



No.512F

2SB698/2SD734

PNP/NPN Epitaxial Planar Silicon Transistors
**1W AF Output, Electronic Governor,
 DC-DC Converter Applications**

() : 2SB698 for audio 1W output.

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

			unit
Collector to Base Voltage	V_{CB0}	(-)25	V
Collector to Emitter Voltage	V_{CE0}	(-)20	V
Emitter to Base Voltage	V_{EB0}	(-)5	V
Collector Current	I_C	(-)0.7	A
Collector Current(Pulse)	I_{CP}	(-)1.5	A
Collector Dissipation	P_C	0.6	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

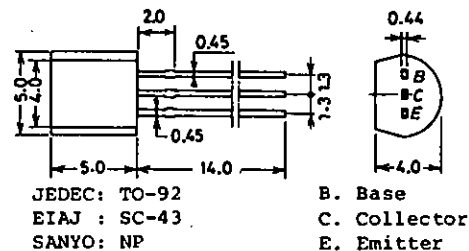
Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)20\text{V}, I_E=0$			(-)1.0	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4\text{V}, I_C=0$			(-)1.0	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=(-)2\text{V}, I_C=(-)50\text{mA}$	60*		560*	
	$h_{FE(2)}$	$V_{CE}=(-)2\text{V}, I_C=(-)500\text{mA}$	50			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10\text{V}, I_C=(-)50\text{mA}$		250		MHz
Output Capacitance	c_{ob}	$V_{CB}=(-)10\text{V}, f=1\text{MHz}$		(13)		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)500\text{mA}, I_B=(-)50\text{mA}$		(-0.2)	(-0.45)	V
				0.13	0.3	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500\text{mA}, I_B=(50\text{mA})$		(-)0.9		V
C-B Saturation Voltage	$V_{(BR)CB0}$	$I_C=(-)10\mu\text{A}, I_E=0$	(-)25			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1\text{mA}, R_{BE}=\infty$	(-)20			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_C=(-)10\mu\text{A}, I_C=0$	(-)5			V

