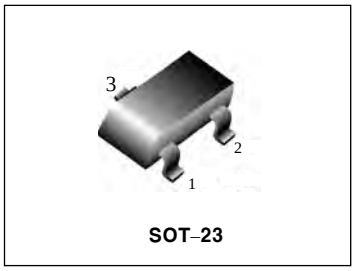
GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

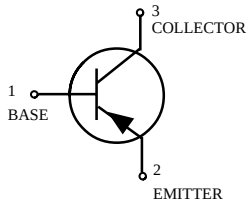


FEATURES

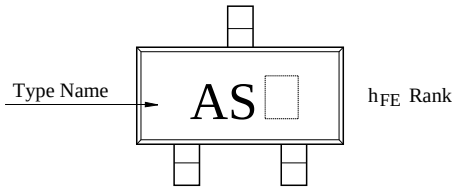
· Excellent h_{FE} Linearity
: h_{FE}(0.1mA)/h_{FE}(2mA)=0.95(Typ.).
· Low Noise : NF=1dB(Typ.), 10dB(Max.).
· Complementary to FTC3875.

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	℃
Storage Temperature Range	T_{stg}	-55～150	℃



Marking

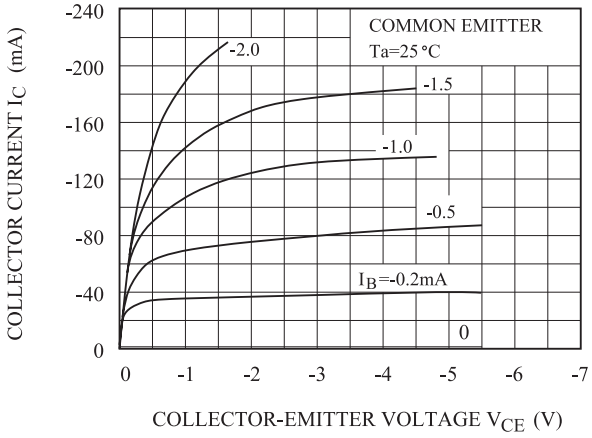


ELECTRICAL CHARACTERISTICS (Ta=25℃)

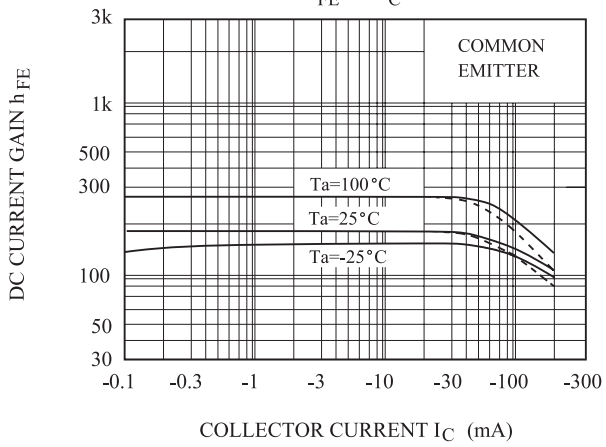
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-50V, I_E=0	-	-	-0.1	uA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-0.1	uA
DC Current Gain	h_{FE}(Note)	V_{CE}=-6V, I_C=-2mA	70	-	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-100mA, 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

