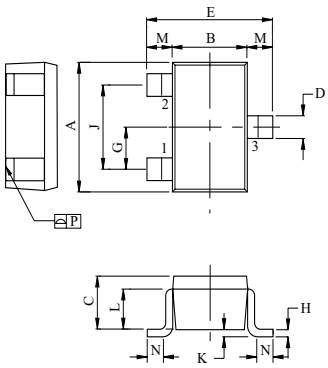
KTA2017

EPITAXIAL PLANAR PNP TRANSISTOR

LOW NOISE AMPLIFIER APPLICATION.

FEATURES

- High Voltage : V_{CEO}=-120V.
- Excellent h_{FE} Linearity
  : h_{FE}(0.1mA)/h_{FE}(2mA)=0.95(Typ.).
- High h_{FE}: h_{FE}=200 700.
- Low Noise : NF=1dB(Typ.), 10dB(Max.).
- Complementary to KTC4077.



DIM	MILLIMETERS
A	2.00±0.20
B	1.25±0.15
C	0.90±0.10
D	0.3+0.10/-0.05
E	2.10±0.20
G	0.65
H	0.15+0.1/-0.06
J	1.30
K	0.00~0.10
L	0.70
M	0.42±0.10
N	0.10 MIN
P	0.1 MAX

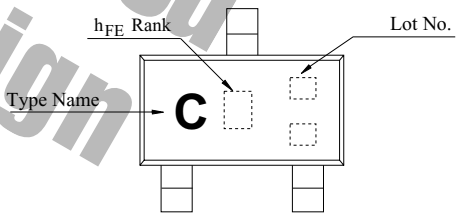
1. EMITTER
2. BASE
3. COLLECTOR

USM

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
Base Current	I_B	-20	mA
Collector Power Dissipation	P_C	100	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃

Marking

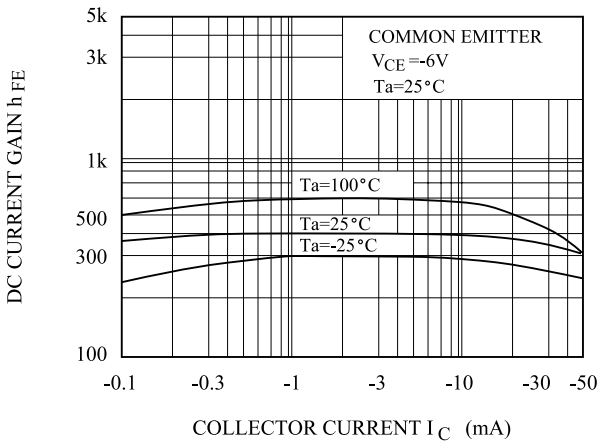


ELECTRICAL CHARACTERISTICS (Ta=25℃)

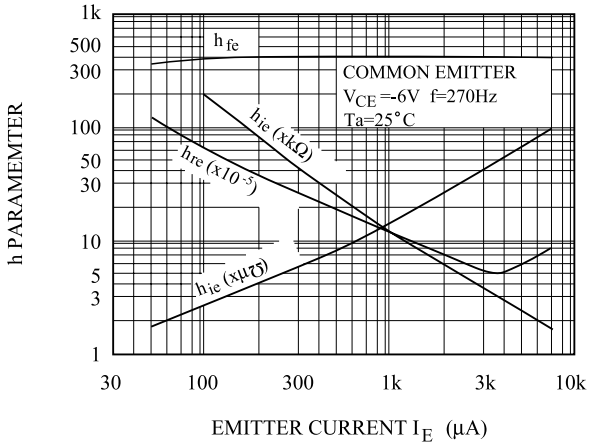
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-120V, I_E=0	-	-	-0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-0.1	μA
DC Current Gain	h_{FE} (Note)	V_{CE}=-6V, I_C=-2mA	200	-	700	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-10mA, I_B=-1mA	-	-	-0.3	V
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	-	4.0	-	pF
Noise Figure	NF	V_{CE}=-6V, I_C=-0.1mA f=1kHz, Rg=10kΩ	-	1.0	10	dB

Note : h_{FE} Classification GR(6):200 400 BL(8):350 700

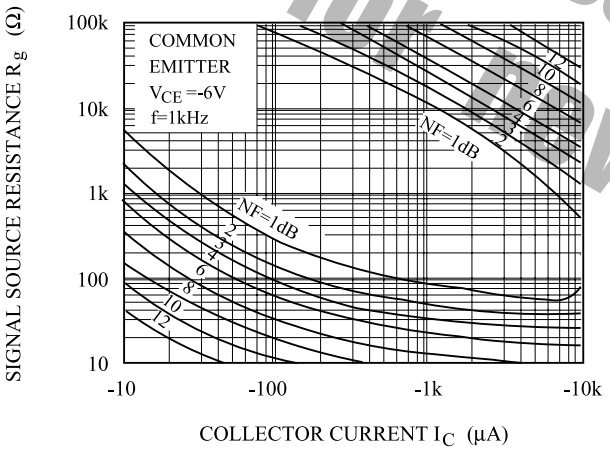
h_{FE} - I_C



h PARAMETER - I_E



NF - Rg, I_C



C_{ob} - V_{CB}