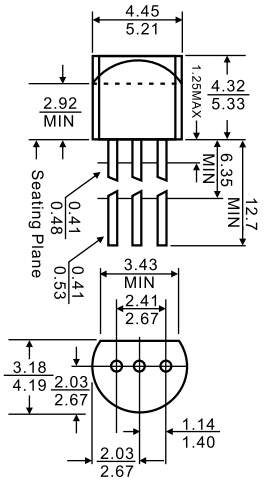
C1815

Transistor(NPN)



1.EMITTER
2.COLLECTOR
3.BASE

TO-92



Dimensions in inches and (millimeters)

Features

✧ **Power dissipation**

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	150	mA
P_C	Collector Power Dissipation	400	mW
T_j	Junction Temperature	125	℃
T_{stg}	Storage Temperature	-55-125	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 100uA, I_E=0	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 0. 1mA, I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 100uA, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}= 60V,I_E=0			0.1	uA
Collector cut-off current	I_{CEO}	V_{CE}= 50V, I_B=0			0.1	uA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			0.1	uA
DC current gain	h_{FE}	V_{CE}= 6 V, I_C= 2mA	70		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100mA, I_B=10mA			0.25	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=100mA, I_B=10mA			1	V
Transition frequency	f_T	V_{CE}=10 V, I_C= 1mA f=30MHz	80			MHz
Collector Output Capacitance	Cob	V_{CB}=10V,I_E=0 f=1MHz			3.5	pF
Noise Figure	NF	V_{CE}=6V,I_C=0.1mA f =1KHz,R_G=10K			10	dB

CLASSIFICATION OF h_{FE}

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700

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Typical Characteristics

