



1. EMITTER
2. COLLECTOR
3. BASE

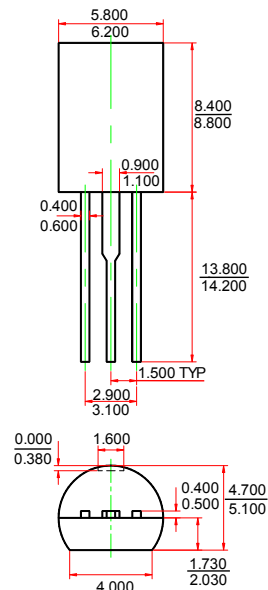
Features

- ✧ High voltage : $V_{ce0}=300V$
- ✧ Small collector output capacitance: $C_{ob}=3.0pF(Typ)$

MAXIMUM RATINGS ($T_A=25^{\circ}C$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current -Continuous	0.1	A
P_C	Collector Power Dissipation	0.9	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55-150	$^{\circ}C$

TO-92MOD



Dimensions in inches and (millimeters)

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	$I_C=100\mu A, I_E=0$	300			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C=3mA, I_B=0$	300			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E=100\mu A, I_C=0$	7			V
Collector cut-off current	I_{CBO}	$V_{CB}=240V, I_E=0$			1.0	μA
Collector cut-off current	I_{CEO}	$V_{CB}=220V, I_B=0$			5.0	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=7V, I_C=0$			1.0	μA
DC current gain	h_{FE}	$V_{CE}=10V, I_C=20mA$	30		150	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			1.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=10mA, I_B=1mA$			1.0	V
Transition frequency	f_T	$V_{CE}=10V, I_C=20mA, f=30MHz$	50			MHz
Collector output capacitance	C_{ob}	$V_{CB}=20V, I_E=0, f=1MHz$		3		pF

CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	30-90	90-150

Typical characteristics

