



## 2SB1266/2SD1902

### AF Power Amplifier Applications

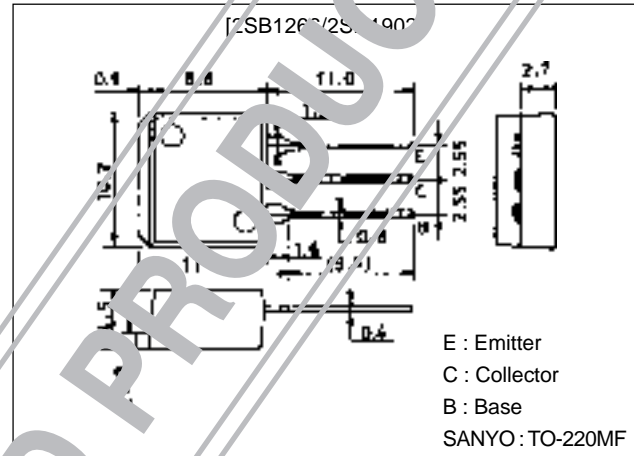
#### Features

- 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	$V_{CE0}$		(-)60	V
Emitter-to-Base Voltage	$V_{EB0}$		(-)6	V
Collector Current	$I_C$		(-)3	A
Collector Current (Pulse)	$I_{CP}$		(-)8	A
Collector Dissipation	$P_C$	$T_c = 25^\circ\text{C}$	1.65	W
