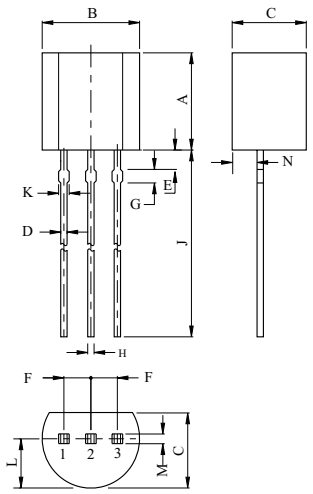
LOW NOISE AUDIO AMPLIFIER APPLICATION.

FEATURES

- The KTC3200 is a transistor for low frequency and low noise applications. This device is designed to ower noise figure in the region of low signal source impedance, and to lower the pulse noise. This is recommended for the first stages of equalizer amplifiers.
- Low Noise
  : NF=4dB(Typ.), Rg=100Ω, V_{CE}=6V, I_C=100 μA, f=1kHz
  : NF=0.5dB(Typ.), Rg=1kΩ, V_{CE}=6V, I_C=100 μA, f=1kHz.
- Low Pulse Noise : Low 1/f Noise.
- High DC Current Gain : h_{FE}=200 700.
- High Breakdown Voltage : V_{CEO}=120V .
- Complementary to KTA1268.



DIM	MILLIMETERS
A	4.70 MAX
B	4.80 MAX
C	3.70 MAX
D	0.45
E	1.00
F	1.27
G	0.85
H	0.45
J	14.00±0.50
K	0.55 MAX
L	2.30
M	0.45 MAX
N	1.00

1. EMITTER
2. COLLECTOR
3. BASE

TO-92

MAXIMUM RATING (Ta=25℃)

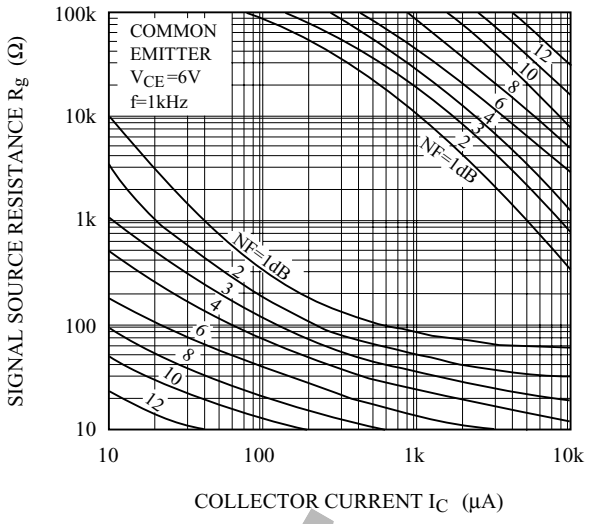
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	120	V
Collector-Emitter Voltage	V_{CEO}	120	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA
Emitter Current	I_E	-100	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

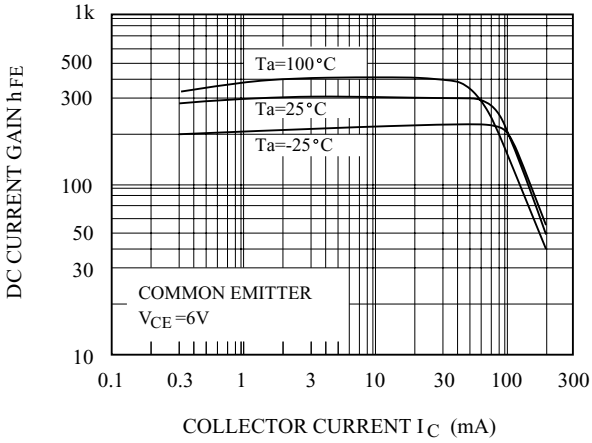
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=120V, I_E=0	-	-	100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	-	-	100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	120	-	-	V
DC Current Gain	h_{FE}(Note)	V_{CE}=6V, I_C=2mA	200	-	700	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=10mA, I_B=1mA	-	-	0.3	V
Base-Emitter Voltage	V_{BE}	V_{CE}=6V, I_C=2mA	-	0.65	-	V
Transition Frequency	f_T	V_{CE}=6V, I_C=1mA	-	100	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz	-	3.0	-	pF
Noise Figure	NF	V_{CE}=6V, I_C=100 μA, f=10Hz, Rg=10kΩ	-	-	6.0	dB
		V_{CE}=6V, I_C=100 μA, f=1kHz, Rg=10kΩ	-	-	2.0	
		V_{CE}=6V, I_C=100 μA f=1kHz, Rg=100Ω	-	4.0	-	

Note : h_{FE} Classification GR:200 400, BL:350 700

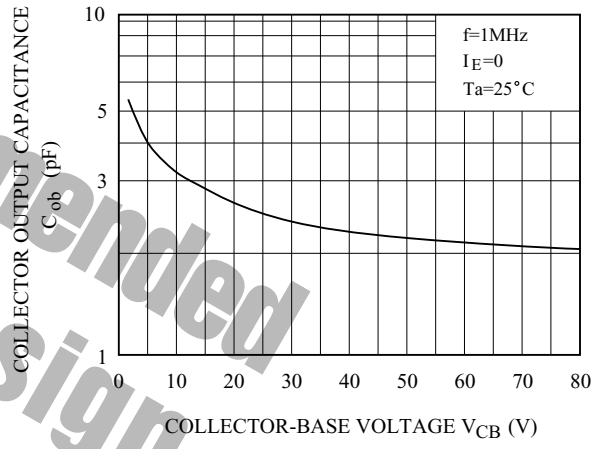
NF - R_g , I_C



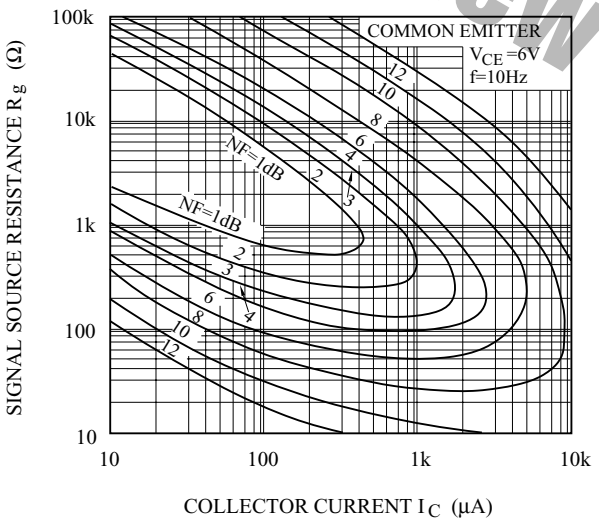
h_{FE} - I_C



C_{ob} - V_{CB}



NF - R_g , I_C



h PARAMETER - V_{CE}