



SANYO Semiconductors

DATA SHEET

2SB544 / 2SD400

PNP / NPN Epitaxial Planar Silicon Transistors

Low-Frequency Power Amplifier
Electronic Governor Applications

Specifications () : 2SB544

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CB0}		(-)25	V
Collector-to-Emitter Voltage	V _{CEO}		(-)25	V
Emitter-to-Base Voltage	V _{EBO}		(-)5	V
Collector Current	I _C		(-)1	A
Collector Current (Pulse)	I _{CP}		(-)2	A
Collector Dissipation	P _C		900	mW
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I _{CBO}	V _{CB} =(-)20V, I _E =0A			(-)1.0	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)4V, I _C =0A			(-)1.0	μA
DC Current Gain	h _{FE1}	V _{CE} =(-)2V, I _C =(-)50mA	60*		560*	
	h _{FE2}	V _{CE} =(-)2V, I _C =(-)1A	30			
Gain-Bandwidth Product	f _T	V _{CE} =(-)10V, I _C =(-)50mA		180		MHz
Output Capacitance	C _{ob}	V _{CB} =(-)10V, f=1MHz		(25)15		pF
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)500mA, I _B =(-)50mA		(-0.15) 0.1	(-0.7) 0.3	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =(-)500mA, I _B =(-)50mA		(-)0.85	(-)1.2	V
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =(-)10μA, I _E =0A	(-)25			V
Collector-to-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =(-)1mA, R _{BE} =∞	(-)25			V
Emitter-to-Base Breakdown Voltage	V _{(BR)EBO}	I _E =(-)10μA, I _C =0A	(-)5			V

* : The 2SB544 / 2SD400 is classified by h_{FE} at 50mA as follows.

