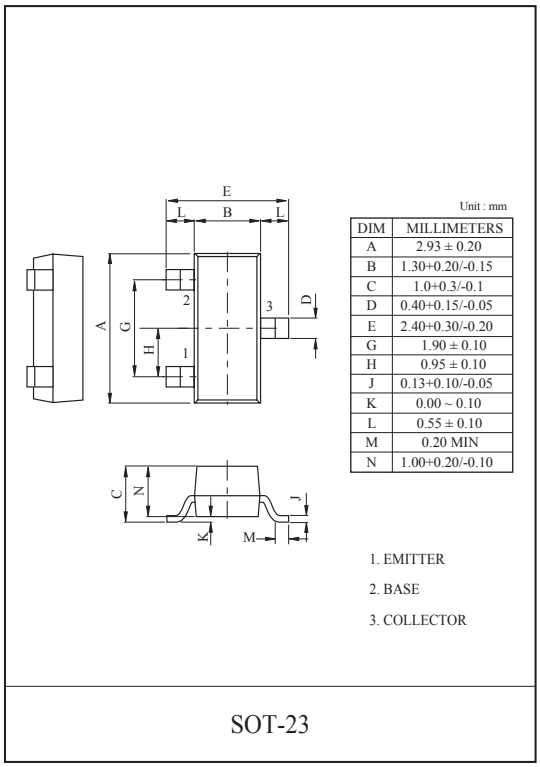
KTA1504S

EPITAXIAL PLANAR PNP TRANSISTOR

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.



SOT-23

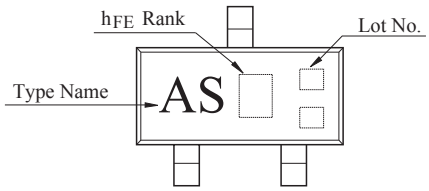
FEATURES

- Excellent h_{FE} Linearity
  : h_{FE}(0.1mA)/h_{FE}(2mA)=0.95(Typ.).
- Low Noise : NF=1dB(Typ.), 10dB(Max.).
- Complementary to KTC3875S.
- Suffix **U** : Qualified to AEC-Q101.
  ex) KTA1504S-Y-RTK/P**U**
- Suffix **E** : EOS(Electrical Over Stress)
  Capacity Enhanced Product.
  ex) KTA1504S-Y-RTK/P**E**
- Suffix **UE** : Qualified to AEC-Q101 and
  EOS(Electrical Over Stress)
  Capacity Enhanced Product.
  ex) KTA1504S-Y-RTK/P**UE**

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-150	mA
Base Current	I_B	-30	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

Marking

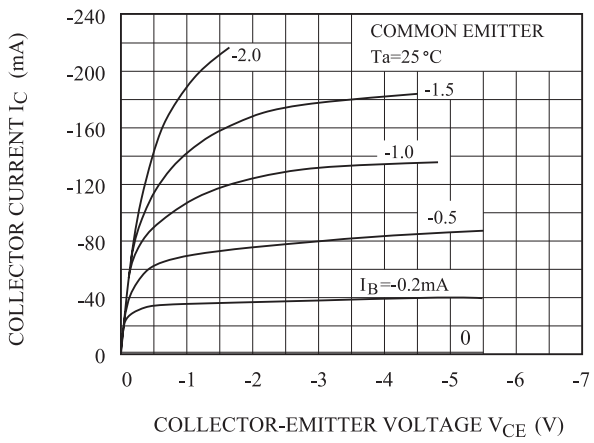


ELECTRICAL CHARACTERISTICS (Ta=25℃)

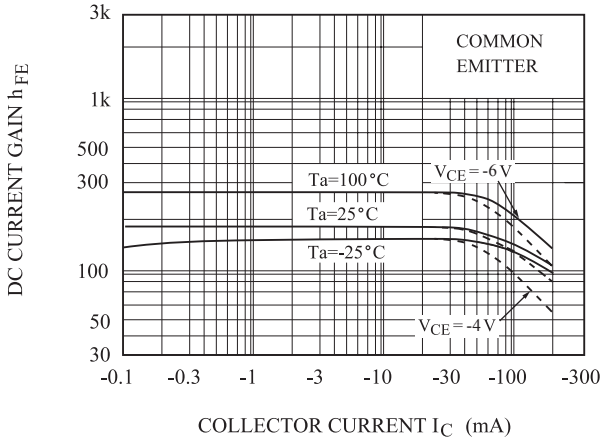
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-50V, I_E=0	-	-	-0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-0.1	μA
DC Current Gain	h_{FE}(Note)	V_{CE}=-6V, I_C=-2mA	70	-	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-10mA	-	-0.1	-0.3	V
Transition Frequency	f_T	V_{CE}=-10V, I_C=-1mA	80	-	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	4.0	7.0	pF
Noise Figure	NF	V_{CE}=-6V, I_C=-0.1mA f=1kHz, Rg=10kΩ	-	1.0	10	dB

