

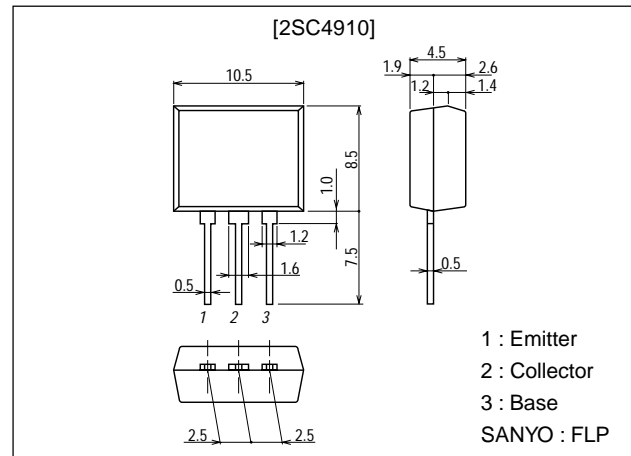
**2SC4910****VHF-Band Power Amplifier Applications****Features**

- On-chip emitter ballast resistors.

**Package Dimensions**

unit:mm

2084B

**Specifications****Absolute Maximum Ratings at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CBO}$		38	V
Collector-to-Emitter Voltage	$V_{CEO}$		18	V
Emitter-to-Base Voltage	$V_{EBO}$		3	V
Collector Current	$I_C$		0.75	A
Collector Current (Pulse)	$I_{CP}$		1.2	A
Base Current	$I_B$		150	mA
Collector Dissipation	$P_C$		1.5	W
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	$I_{CBO}$	$V_{CB}=30V, I_E=0$			50	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=2V, I_C=0$			50	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=10V, I_C=200mA$	20		200	
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	38			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	18			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	3			V

