



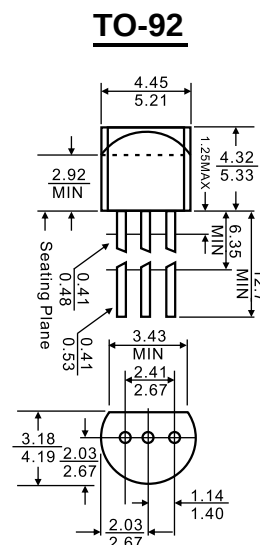
1. EMITTER
2. COLLECTOR
3. BASE

Features

- ✧ Audio power amplifier application
- ✧ High h_{FE} : $h_{FE}=100\sim320$
- ✧ Complementary to 2SA1981

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	35	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	800	mA
P_C	Collector Power Dissipation	625	mW
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$



Dimensions in inches and (millimeters)

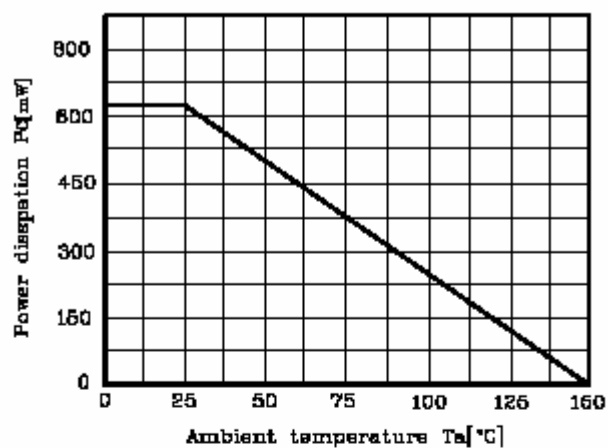
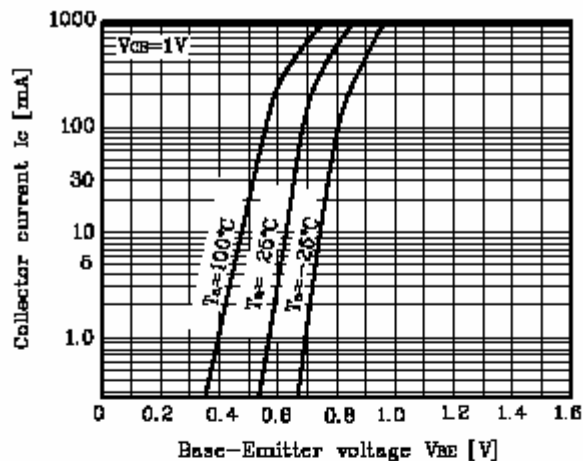
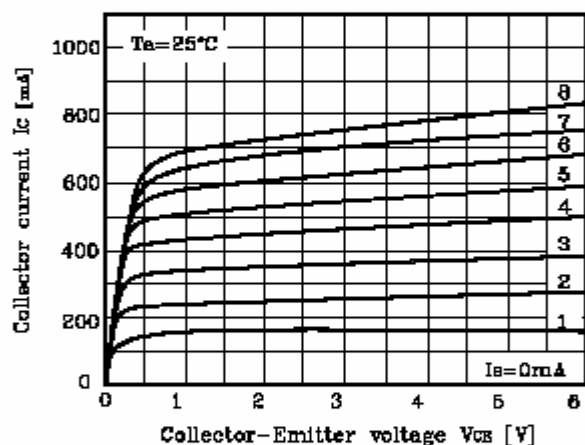
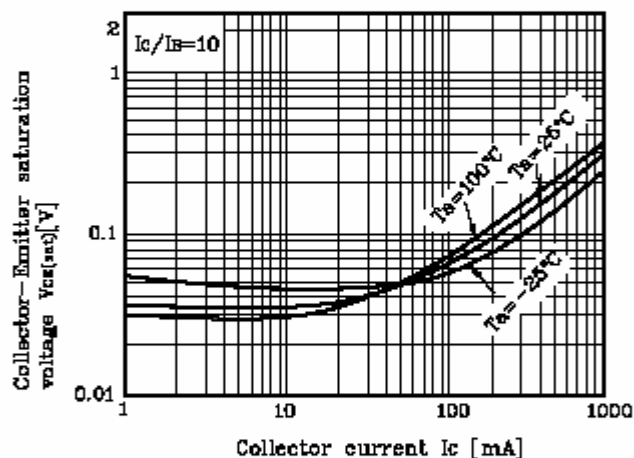
ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 0.1\text{mA}, I_B=0$	35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10\text{mA}, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 0.01\text{mA}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=35\text{V}, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=1\text{V}, I_C=100\text{mA}$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$			0.5	V
Transition frequency	f_T	$V_{CE}=5\text{V}, I_C=10\text{mA}$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		13		pF

CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	100-200	160-320

Typical Characteristics

 Fig. 1 $P_C - T_a$

 Fig. 2 $I_C - V_{BE}$

 Fig. 3 $I_C - V_{CE}$

 Fig. 4 $V_{CE(sat)} - I_C$

 Fig. 5 $h_{FE} - I_C$
