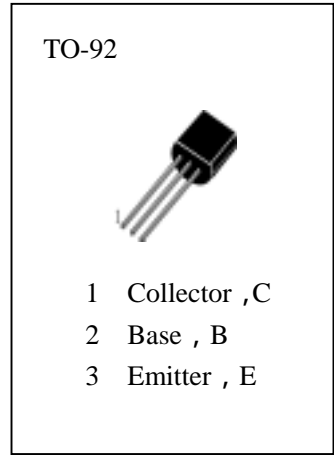




SWITCHING AND AMPLIFIER

ABSOLUTE MAXIMUM RATINGS (  $T_a=25$  )

- $T_{stg}$ —Storage Temperature..... -55~150
- $T_j$ —Junction Temperature.....150
- $P_C$ —Collector Dissipation.....500mW
- $V_{CBO}$ —Collector-Base Voltage.....50V
- $V_{CEO}$ —Collector-Emitter Voltage.....45V
- $V_{EBO}$ —Emitter-Base Voltage.....6V
- $I_C$ —Collector Current.....100mA



ELECTRICAL CHARACTERISTICS (  $T_a=25$  )

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
$I_{CBO}$	Collector Cut-off Current			15	nA	$V_{CB}=30V, I_E=0$
$h_{FE} (1)$	DC Current Gain	110		800		$V_{CE}=5V, I_C=2mA$
$V_{CE(sat1)}$	Collector- Emitter Saturation Voltage		90	250	mV	$I_C=10mA, I_B=0.5mA$
$V_{CE(sat2)}$			200	600	mV	$I_C=100mA, I_B=5mA$
$V_{BE(sat1)}$	Base-Emitter Saturation Voltage		0.7		V	$I_C=10mA, I_B=0.5mA$
$V_{BE(sat2)}$			0.9		V	$I_C=100mA, I_B=5mA$
$V_{BE(ON1)}$	Base-Emitter On Voltage	580	660	700	mV	$V_{CE}=5V, I_C=2mA$
$V_{BE(ON2)}$				720	mV	$V_{CE}=5V, I_C=10mA$
$f_T$	Current Gain-Bandwidth Product		300		MHZ	$V_{CE}=5V, I_C=10mA$
NF	Noise Figure		2	10	dB	$V_{CE}=5V, I_C=200 \mu A$ $f=1KHz, R_g=2K$

$h_{FE}$  Classification

A	B	C
110—220	200—450	420—800