



2SB1266/2SD1902

AF Power Amplifier Applications

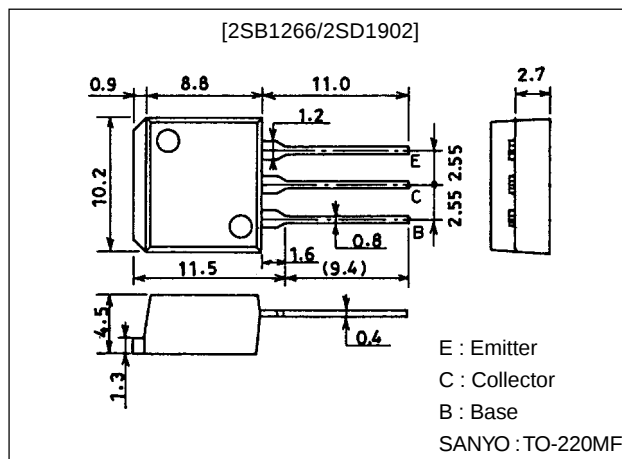
Features

- Suitable for sets whose height is restricted.
- Wide ASO (adoption of MBIT process).
- High reliability.

Package Dimensions

unit:mm

2049B



() : 2SB1266

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		(-)60	V
Collector-to-Emitter Voltage	V_{CEO}		(-)60	V
Emitter-to-Base Voltage	V_{EBO}		(-)6	V
Collector Current	I_C		(-)3	A
Collector Current (Pulse)	I_{CP}		(-)8	A
Collector Dissipation	P_C		1.65	W
		$T_c=25^\circ\text{C}$	30	W
Junction Temperature	T_J		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)40\text{V}, I_E=0$			(-)100	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4\text{V}, I_C=0$			(-)100	μA
DC Current Gain	h_{FE1}	$V_{CE}=(-)5\text{V}, I_C=(-)0.5\text{A}$	70*		280*	
	h_{FE2}	$V_{CE}=(-)5\text{V}, I_C=(-)3\text{A}$	20			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)5\text{V}, I_C=(-)0.5\text{A}$		(8)40		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)10\text{V}, f=1\text{MHz}$		(60)		pF
				110		pF

* : The 2SB1266/2SD1902 are classified by 0.5A h_{FE} as follows :