Note : h_{FE} Classification O:70 ~ 140 , Y:120 ~ 240 , GR(G):200 ~ 400

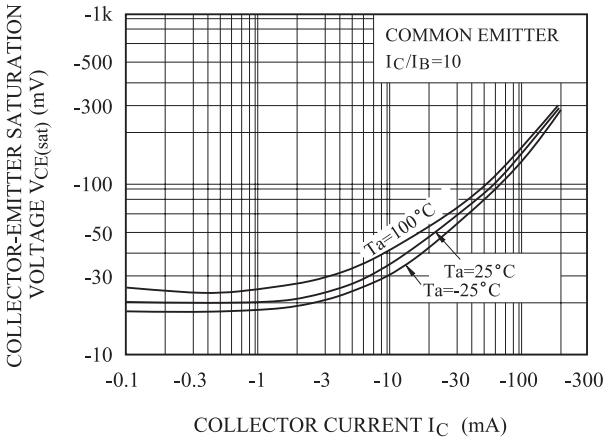
I_C - V_{CE}



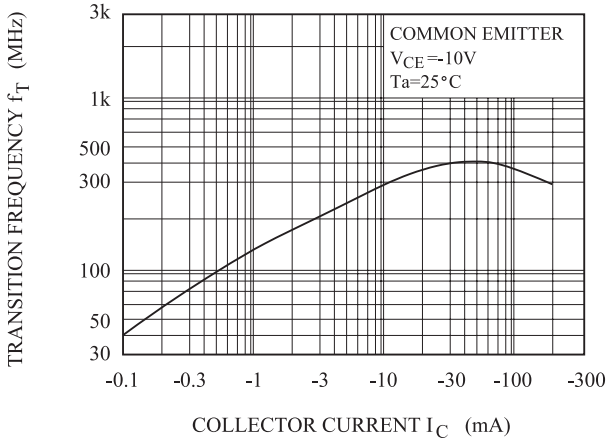
h_{FE} - I_C



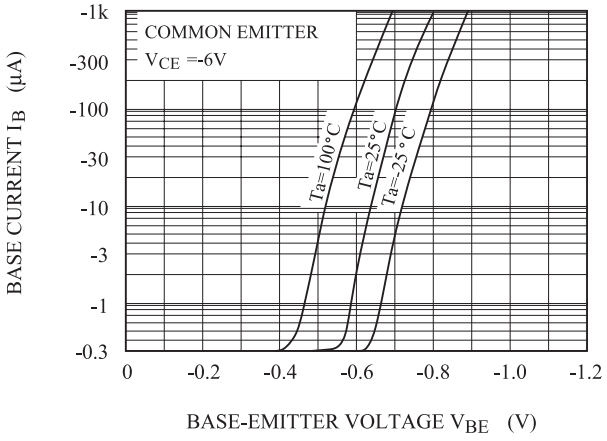
$V_{CE(sat)}$ - I_C



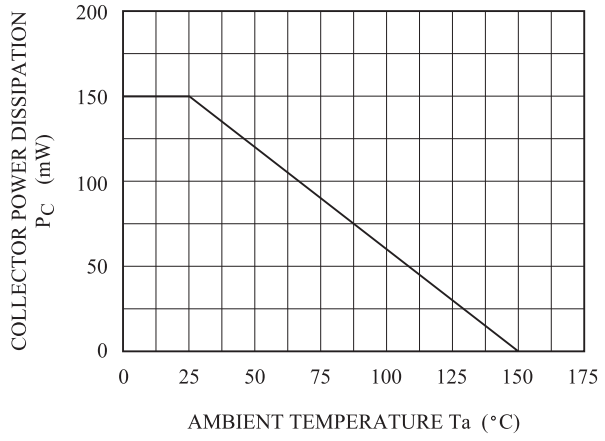
f_T - I_C



I_B - V_{BE}



Pc - Ta



SAFE OPERATING AREA