

2SB996

SILICON PNP TRIPLE DIFFUSED TYPE

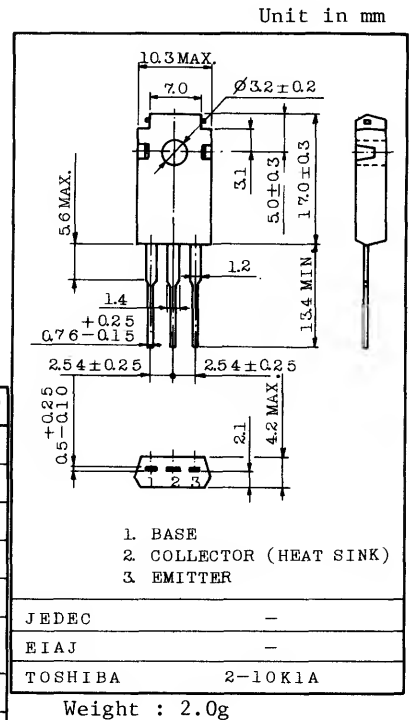
POWER AMPLIFIER APPLICATIONS.

FEATURES:

- Good Linearity of h_{FE}
- Complementary to 2SD1356
- Recommended for 20~25W High-Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	-80	V
Collector-Emitter Voltage	V_{CE0}	-80	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current	I_C	-4	A
Base Current	I_B	-0.4	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)	P_C	30	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CB0}	$V_{CB}=-80\text{V}$, $I_E=0$	-	-	-30	μA
Emitter Cut-off Current	I_{EB0}	$V_{EB}=-5\text{V}$, $I_C=0$	-	-	-100	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C=-50\text{mA}$, $I_B=0$	-80	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=-5\text{V}$, $I_C=-0.5\text{A}$	40	-	240	
	$h_{FE(2)}$	$V_{CE}=-5\text{V}$, $I_C=-3\text{A}$	15	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-3\text{A}$, $I_B=-0.3\text{A}$	-	-1.0	-1.7	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=-5\text{V}$, $I_C=-3\text{A}$	-	-1.0	-1.5	V
Transition Frequency	f_T	$V_{CE}=-5\text{V}$, $I_C=-0.5\text{A}$	-	9	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}$, $I_E=0$, $f=1\text{MHz}$	-	130	-	pF

Note : $h_{FE(1)}$ Classification R : 40~80, O : 70~140, Y : 120~240