70	Q	140	100	R	200	140	S	280
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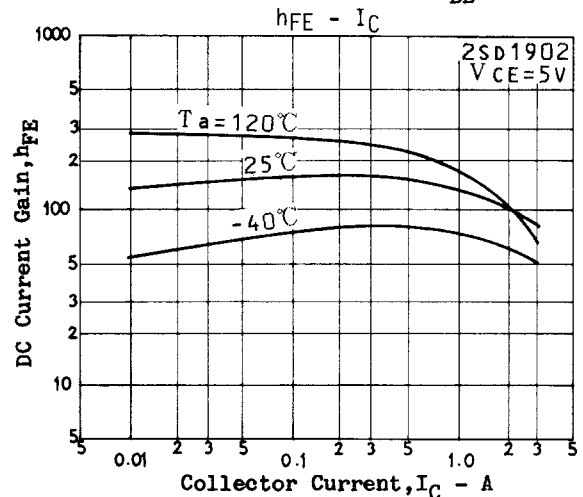
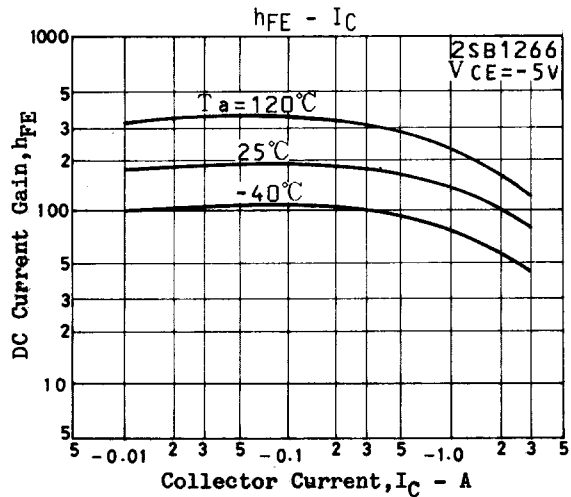
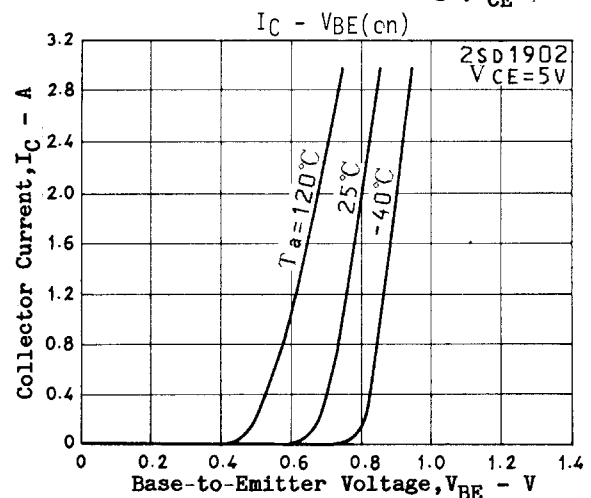
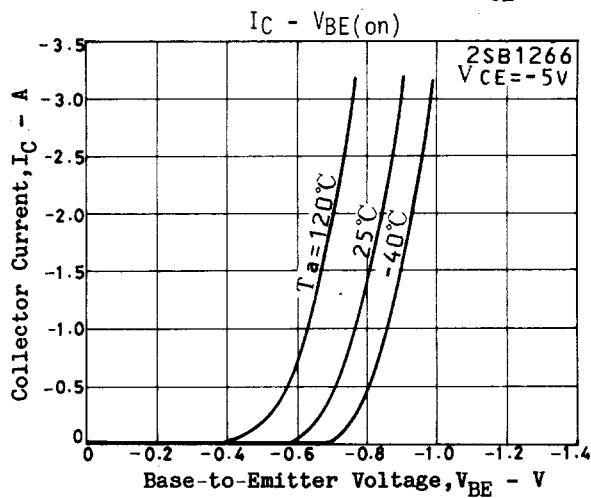
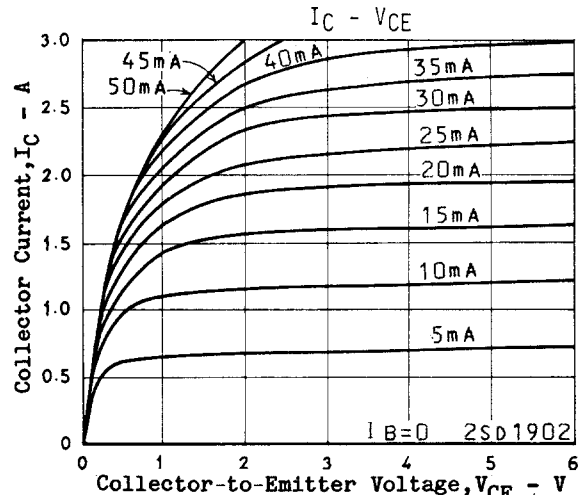
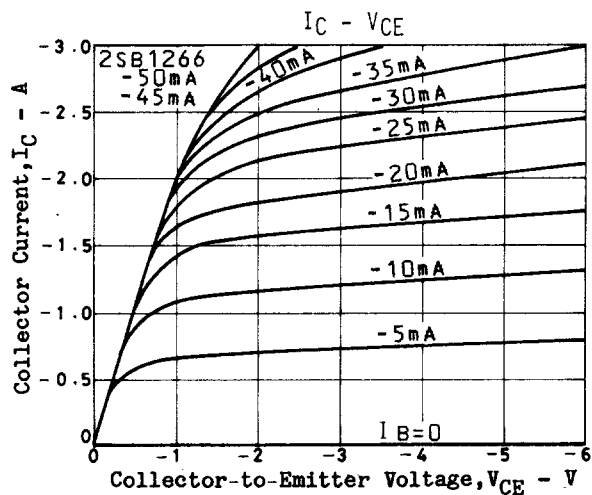
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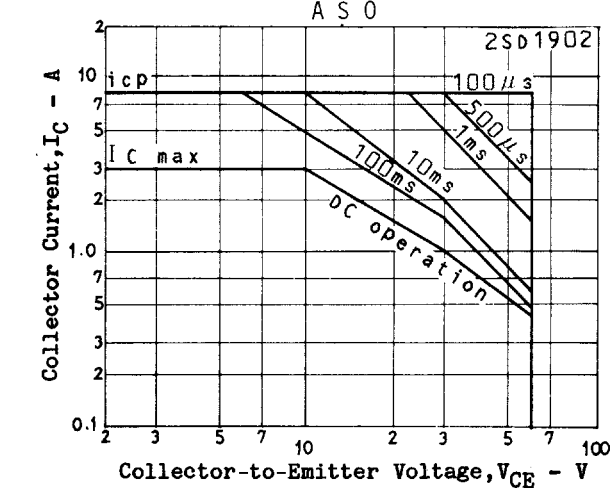