Rank	D	E	F	G
h _{FE}	60 to 120	100 to 200	160 to 320	280 to 560

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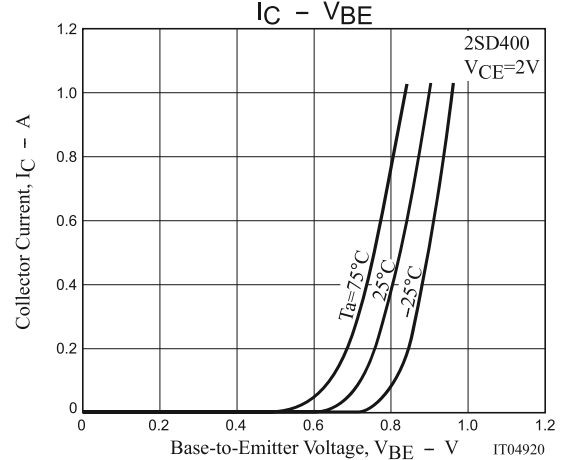
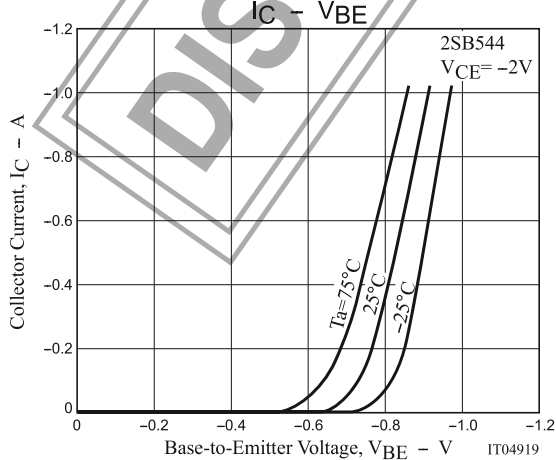
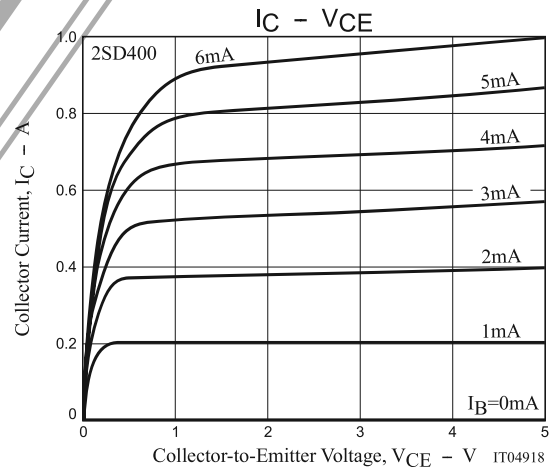
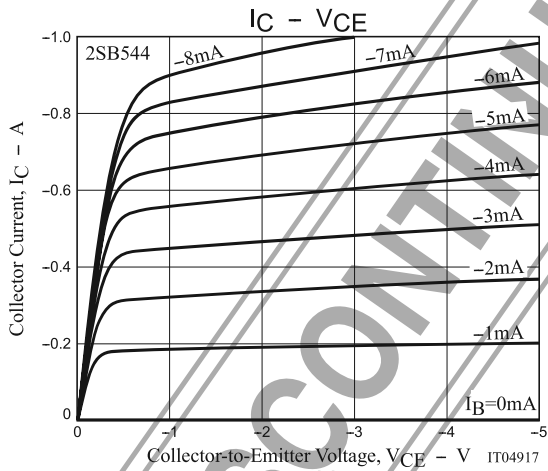
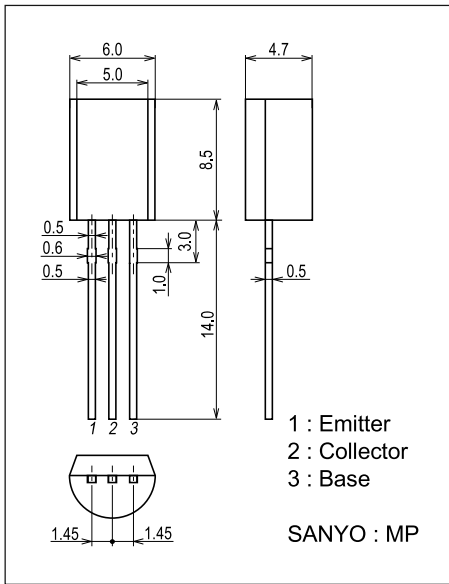