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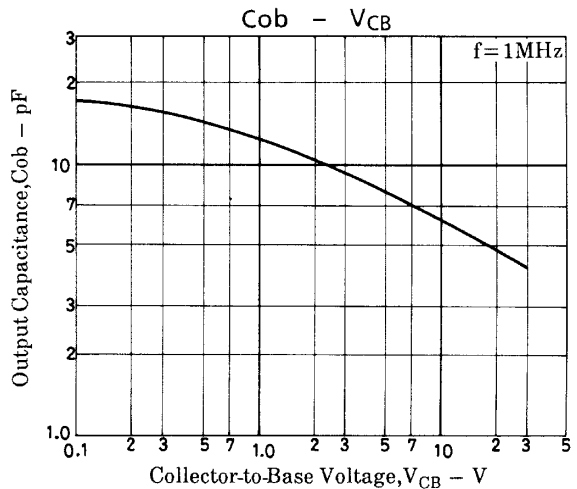
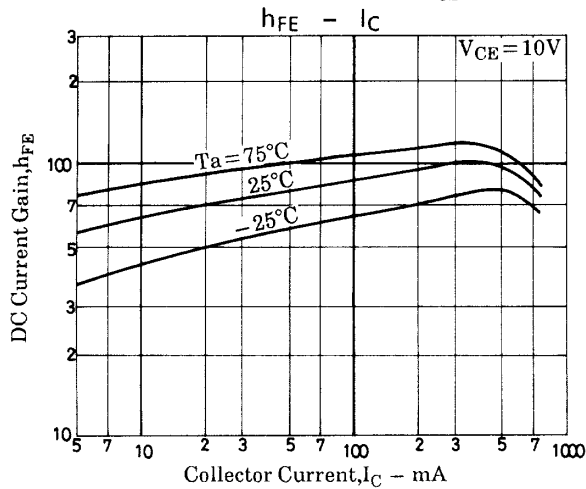
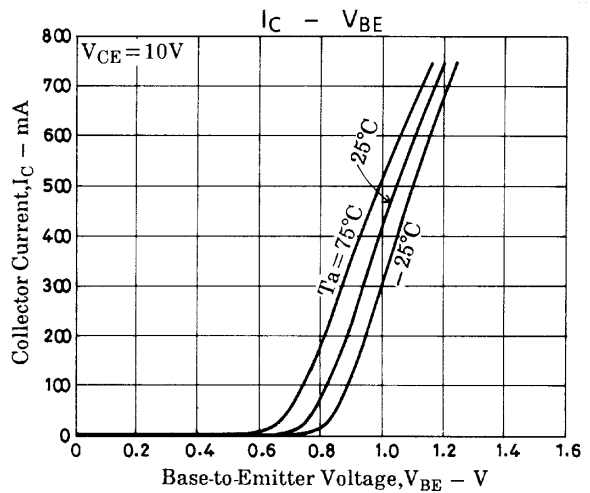
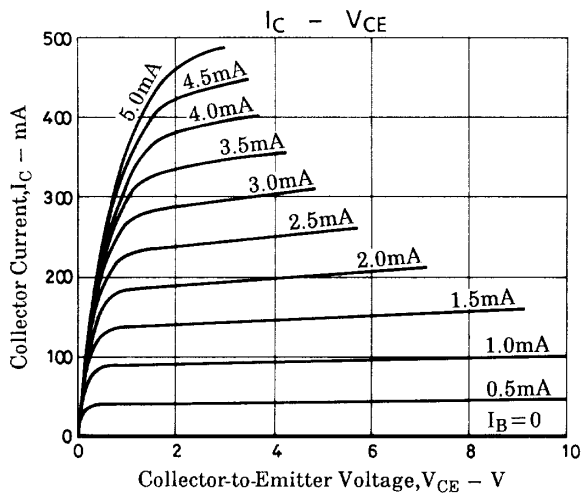
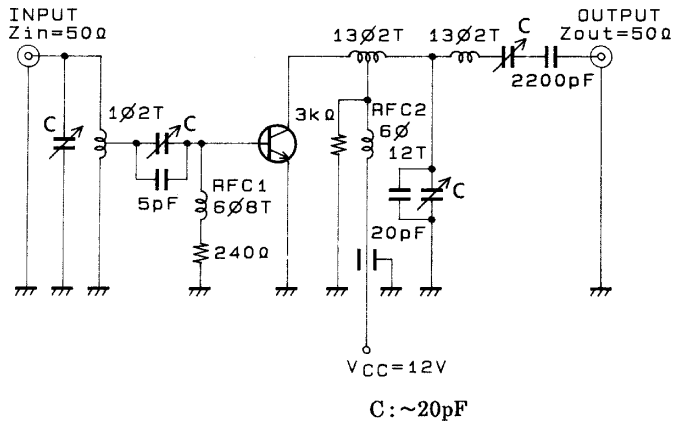
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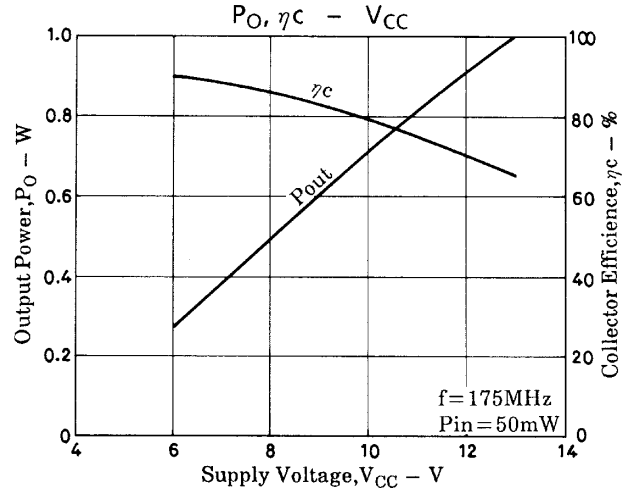
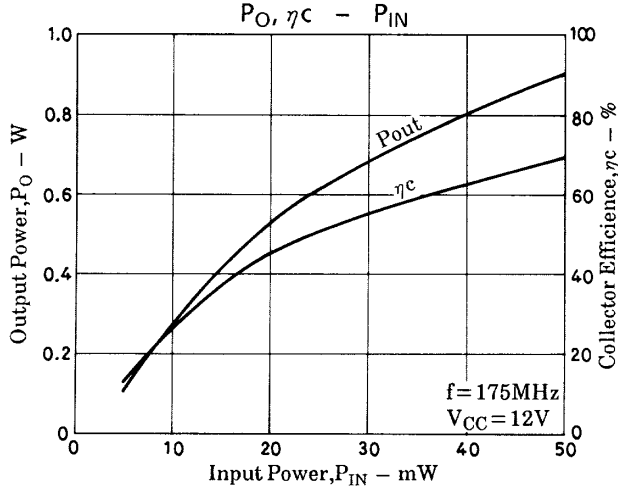
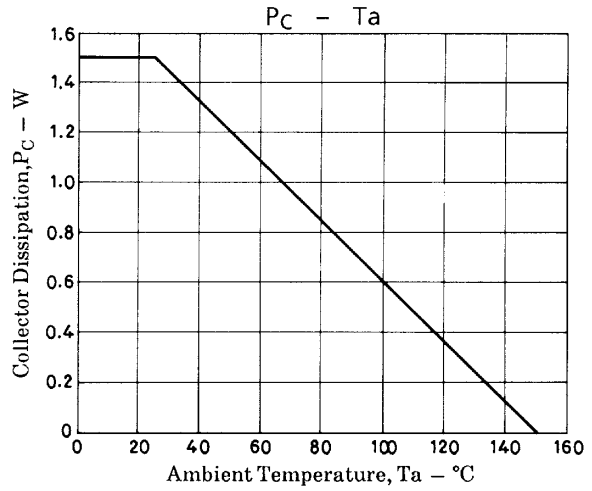
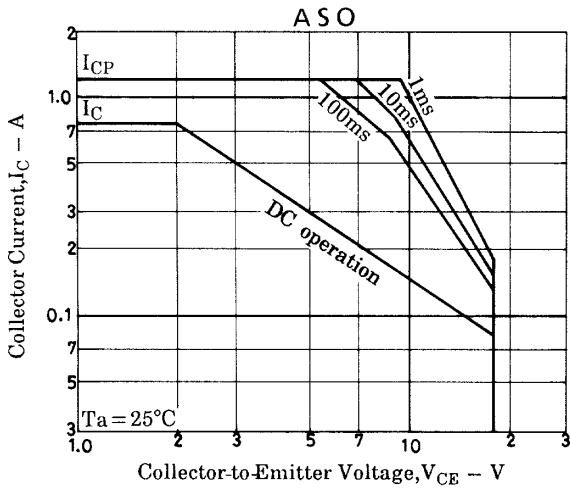