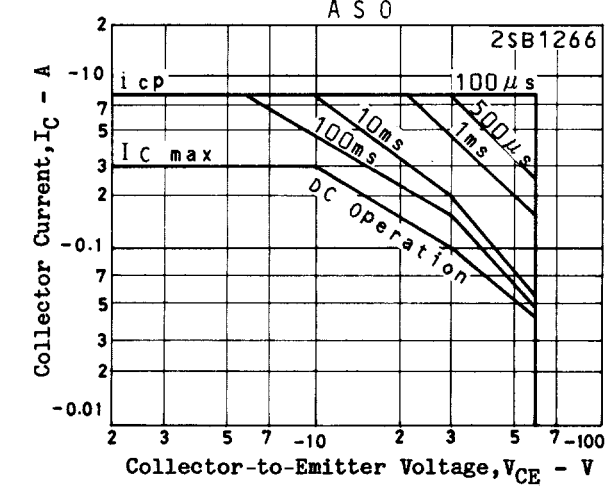
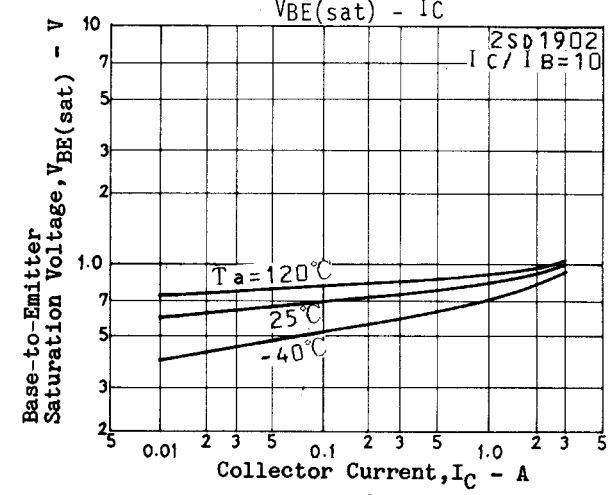
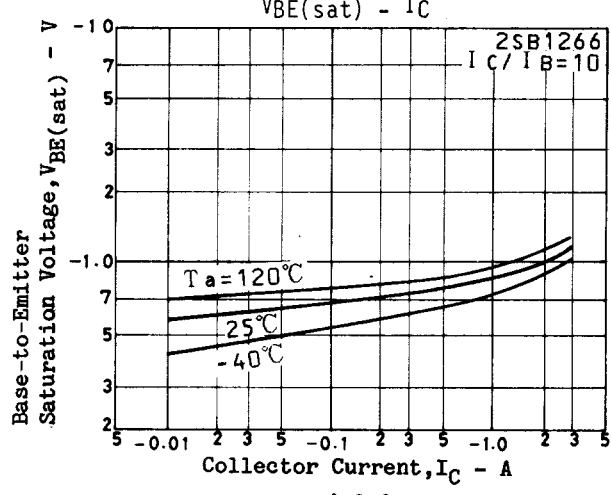
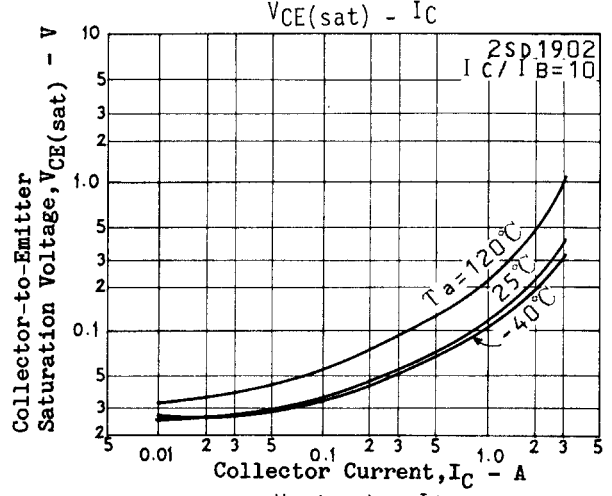
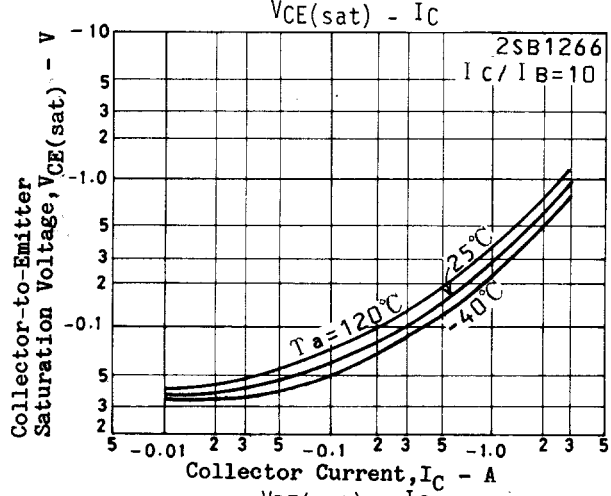
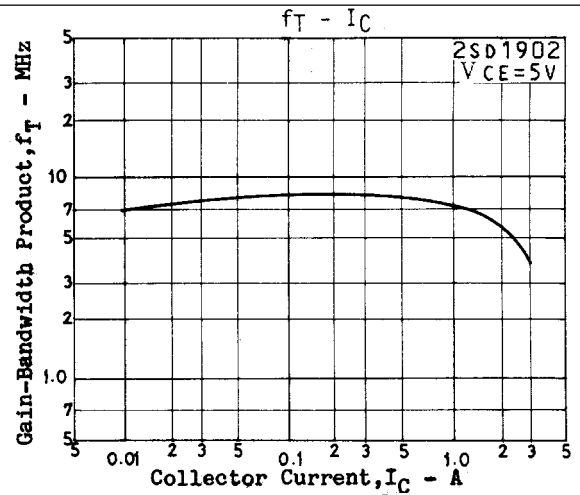
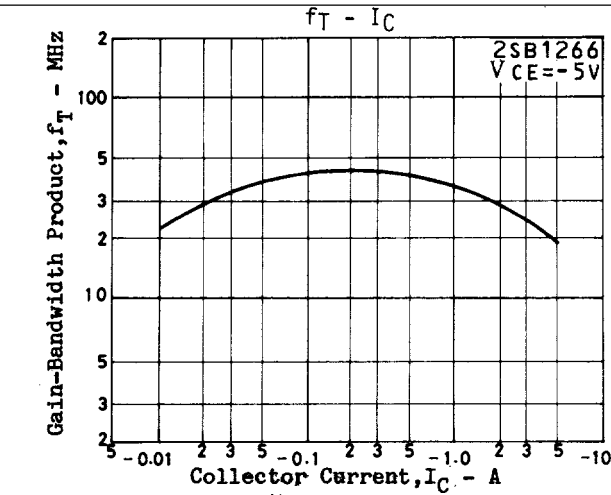
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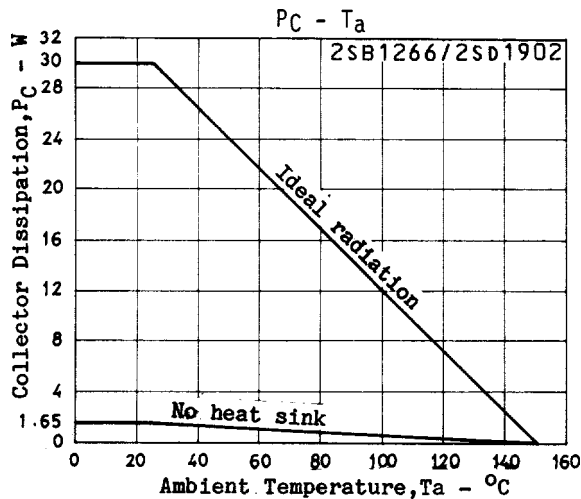
2SB1266/2SD1902

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)2A, I_B=(-)0.2A$		(-)0.4	(-)1	V
Base-to-Emitter Voltage	V_{BE}	$I_{CE}=(-)5V, I_C=(-)0.5A$		(-)0.7	(-)1	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)1mA, I_E=0$	(-)60			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)5mA, R_{BE}=\infty$	(-)60			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)1mA, I_C=0$	(-)6			V



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