			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	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = (-)4\text{V}, I_C = 0$			(-)100	$\mu\text{A}$
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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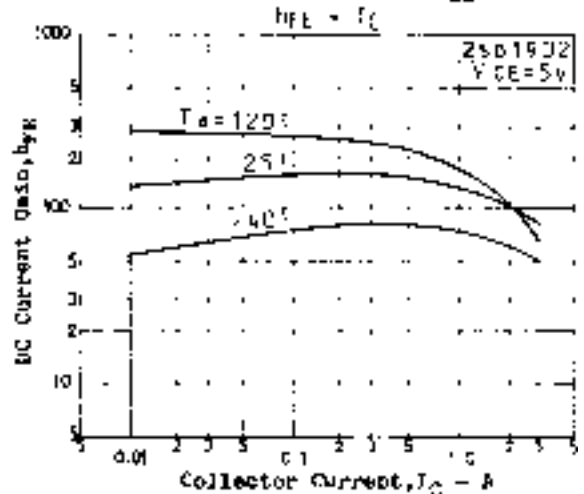
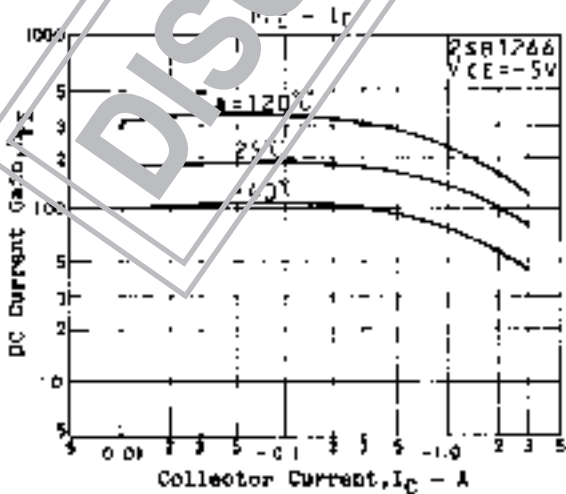
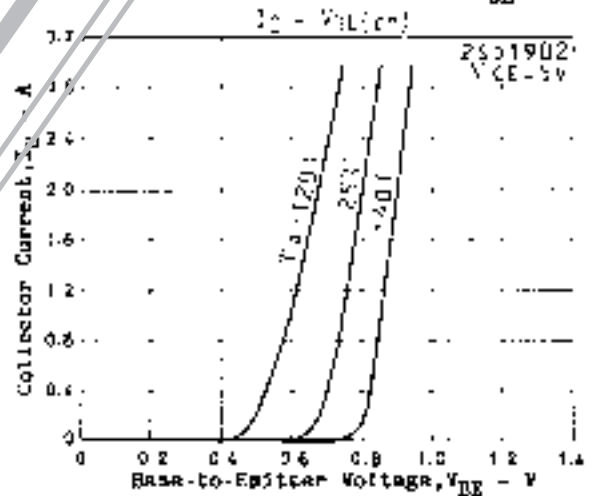
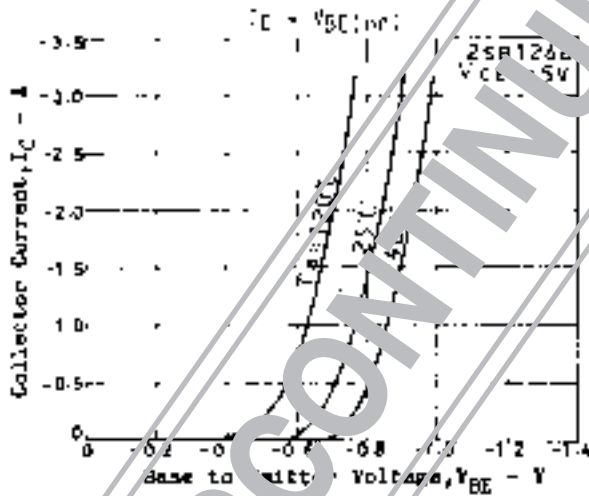
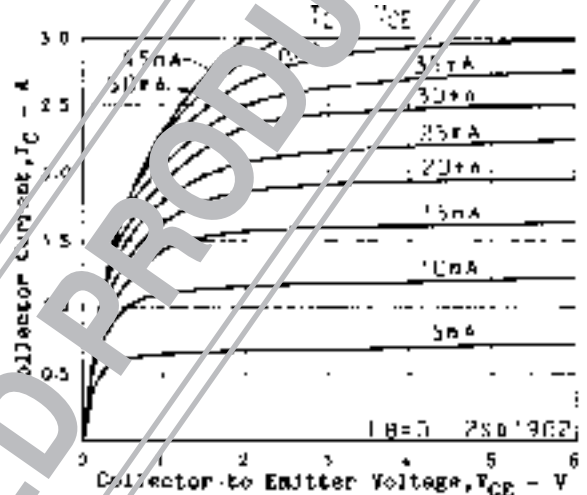
