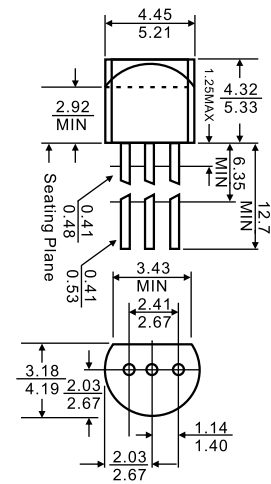




1. EMITTER
2. COLLECTOR
3. BASE

TO-92



Dimensions in inches and (millimeters)

Features

- ✧ Collector output capacitance :
Cob=11 pF (TYP),20 pF (MAX)

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

Symbol	Parameter	Value	Units
V _{CB0}	Collector-Base Voltage	80	V
V _{CEO}	Collector-Emitter Voltage	70	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	500	mA
P _C	Collector Power Dissipation	750	mW
T _j	Junction Temperature	150	°C
T _{stg}	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 =10μA, I _E =0	80			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =2mA, I _B =0	70			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =20V, I _E =0			0.1	μA
DC current gain	h _{FE(1)}	V _{CE} =10V, I _C =150mA	85		340	
	h _{FE(2)}	V _{CE} =10V, I _C =500mA	40			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =300mA, I _B =30mA			0.6	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =300mA, I _B =30mA			1.5	V
Transition frequency	f _T	V _{CE} =10V, I _C =50mA, f=200MHz		120		MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		11	20	pF

CLASSIFICATION OF h_{FE(1)}

Rank	Q	R	S
Range	85-170	120-240	170-340

Typical Characteristics