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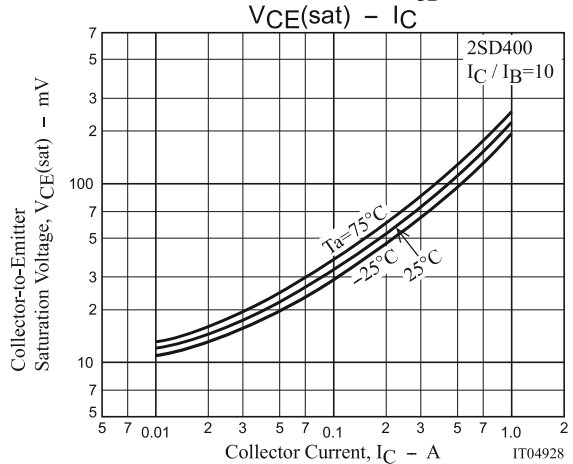
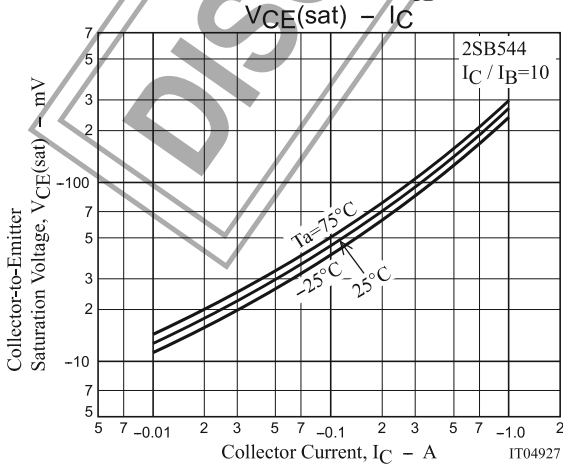
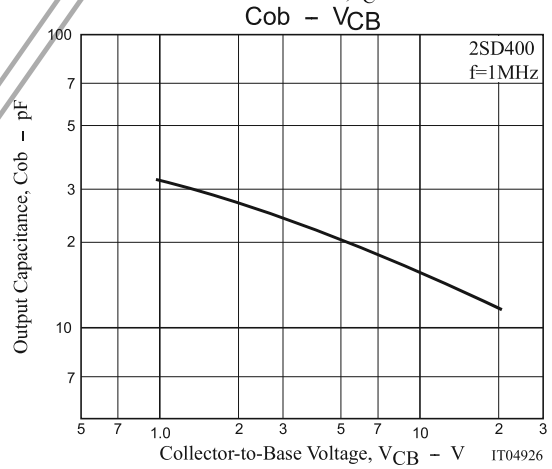
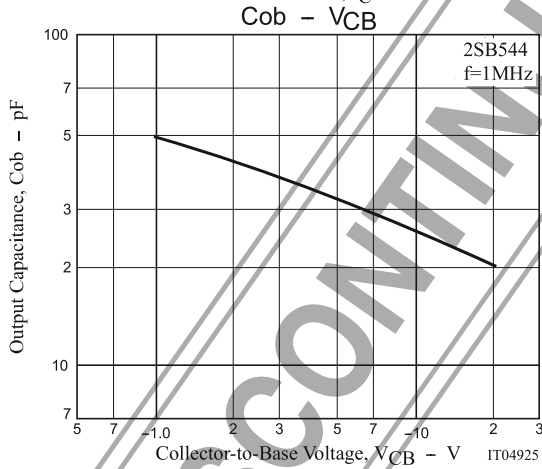
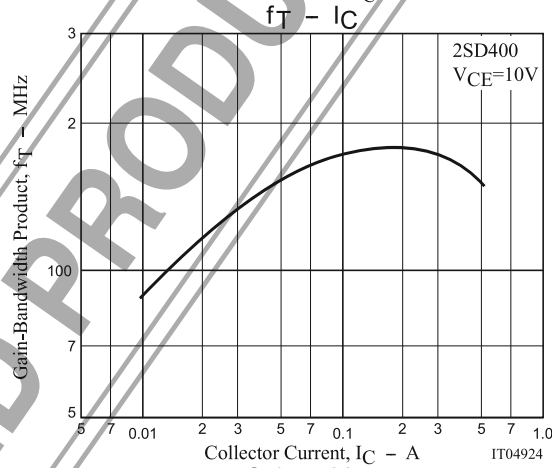
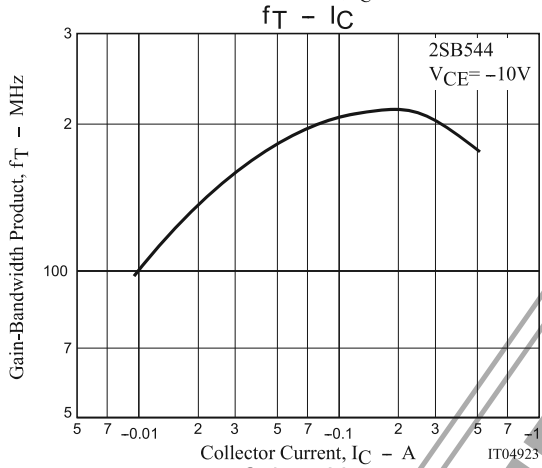
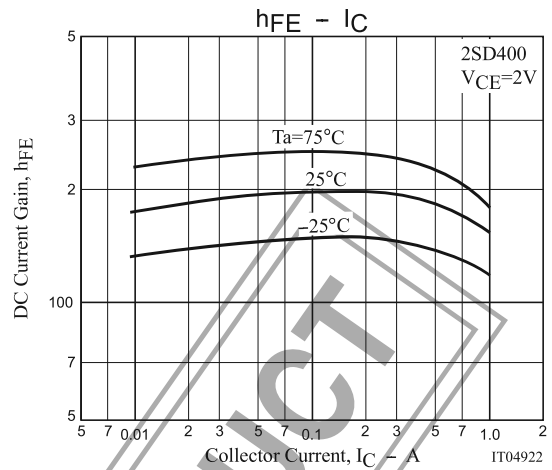
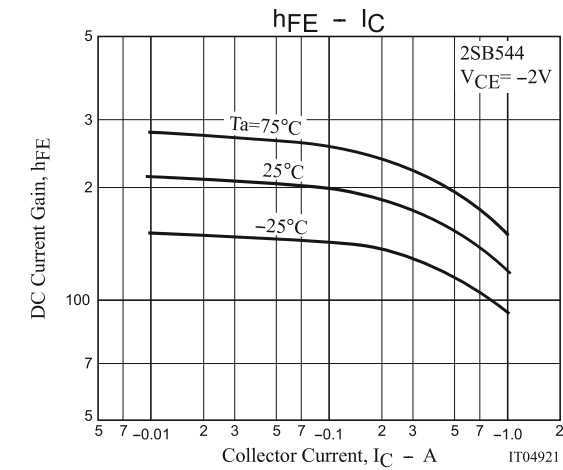
Package Dimensions

