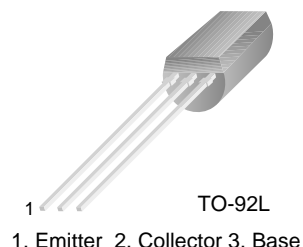


APPLICATION: Audio Amplifier and Switching Applications.

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CB0}	25	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	1	A
Collector Power Dissipation	P_C	1	W
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55~150	$^{\circ}\text{C}$


ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h_{FE}	80		360		$V_{CE}=2\text{V}$, $I_C=500\text{mA}$
Collector Cut-off Current	I_{CBO}			1	μA	$V_{CB}=20\text{V}$, $I_E=0$
Emitter Cut-off Current	I_{EBO}			1	μA	$V_{EB}=4\text{V}$, $I_C=0$
Collector-Base Breakdown Voltage	BV_{CB0}	25			V	$I_C=0.1\text{mA}$, $I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	20			V	$I_C=1\text{mA}$, $I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	5			V	$I_E=0.1\text{mA}$, $I_C=0$
Base-Emitter Voltage	V_{BE}			0.8	V	$V_{CE}=2\text{V}$, $I_C=500\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.2	0.5	V	$I_C=800\text{mA}$, $I_B=80\text{mA}$
Gain bandwidth product	f_T		350		MHz	$I_C=500\text{mA}$, $V_{CE}=2\text{V}$
Common Base Output Capacitance	C_{ob}		38		PF	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$

 h_{FE} Classification

Classification	A	B	C	D
h_{FE}	80~120	85~170	120~240	180~360