

SANYO	No. 677D	2SB816/2SD1046
Silicon PNP/NPN Planar Type Transistor FOR LF POWER AMP, 50W OUTPUT, LARGE POWER SWITCHING		

Features

- Capable of being mounted easily because of one-point fixing type plastic molded package (Interchangeable with TO-3)
- Wide ASO because of built-in ballast resistance
- Good dependence of f_T on current and good HF characteristic

(): 2SB816

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

			unit
Collector-to-Base Voltage	V _{CB0}	(-)150	V
Collector-to-Emitter Voltage	V _{CE0}	(-)120	V
Emitter-to-Base Voltage	V _{EBO}	(-)6	V
Collector Current	I _C	(-)8	A
Peak Collector Current	i _{cp}	(-)12	A
Collector Dissipation	P _C	T _c =25°C	80 W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-40 to +150	°C

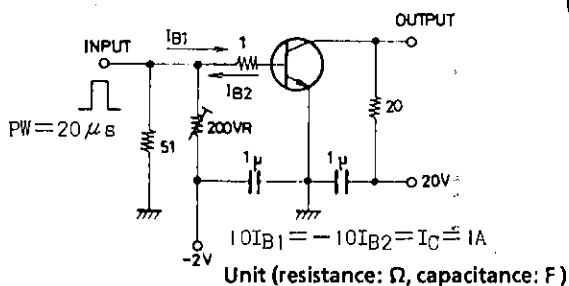
Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} =(-)80V, I _E =0			(-)0.1	mA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)4V, I _C =0			(-)0.1	mA
DC Current Gain	h _{FE} (1)	V _{CE} =(-)5V, I _C =(-)1A	60*		200*	
	h _{FE} (2)	V _{CE} =(-)5V, I _C =(-)5A	20			
Gain Bandwidth Product	f _T	V _{CE} =(-)5V, I _C =(-)1A		15		MHz
Output Capacitance	c _{ob}	V _{CB} =(-)10V, f=1MHz		(220)		pF
				160		
Base to Emitter Voltage	V _{BE}	V _{CE} =(-)5V, I _C =(-)1A			1.5	V
Collector to Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)5A, I _B =(-)0.5A		1.0	2.0	V
C-B Breakdown Voltage	V(BR)CBO	I _C =(-)5mA, I _E =0	(-)150			V
C-E Breakdown Voltage	V(BR)CEO	I _C =(-)5mA, R _{BE} =∞	(-)120			V
		I _C =(-)50mA, R _{BE} =∞	(-)120			V
E-B Breakdown Voltage	V(BR)EBO	I _E =(-)5mA, I _C =0	(-)6			V
Turn-on Time	t _{on}	At specified	(0.22)	0.22		μs
Fall Time	t _f	test circuit	(0.37)	1.02		μs
Storage Time	t _{stg}		(0.93)	6.66		μs

* The 2SB816/2SD1046 are classified by 1A h_{FE} as follows:

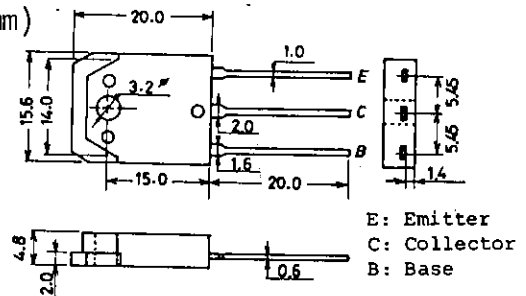
60	D	120	100	E	200
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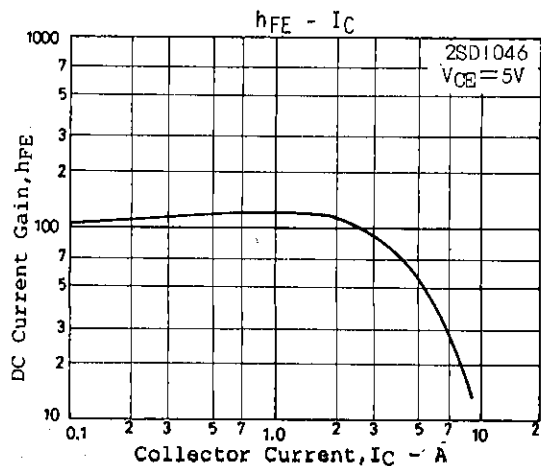
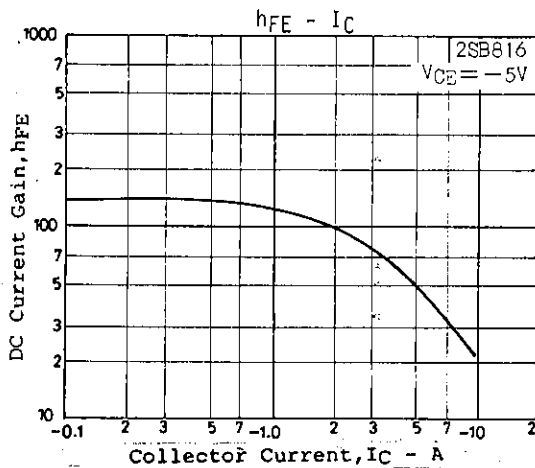
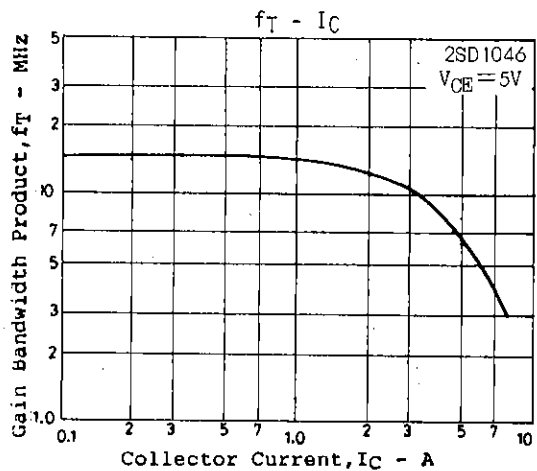