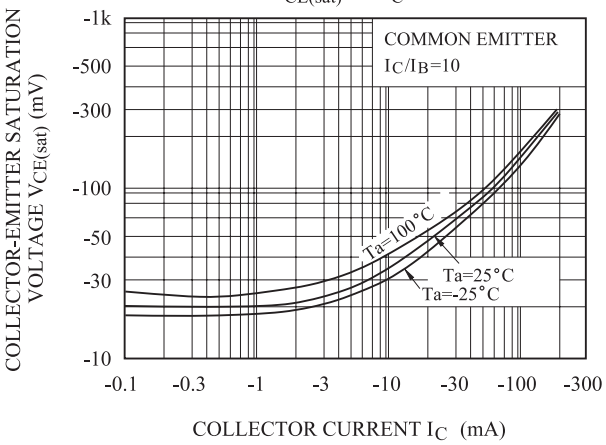
I_C - V_{CE}



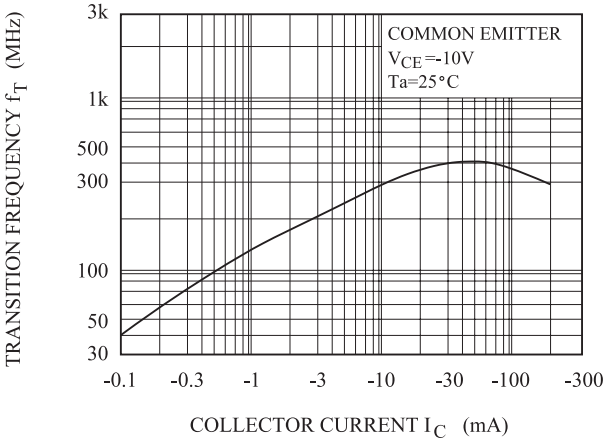
h_{FE} - I_C



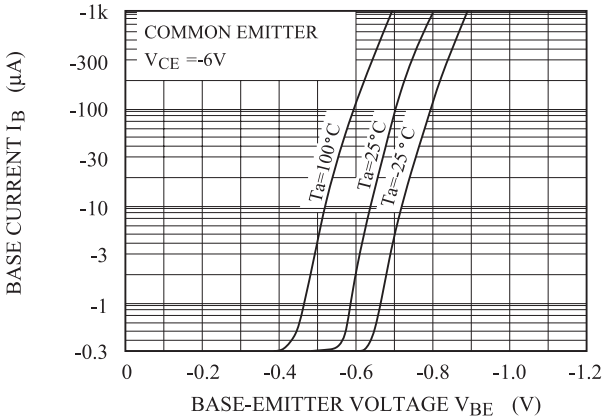
$V_{CE(sat)}$ - I_C



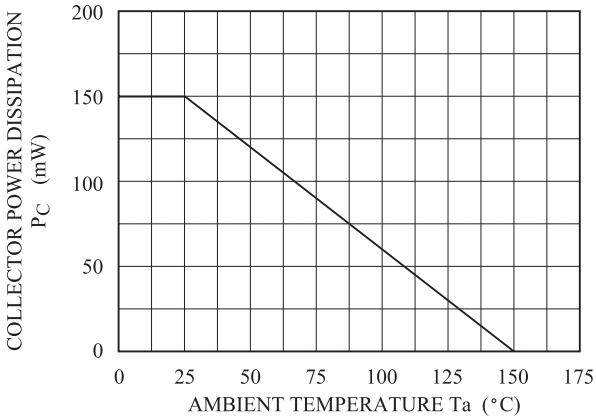
f_T - I_C



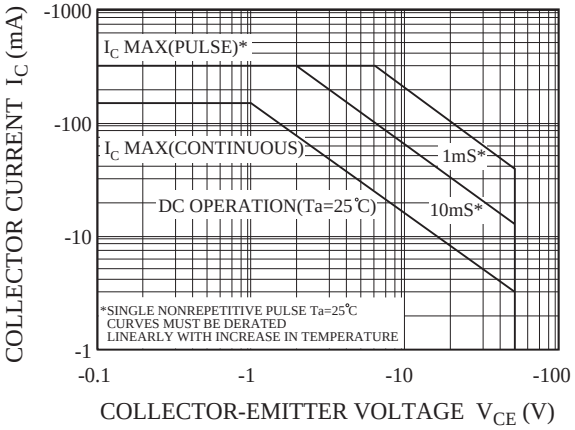
I_B - V_{BE}



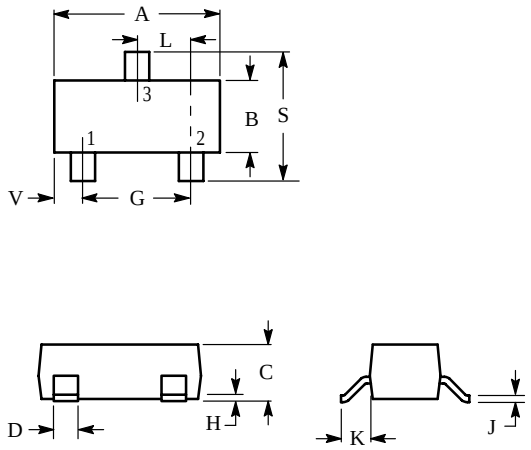
Pc - Ta



SAFE OPERATING AREA



SOT-23



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M,1982
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