unit : mm (typ)

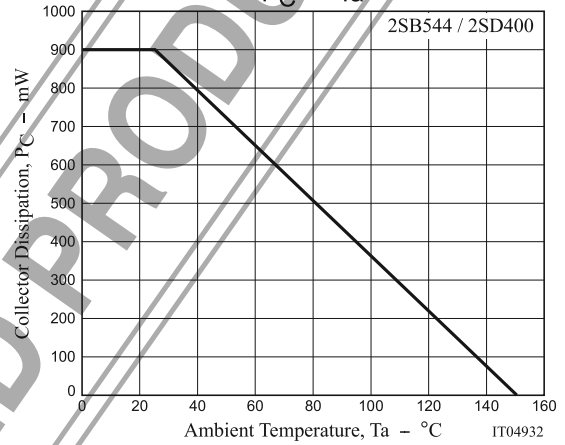
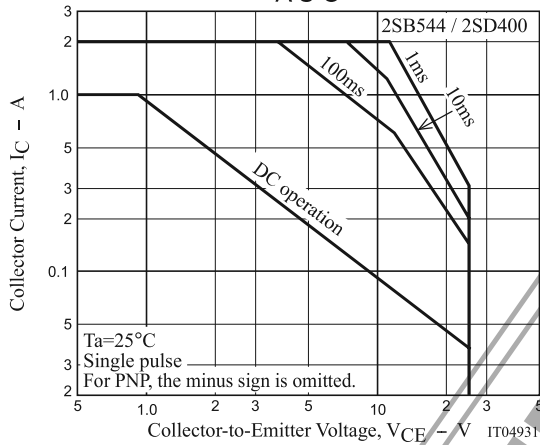
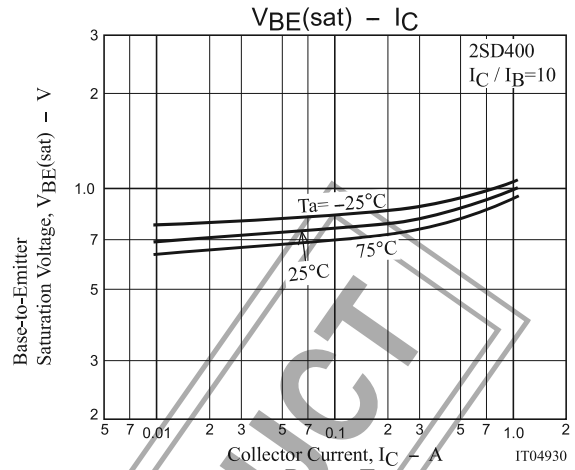
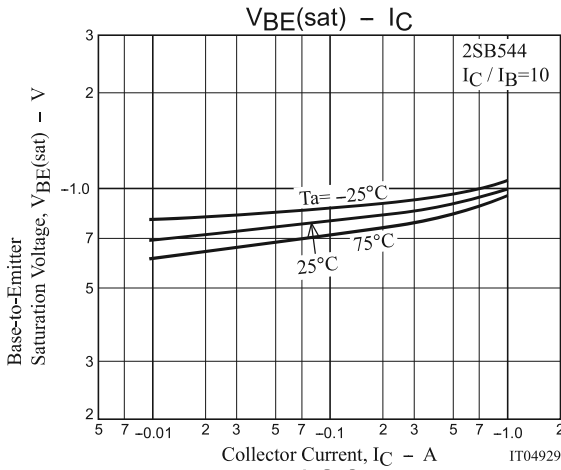
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