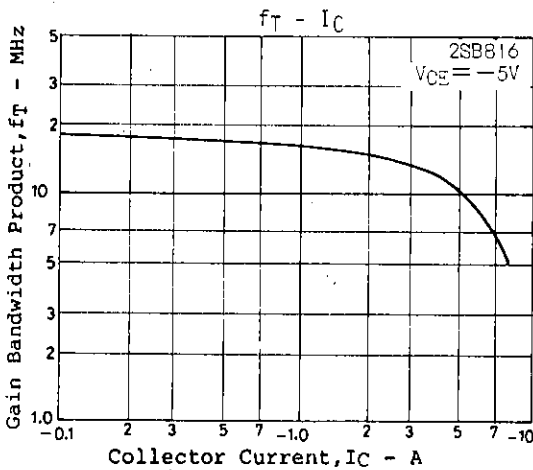
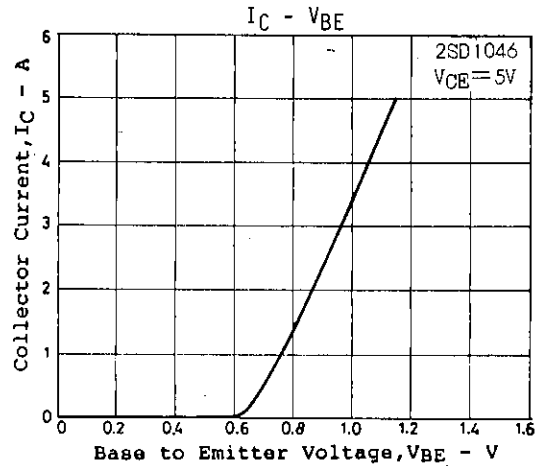
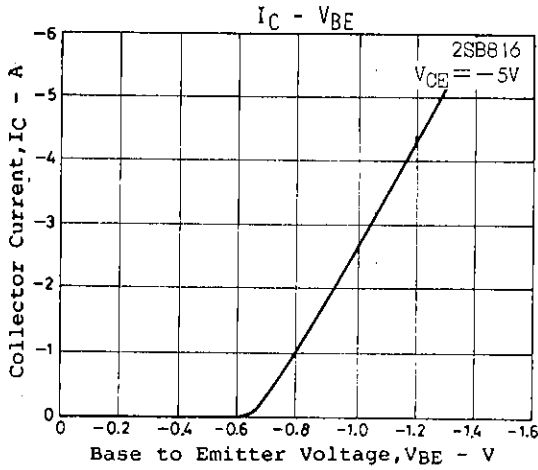
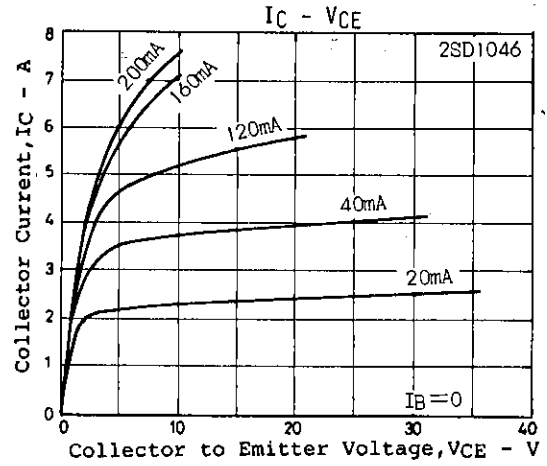
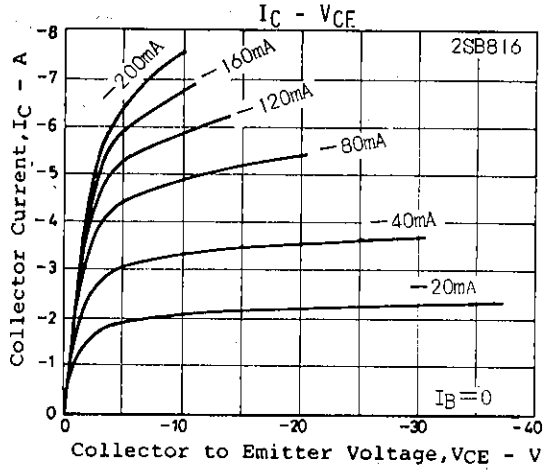
Switching Time Test Circuit