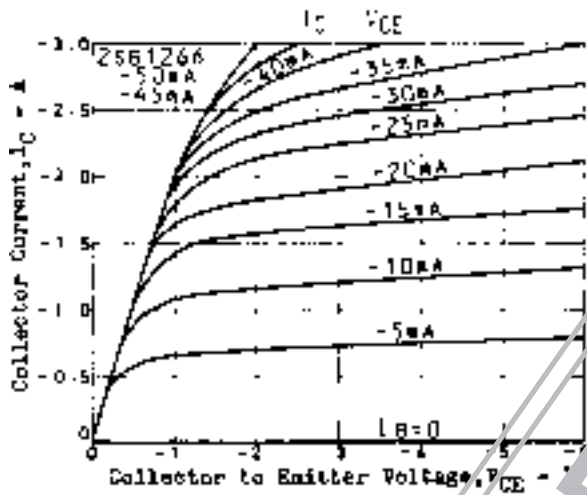
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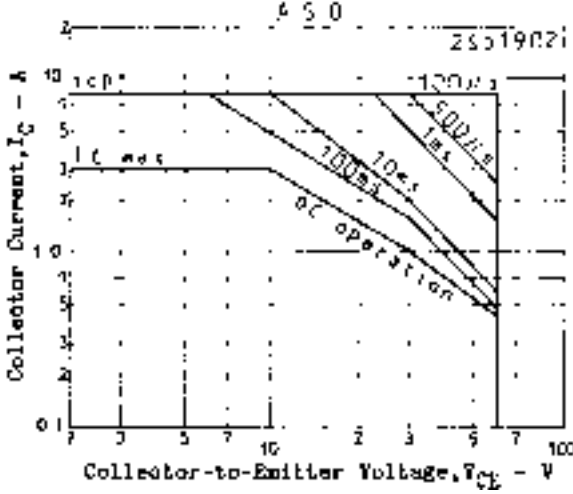
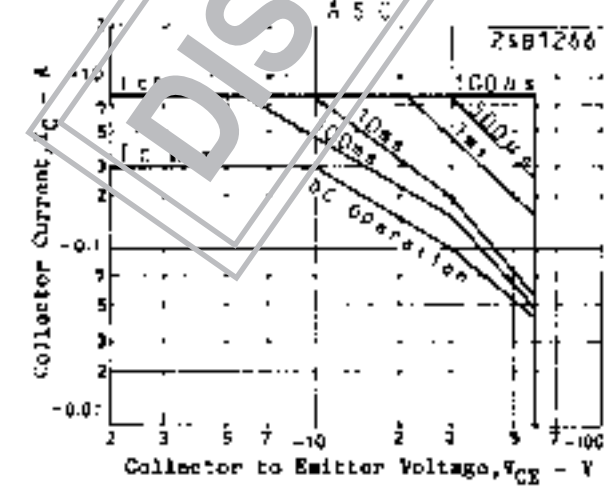
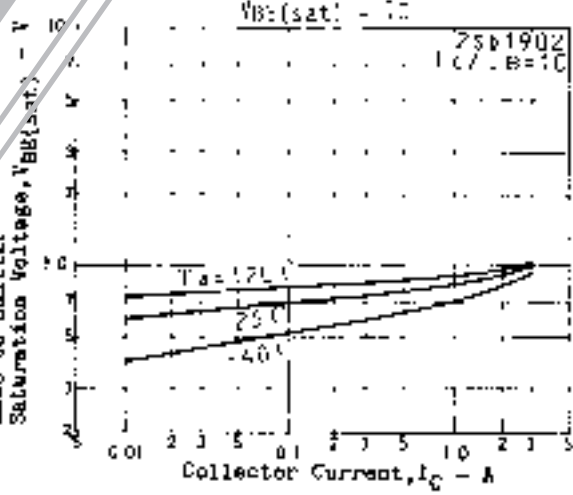
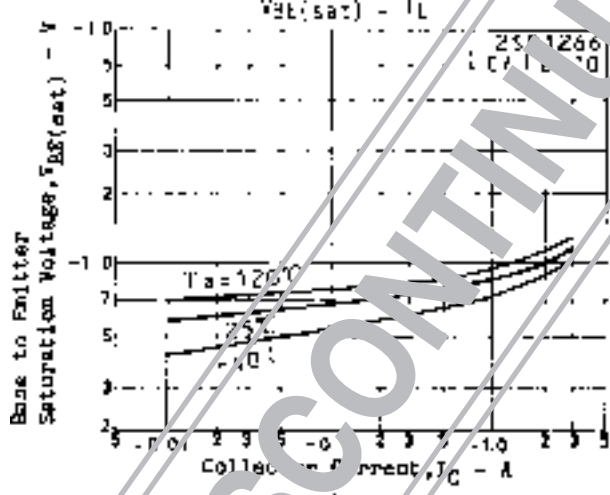
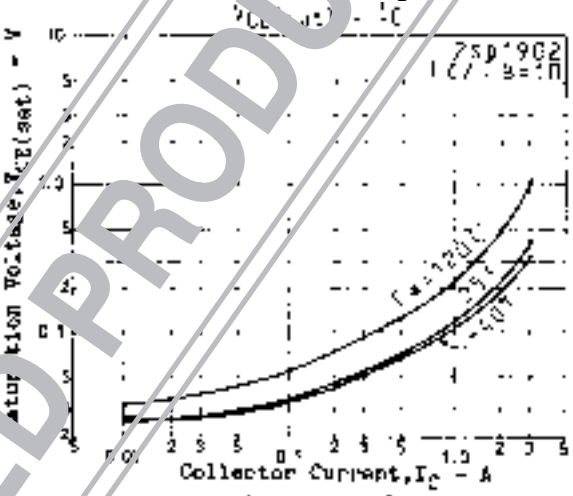
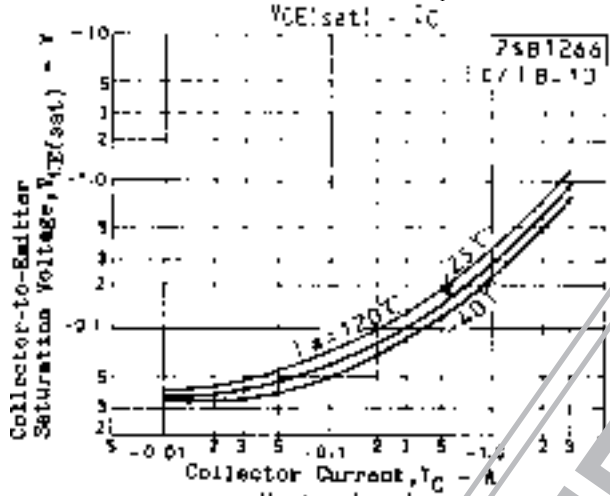
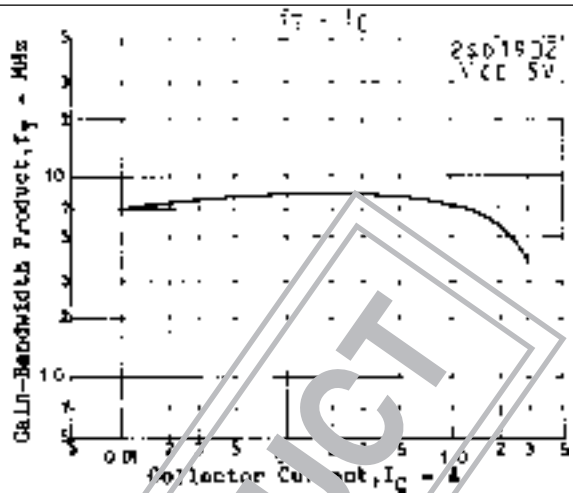
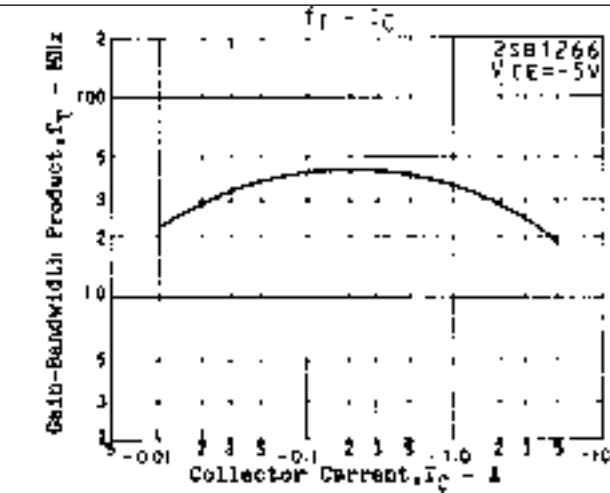
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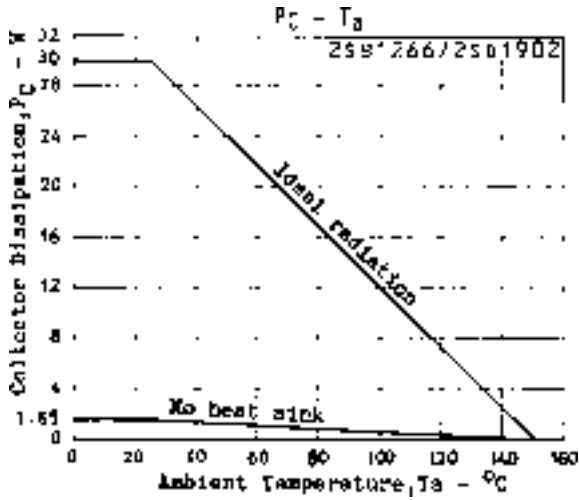
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)2A, I_B=(-)0.2A$		(-)0.4	(-)1	V
Base-to-Emitter Voltage	$V_{BE}$	$I_{CE}=(-)5V, I_C=(-)0.5A$		(-)0.7	(-)1	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)1mA, I_E=0$	(-)60			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



2SB1266/2SD1902



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