



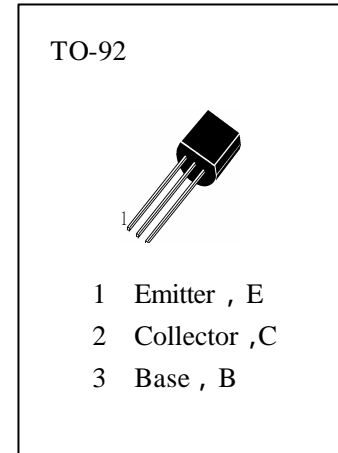
# H3200

## APPLICATIONS

Low Noise Audio Amplifier Application

### ABSOLUTE MAXIMUM RATINGS ( $T_a=25$ )

$T_{stg}$ —Storage Temperature.....	-55~150
$T_j$ —Junction Temperature.....	150
$P_C$ —Collector Dissipation.....	300mW
$V_{CBO}$ —Collector-Base Voltage.....	120V
$V_{CEO}$ —Collector-Emitter Voltage.....	120V
$V_{EBO}$ —Emitter-Base Voltage.....	5V
$I_C$ —Collector Current.....	100mA



### ELECTRICAL CHARACTERISTICS ( $T_a=25$ )

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	120			V	$I_C=1mA, I_B=0$
$I_{CBO}$	Collector Cut-off Current			100	nA	$V_{CB}=120V, I_E=0$
$I_{EBO}$	Emitter Cut-off Current			100	nA	$V_{EB}=5V, I_C=0$
$H_{FE}$	DC Current Gain	200		700		$V_{CE}=6V, I_C=2mA$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			0.3	V	$I_C=10mA, I_B=1mA$
$V_{BE(ON)}$	Base-Emitter On Voltage		0.65		V	$V_{CE}=6V, I_C=2mA$
$f_t$	Current Gain-Bandwidth Product		100		MHZ	$V_{CE}=6V, I_C=1mA$
$C_{ob}$	Output Capacitance		3.0		pF	$V_{CB}=10V, I_E=0, f=1MHz$
NF	Noise Figure			6	dB	$V_{CE}=6V, I_C=100 \mu A$ $f=10KHz, R_g=10K$
NF				2	dB	$V_{CE}=6V, I_C=100 \mu A$ $f=1KHz, R_g=10K$
NF			3		dB	$V_{CE}=6V, I_C=100 \mu A$ $f=1KHz, R_g=100K$

### $h_{FE}$ Classification

GR

BL

200—400

350—700

