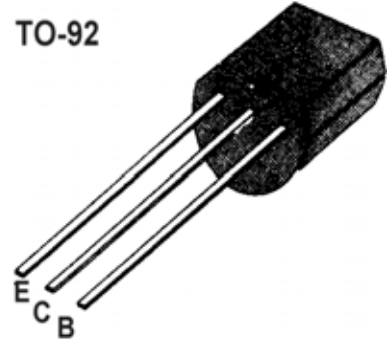


■■ APPLICATION: Audio Frequency Power Amplifier.
 Medium Speed Switching.

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

PARAMETER		SYMBOL	RATING	UNIT
Collector-base voltage		V_{CB0}	120	V
Collector-emitter voltage		V_{CEO}	60	V
Emitter-base voltage		V_{EBO}	6	V
Collector Current	Direct current	I_C	1	A
	Pulse current	I_{CP}	2	A
Collector Power Dissipation		P_C	0.75	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
Collector-Base Breakdown Voltage	BV_{CB0}	120			V	$I_C=50\mu\text{A}$ $I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	60			V	$I_C=1\text{mA}$ $I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	6			V	$I_E=50\mu\text{A}$ $I_C=0$
Collector Cut-off Current	I_{CB0}			0.1	μA	$V_{CB}=120\text{V}$ $I_E=0$
Emitter Cut-off Current	I_{EBO}			0.1	μA	$V_{EB}=6\text{V}$ $I_C=0$
Base-Emitter on Voltage	$V_{BE(on)}$	0.6		0.7	V	$V_{CE}=2\text{V}$ $I_C=50\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.15	0.3	V	$I_C=1\text{A}$ $I_B=50\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		0.9	1.2	V	$I_C=1\text{A}$ $I_B=50\text{mA}$
DC Current Gain	h_{FE}	135		400	β	$V_{CE}=2\text{V}$ $I_C=0.1\text{A}$
Transistion Frequency	f_T	100	160		MHz	$V_{CE}=2\text{V}$ $I_E=0.1\text{A}$ $f=100\text{MHz}$
Common Base Output Capacitance	C_{ob}		19		pF	$V_{CB}=10\text{V}$ $I_E=0$ $f=1\text{MHz}$
Turn on Time	t_{on}		0.07		μs	$V_{CC}=10\text{V}$ $I_C=0.1\text{A}$
Storage Time	t_{stg}		0.95		μs	$I_{B1}=I_{B2}=10\text{mA}$
Fall Time	t_f		0.07		μs	$V_{BE(off)}=-2 \sim -3\text{V}$

■■ h_{FE} Classification And Marking

Print Mark

Classification	L	K	U
h_{FE}	135~270	200~400	300~600