

TO-92 Plastic-Encapsulate Transistors

AV733 TRANSISTOR (PNP)

FEATURES

Power dissipation

$P_{CM} : 0.25 \text{ W (Tamb=25}^{\circ}\text{C)}$

Collector current

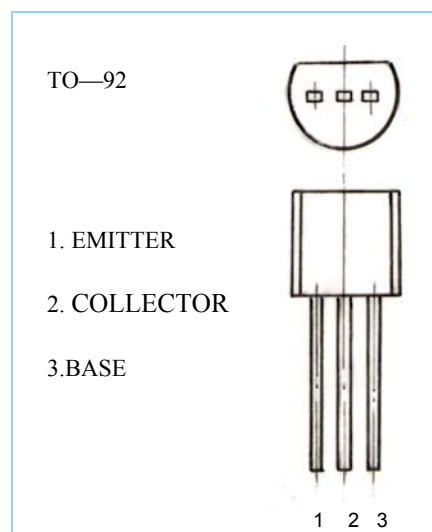
$I_{CM} : -0.1 \text{ A}$

Collector-base voltage

$V_{(BR)CBO} : -60 \text{ V}$

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	$V_{(BR)CBO}$	$I_C = -5 \mu\text{A}, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 \text{ mA}, I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -50 \mu\text{A}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -60 \text{ V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$			-0.1	μA
DC current gain	$H_{FE(1)}$	$V_{CE} = -6 \text{ V}, I_C = -1 \text{ mA}$	90	200	600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100 \text{ mA}, I_B = -10 \text{ mA}$		-0.18	-0.3	V
Transition frequency	f_T	$V_{CE} = -6 \text{ V}, I_C = -10 \text{ mA}$ $f = 30 \text{ MHz}$	100	180		MHz

CLASSIFICATION OF $H_{FE(1)}$

Rank	R	Q	P	K
Range	90-180	135-270	200-400	300-600

TYPICAL PERFORMANCE CHARACTERISTICS

Fig.1 Static characteristics

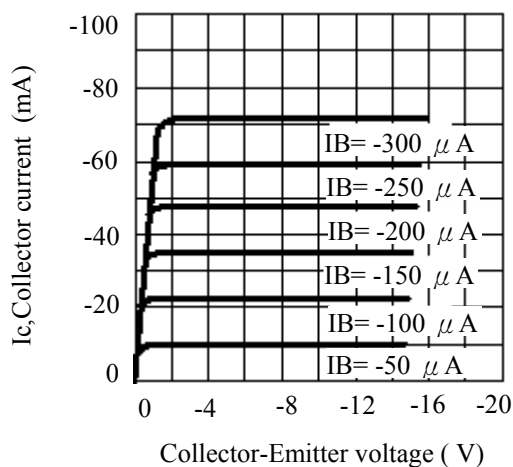


Fig.2 DC current Gain

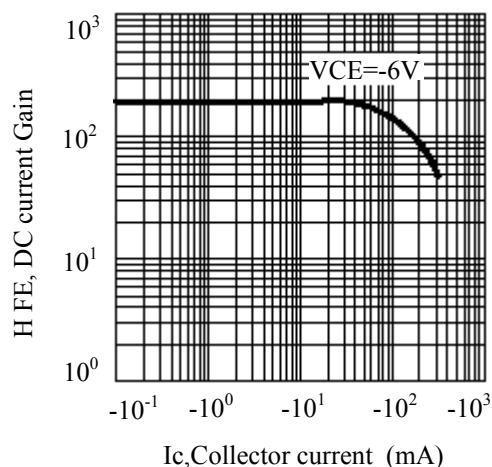


Fig.3 Base-Emitter on Voltage

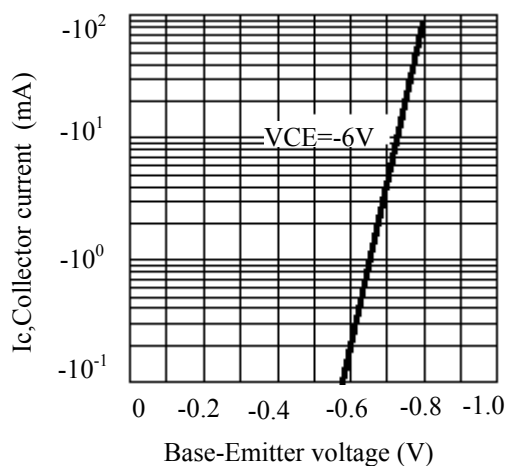


Fig.4 Saturation voltage

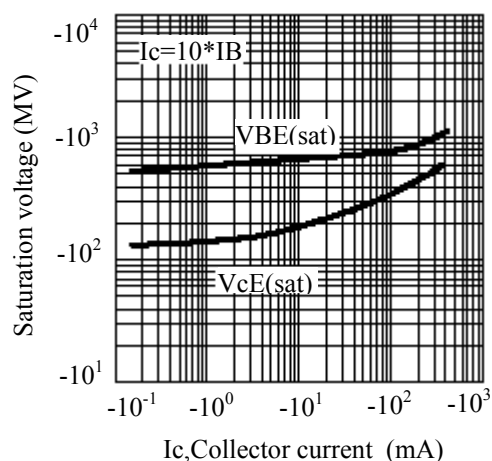


Fig.5 Current gain-bandwidth product

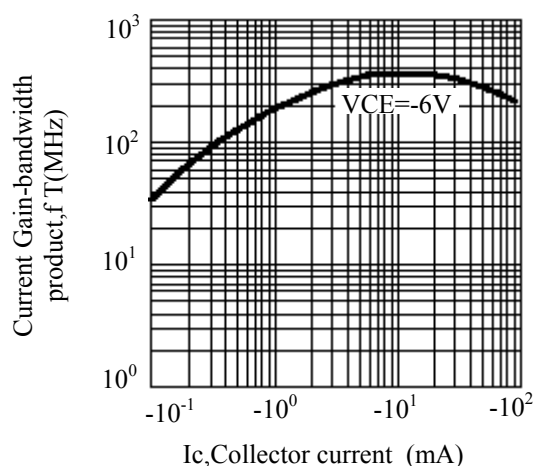


Fig.6 Collector output Capacitance