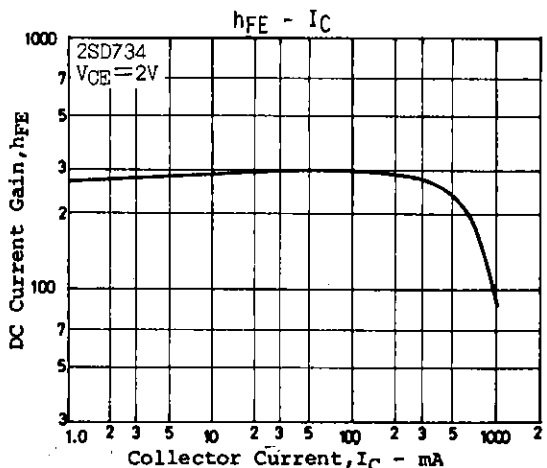
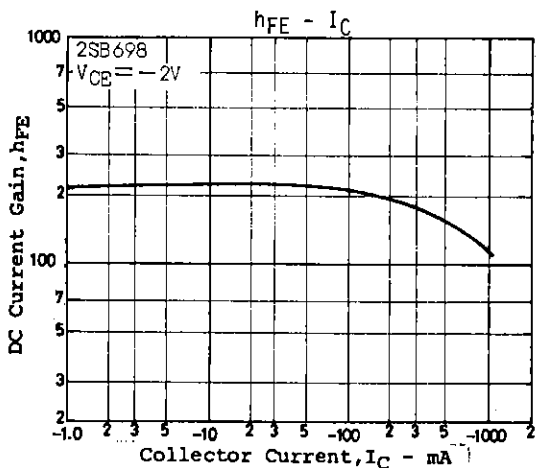
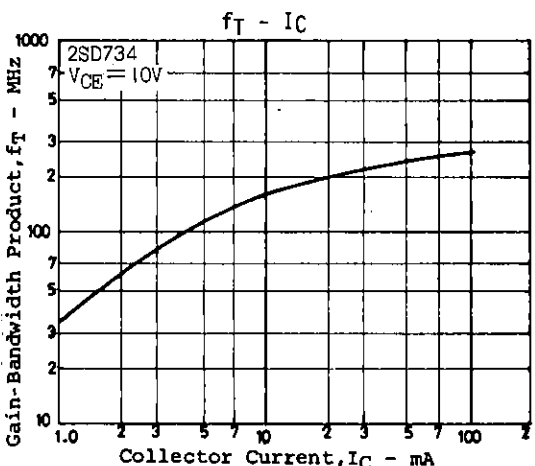
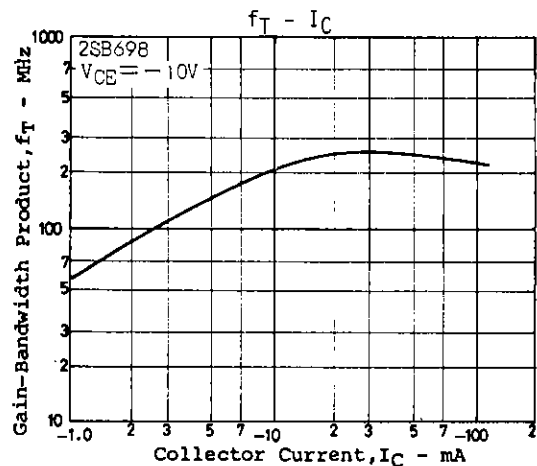
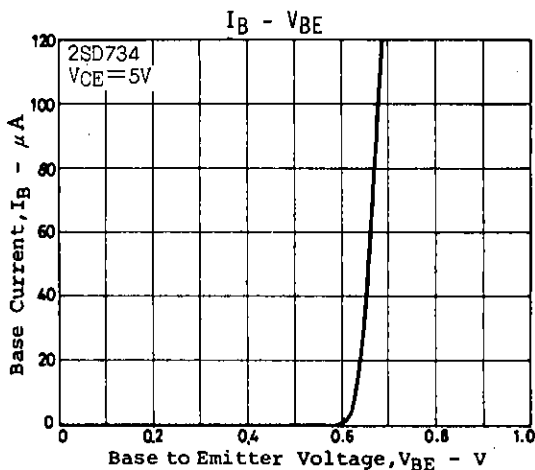
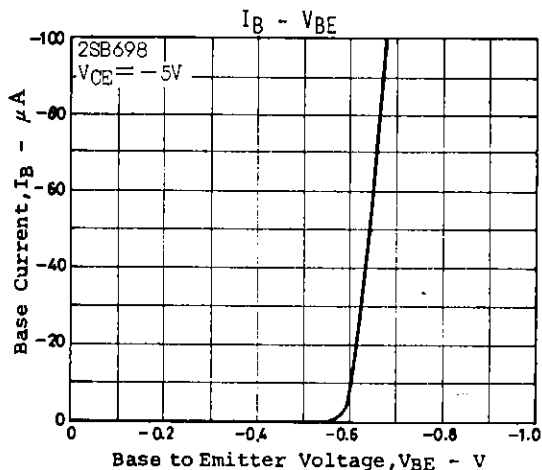
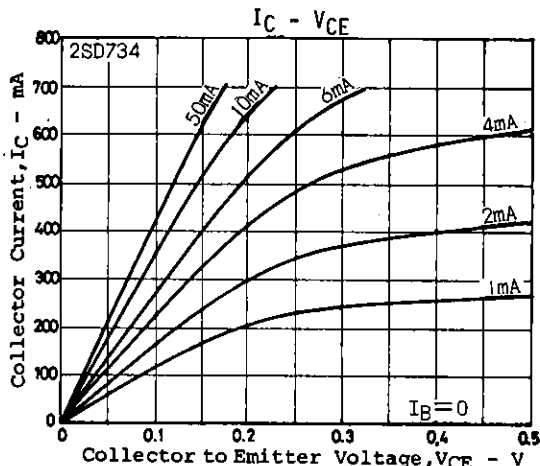
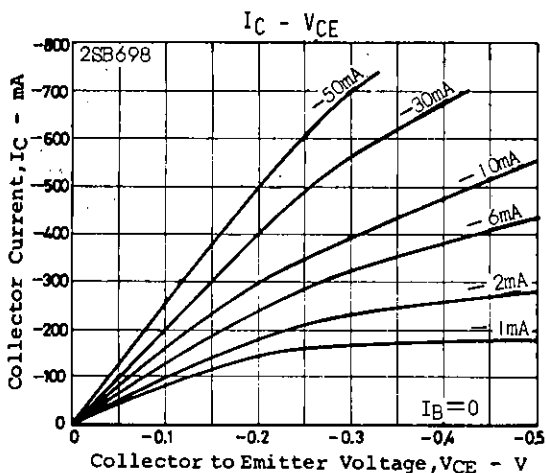
*:2SB698/2SD734 are classified by 50mA h_{FE} as follows:

