

2SC1953

Silicon NPN Epitaxial Planar Type

AF Power Pre-Amplifier
Complementary Pair with 2SA914

■ Features

- High collector-emitter voltage (V_{CE0})
- Small collector output capacitance (C_{ob})
- Optimum for 60~100W pre-driver in complementary pair with 2SA914

■ Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Item	Symbol	Value	Unit
Collector-base voltage	V_{CBO}	150	V
Collector-emitter voltage	V_{CEO}	150	V
Emitter-base voltage	V_{EBO}	5	V
Peak collector current	I_{CP}	100	mA
Collector current	I_C	50	mA
Collector power dissipation	P_C	1.2 *	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

* Without heat sink

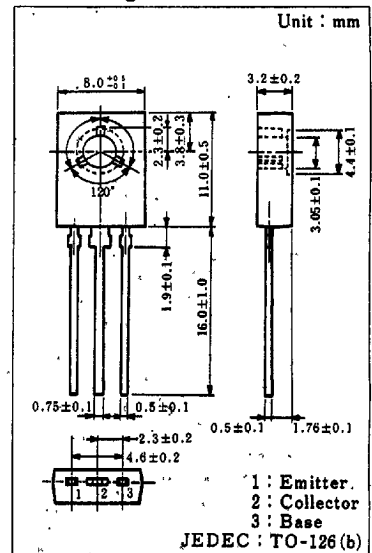
■ Electrical Characteristics ($T_c=25^\circ\text{C}$)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I_{CBO}	$V_{CB}=100\text{ V}, I_E=0$			1	μA
Collector-emitter voltage	V_{CEO}	$I_C=100\text{ }\mu\text{A}, I_B=0$	150			V
Emitter-base voltage	V_{EBO}	$I_E=10\text{ }\mu\text{A}, I_C=0$	5			V
DC current gain	h_{FE}^*	$V_{CE}=5\text{ V}, I_C=10\text{ mA}$	90		450	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=30\text{ mA}, I_B=3\text{ mA}$			1	V
Transition frequency	f_T	$V_{CB}=10\text{ V}, I_E=-10\text{ mA}, f=200\text{ MHz}$	70			MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{ V}, I_E=0, f=1\text{ MHz}$			3	pF

* h_{FE} Classifications

Class	Q	R	S	T
h_{FE}	90 ~ 155	130 ~ 220	185 ~ 330	260 ~ 450

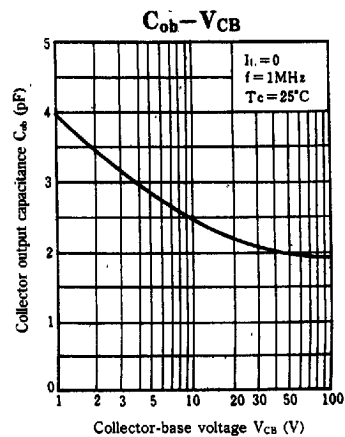
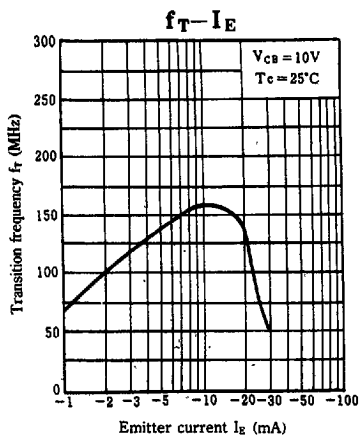
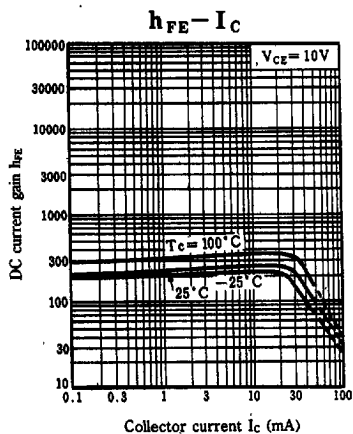
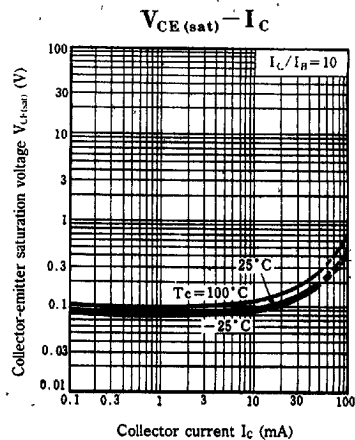
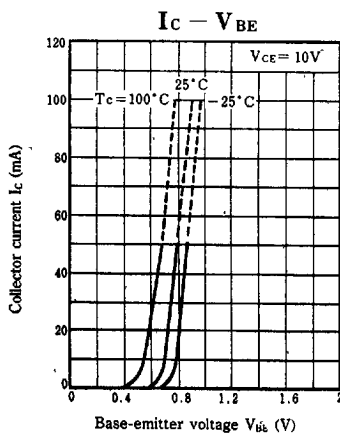
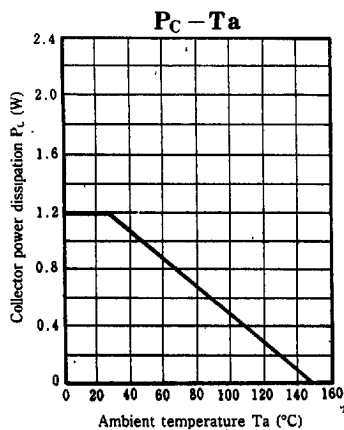
■ Package Dimensions



■ 6932852 0016365 T77 ■

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