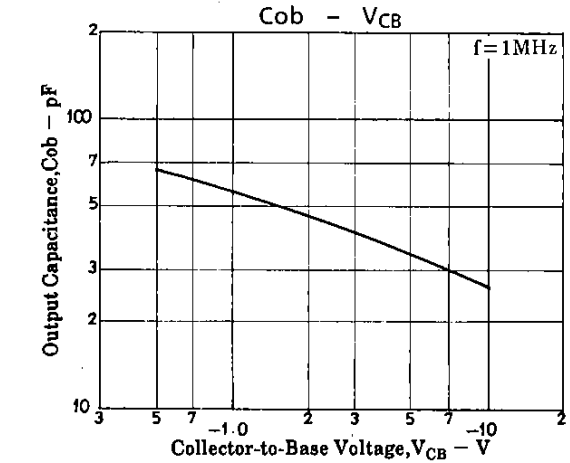
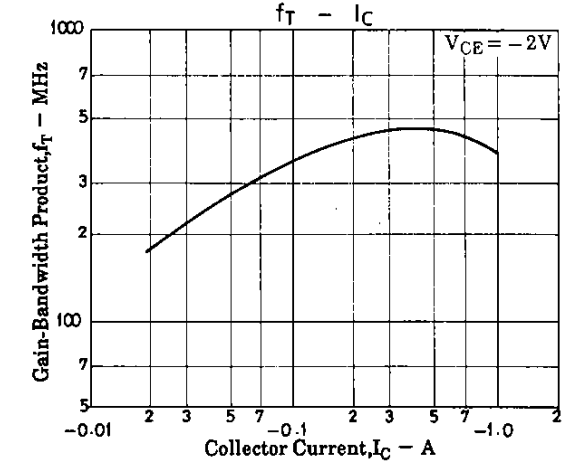
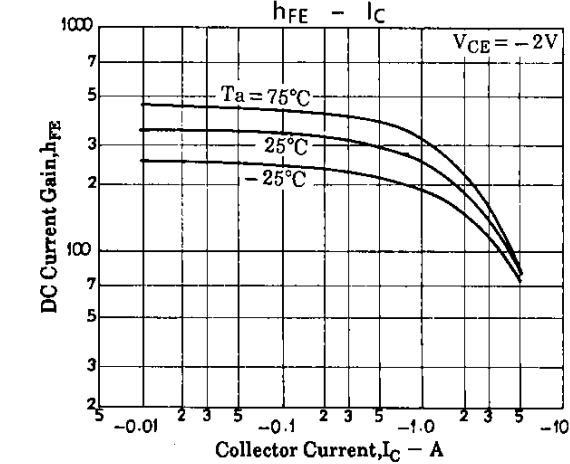
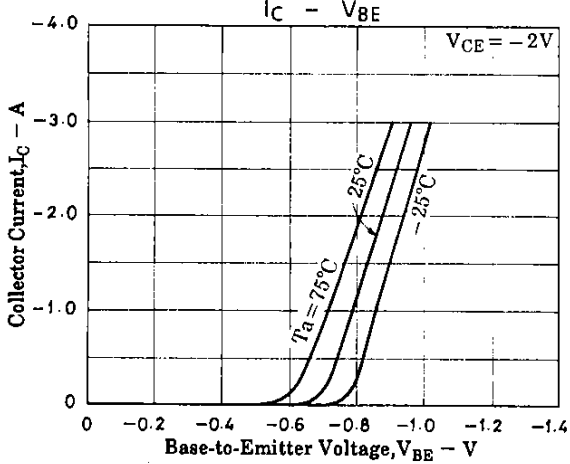
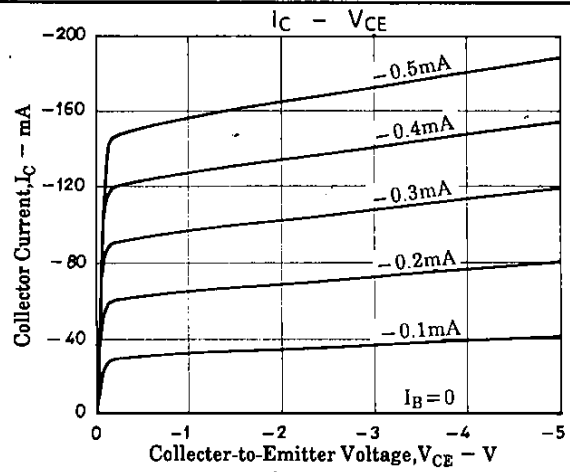
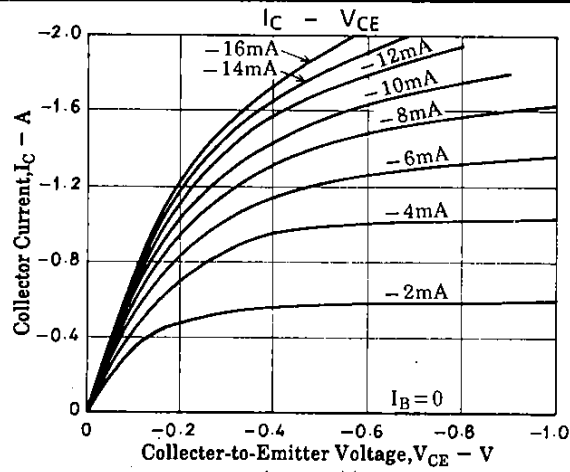
Marking : AM
 h_{FE} rank : S, T

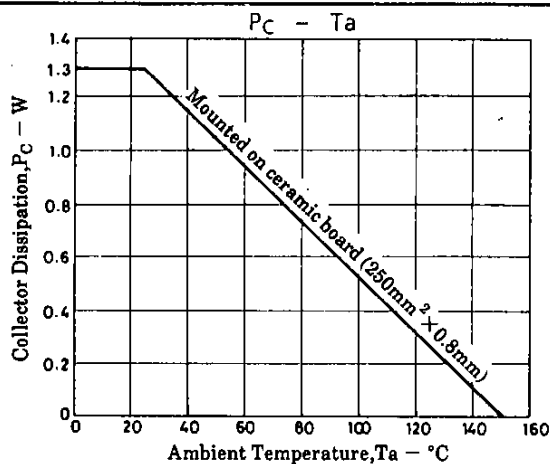
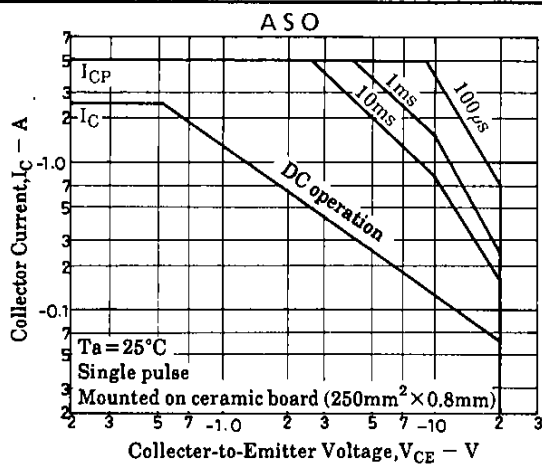
Package Dimensions 2038A
(unit : mm)



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