

TO-92 Plastic-Encapsulate Transistors

AV8550 TRANSISTOR (PNP)

FEATURES

Power dissipation

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

Collector current

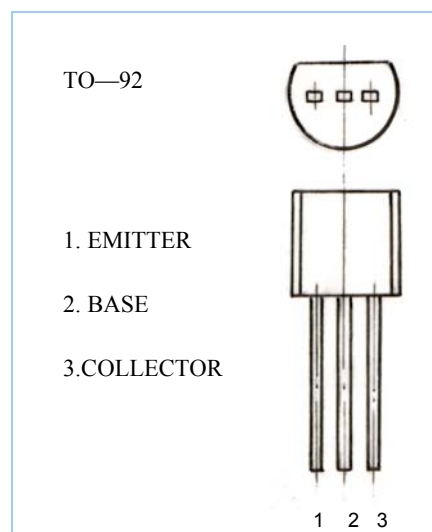
$I_{CM} : -1.5 \text{ A}$

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu\text{A}$, $I_E = 0$	-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	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -20 \text{ V}$, $I_E = 0$			-0.1	μA
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	$V_{CE(sat)}$	$I_C = -800 \text{ mA}$, $I_B = -80 \text{ mA}$			-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

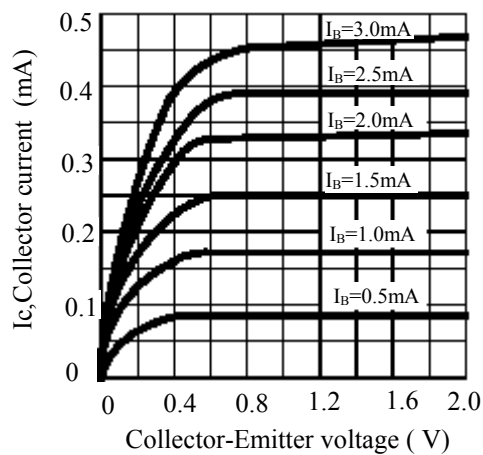


Fig.2 DC current Gain

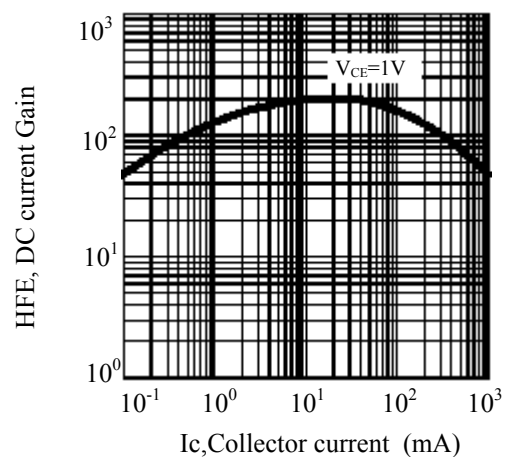


Fig.3 Base-Emitter on Voltage

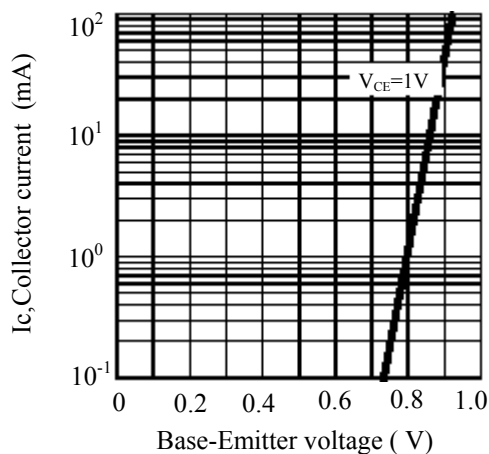


Fig.4 Saturation voltage

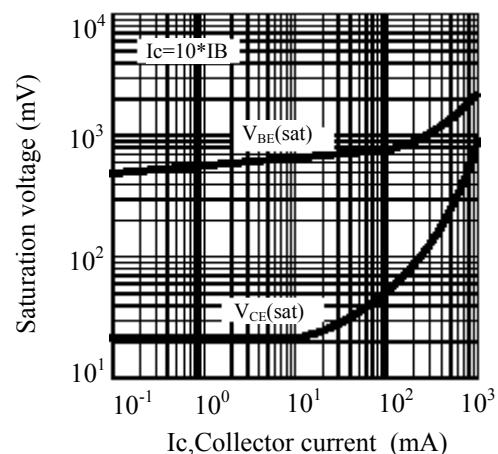


Fig.5 Current gain-bandwidth product

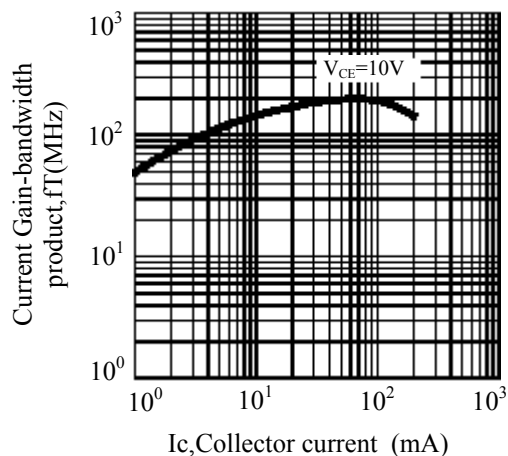


Fig.6 Collector output Capacitance