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output Capacitance	Cob	V <sub>CB</sub> =10V, f=1MHz		6	10	pF
Output Power	P <sub>O</sub>	V <sub>CC</sub> =12V, f=175MHz, P <sub>IN</sub> =50mW	0.7	0.9		W
Collector Efficiency	η <sub>c</sub>	See specified Test Circuit.	55	70		%

## Collector Efficiency Test Circuit

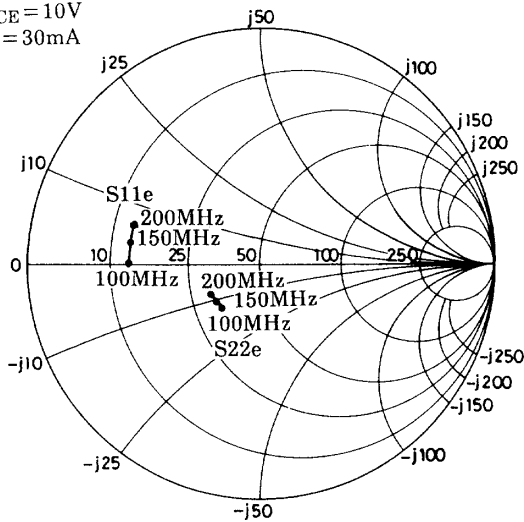


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## S parameter

$Z_o = 50\Omega$   
 $V_{CE} = 10\text{V}$   
 $I_C = 30\text{mA}$



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