

TO-92 Plastic-Encapsulate Transistors

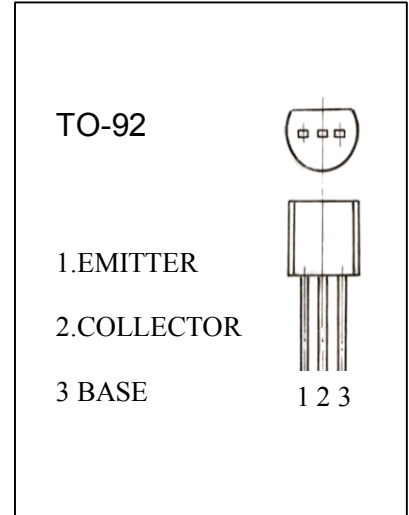
A733 TRANSISTOR (PNP)

FEATURE

Power dissipation

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{CB0}	Collector-Base Voltage	-60	V
V _{CE0}	Collector-Emitter Voltage	-50	V
V _{EB0}	Emitter-Base Voltage	-5	V
I _c	Collector Current -Continuous	-100	mA
P _c	Collector Power Dissipation	250	mW
T _j	Junction Temperature	150	°C
T _{stg}	Junction and Storage Temperature	-55-150	°C



ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

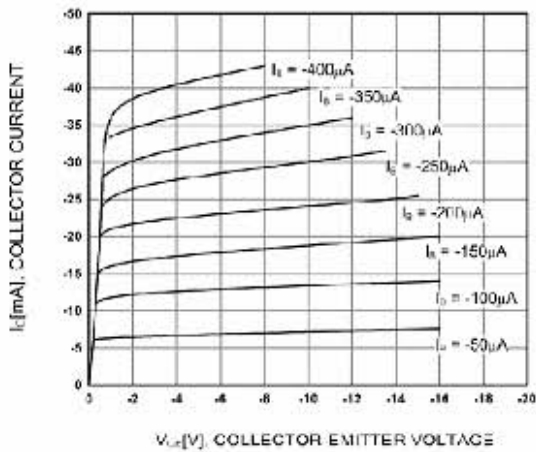
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _c = -50μA, I _E =0	-60			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _c = -1mA, I _B =0	-50			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -50μA, I _c =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} = -60V, I _E =0			-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -5 V, I _c =0			-0.1	μA
DC current gain	h _{FE}	V _{CE} = -6V, I _c = -1mA	90	200	600	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c = -100mA, I _B =-10mA		-0.18	-0.3	V
Base-emitter voltage	V _{BE}	V _{CE} =-6V, I _c =-1.0mA	-0.58	-0.62	-0.68	V
Transition frequency	f _T	V _{CE} =-6V, I _c =-10mA	100			MHz
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz			6	pF
Noise figure	NF	V _{CE} =-6V, I _c =-0.3mA, R _g =10kΩ, f=100Hz			20	dB

CLASSIFICATION OF hFE

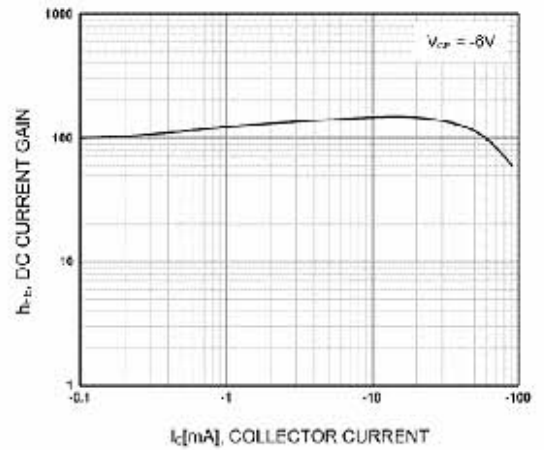
Rank	R	Q	P	K
Range	90-180	135-270	200-400	300-600

Typical Characteristics

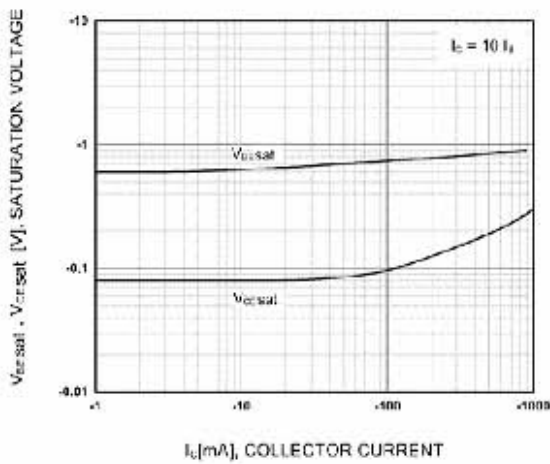
A733



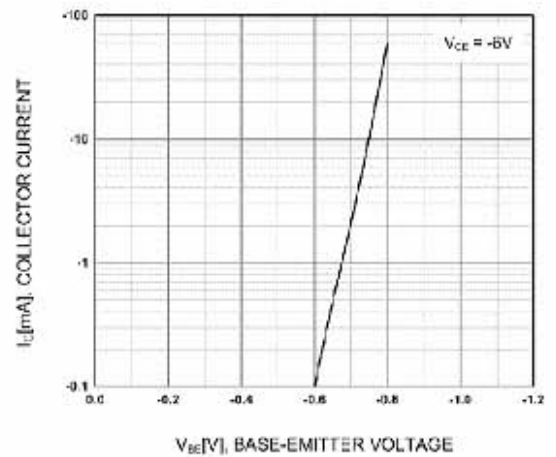
Static Characteristic



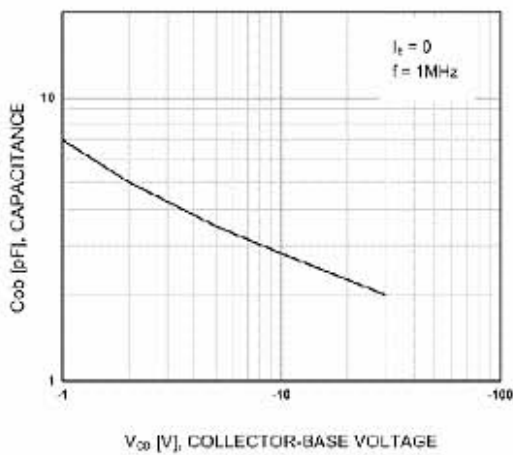
DC current Gain



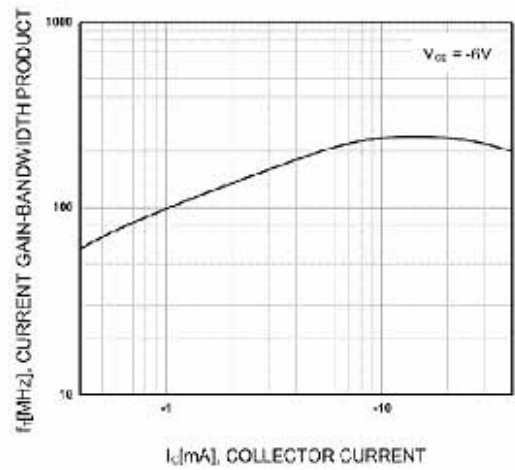
Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



Base-Emitter On Voltage



Collector Output Capacitance



Current Gain Bandwidth Product