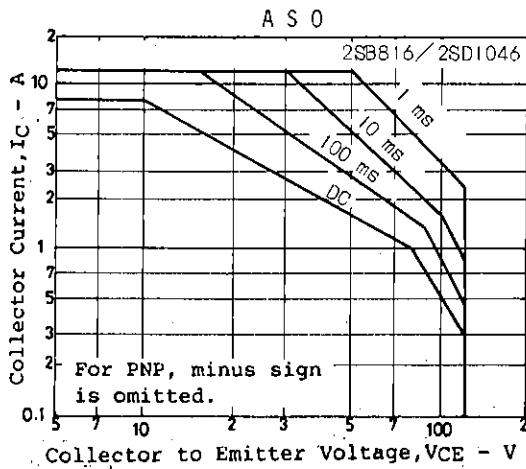
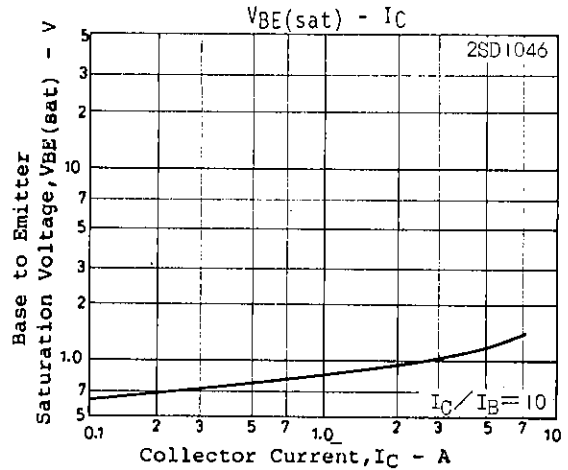
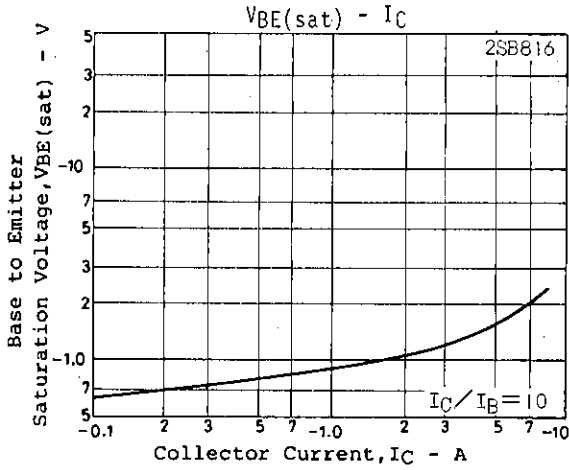
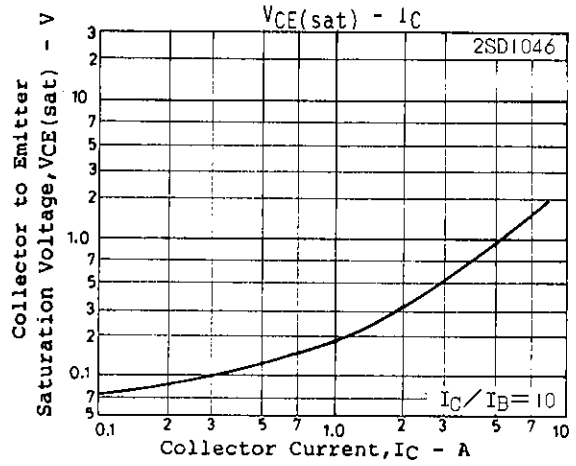
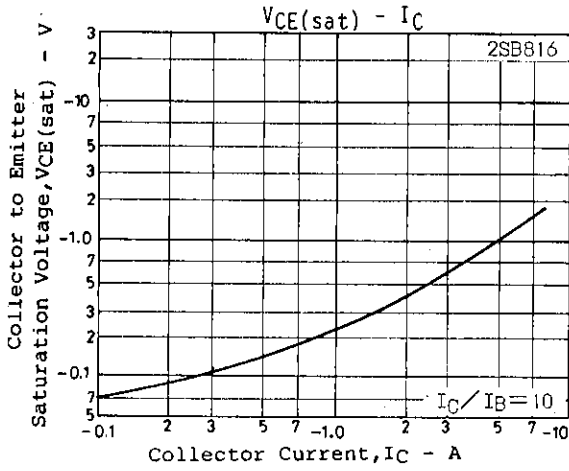
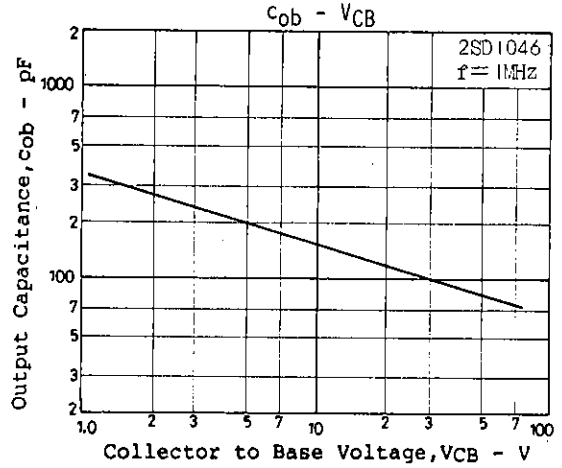
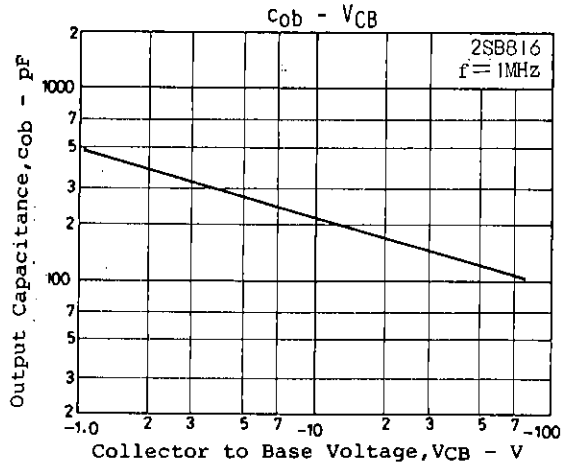
Package Dimensions 2022

(unit: mm)





2SB816/2SD1046



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