

## TO-92 Plastic-Encapsulate Transistors

AV8550 TRANSISTOR ( PNP )

### FEATURES

Power dissipation

$$P_{CM} : 1 \text{ W (Tamb=25}^\circ\text{C)}$$

Collector current

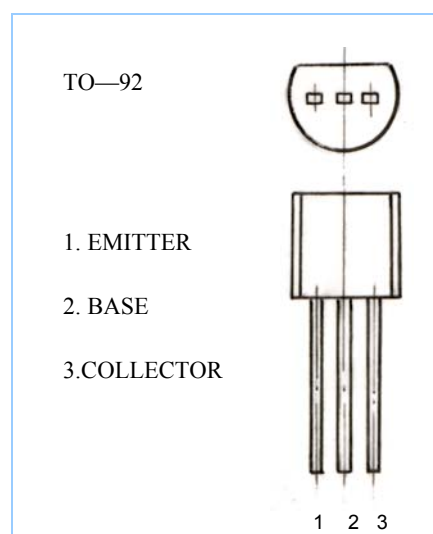
$$I_{CM} : -1.5 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -40 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg} : -55^\circ\text{C to } +150^\circ\text{C}$$



### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu\text{A}, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -0.1 \text{ mA}, I_B = 0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu\text{A}, I_C = 0$	-6			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -40 \text{ V}, I_E = 0$			-0.1	$\mu\text{A}$
Collector cut-off current	$I_{CEO}$	$V_{CE} = -20 \text{ V}, I_E = 0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5 \text{ V}, I_C = 0$			-0.1	MA
DC current gain	$H_{FE(1)}$	$V_{CE} = -1\text{V}, I_C = -100 \text{ mA}$	85		300	
	$H_{FE(2)}$	$V_{CE} = -1\text{V}, I_C = -800 \text{ mA}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -800 \text{ m}, I_B = -80 \text{ mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -800 \text{ mA}, I_B = -80 \text{ mA}$			-1.2	V
Base-emitter voltage	$V_{BE}$	$I_E = -1.5 \text{ A}$			-1.6	V
Transition frequency	$f_T$	$V_{CE} = -10 \text{ V}, I_C = -50 \text{ mA}$ $f = 30 \text{ MHz}$	190			MHz

### CLASSIFICATION OF HFE(1)

Rank	B	C	D
Range	85-160	120-200	160-300

TYPICAL PERFORMANCE CHARACTERISTICS

Fig.1 Static characteristics

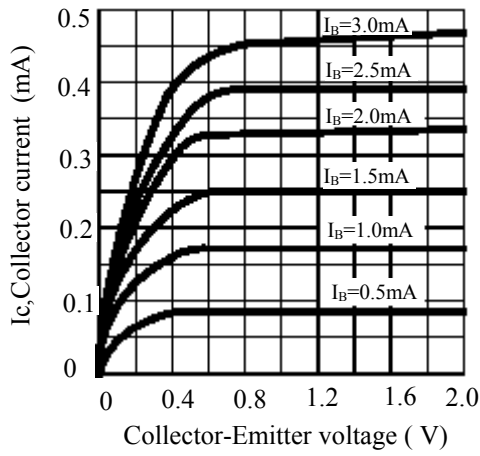


Fig.2 DC current Gain

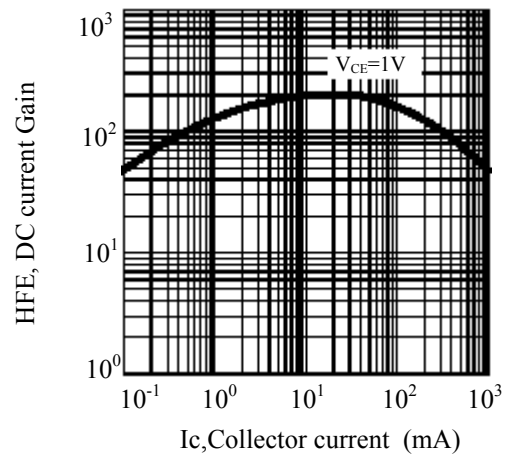


Fig.3 Base-Emitter on Voltage

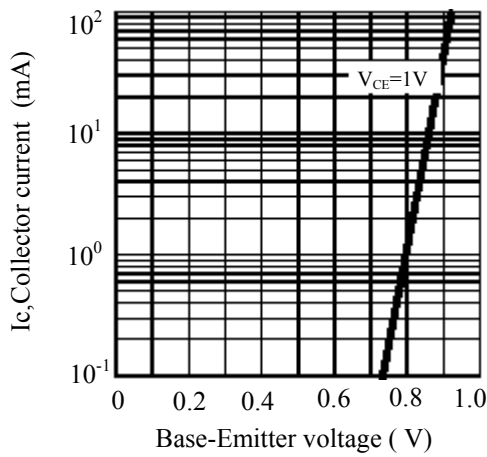


Fig.4 Saturation voltage

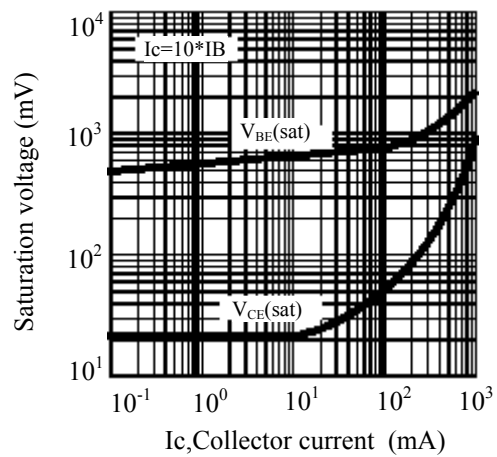


Fig.5 Current gain-bandwidth product

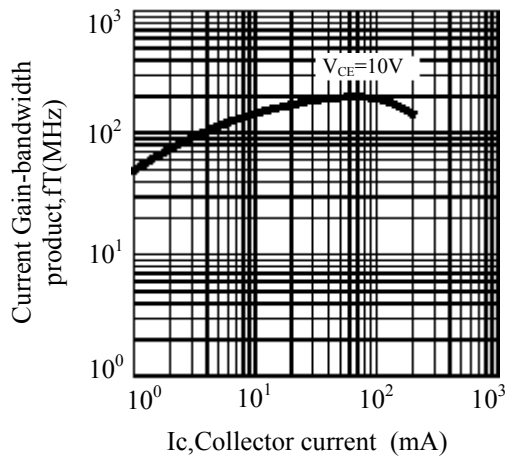


Fig.6 Collector output Capacitance