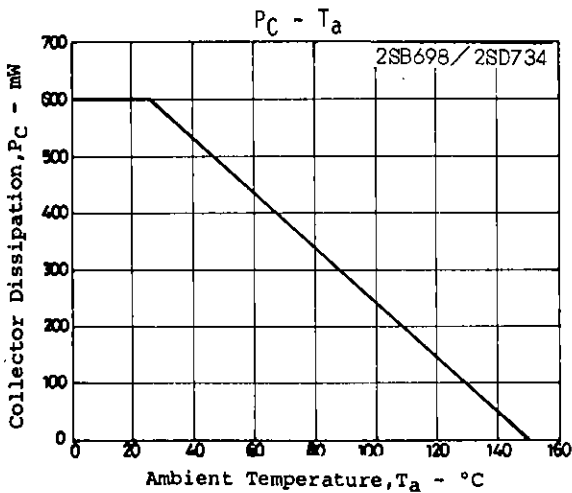
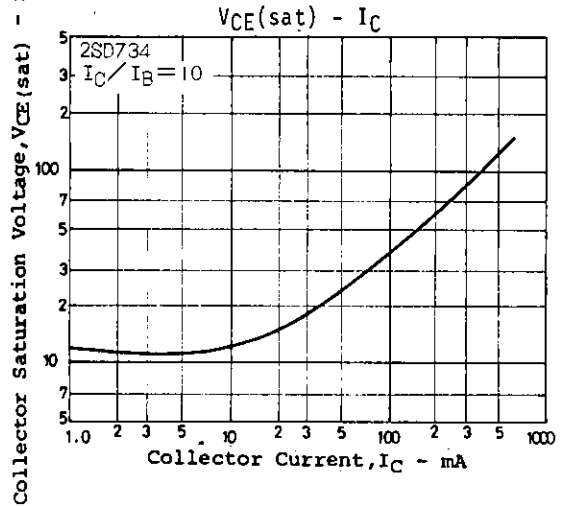
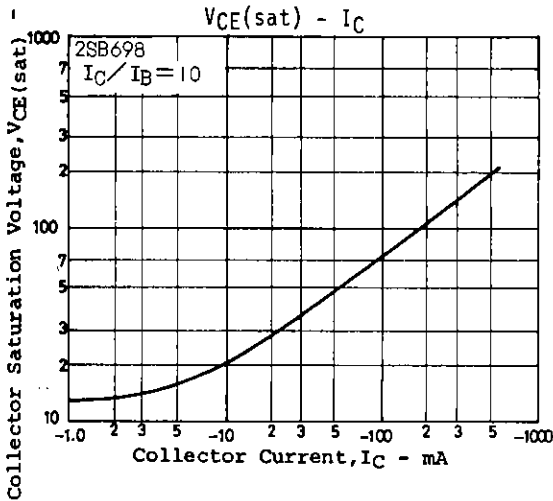
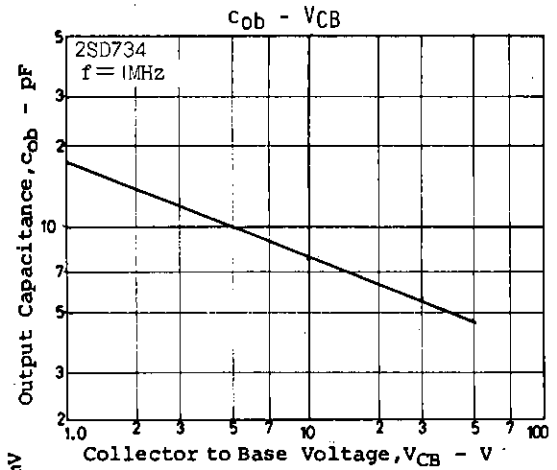
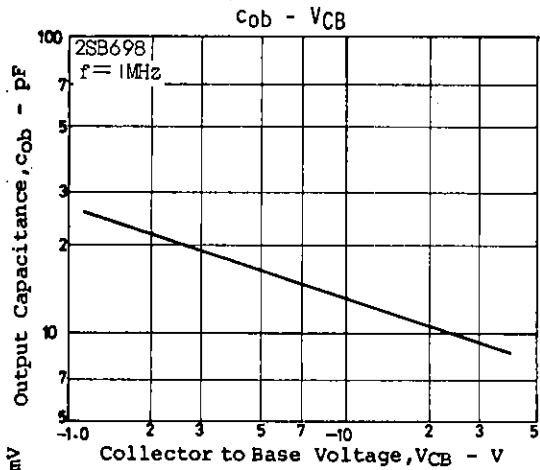
60	D	120	100	E	200	160	F	320	280	G	560
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Package Dimensions 2003A
(unit: mm)



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