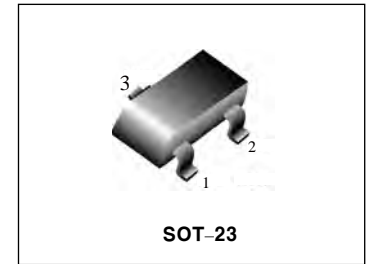


### GENERAL PURPOSE APPLICATION. SWITCHING APPLICATION.

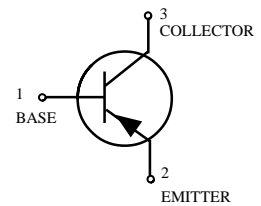
#### FEATURES

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

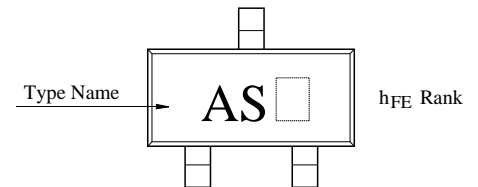


#### MAXIMUM RATING (Ta=25 °C)

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



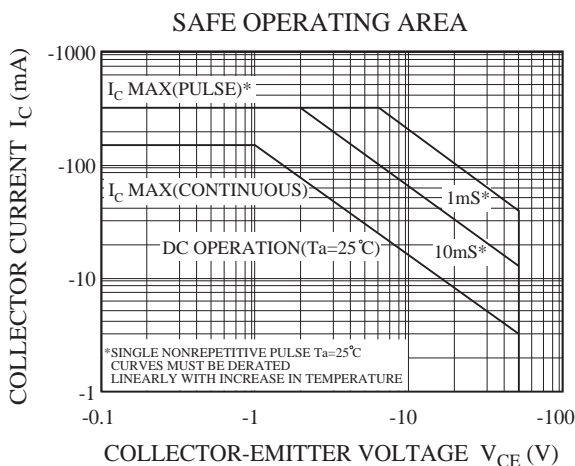
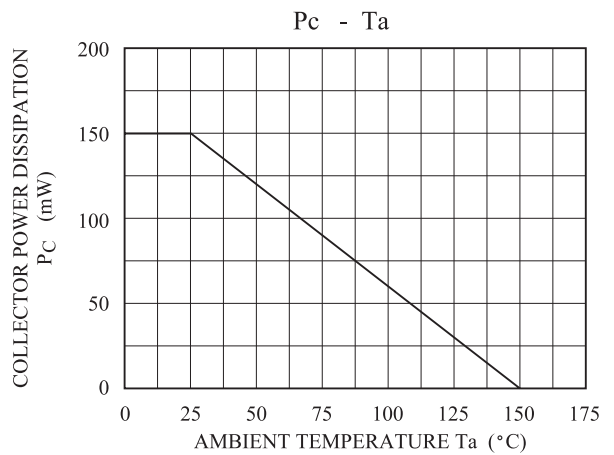
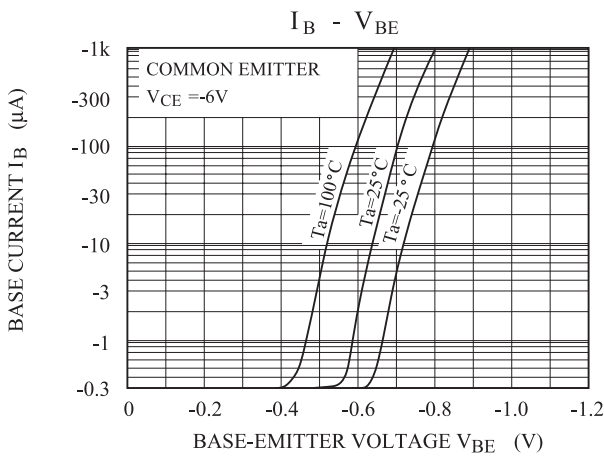
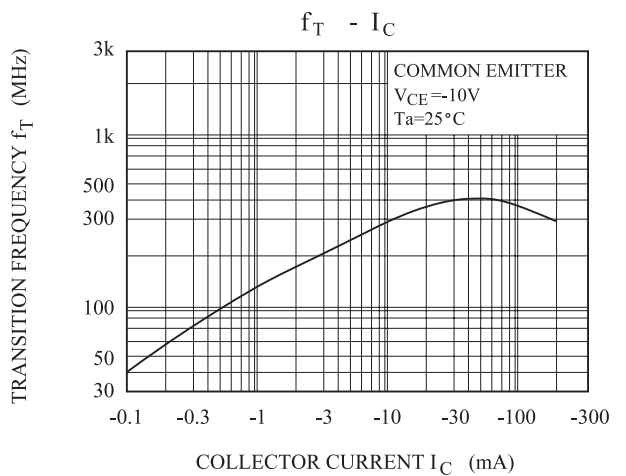
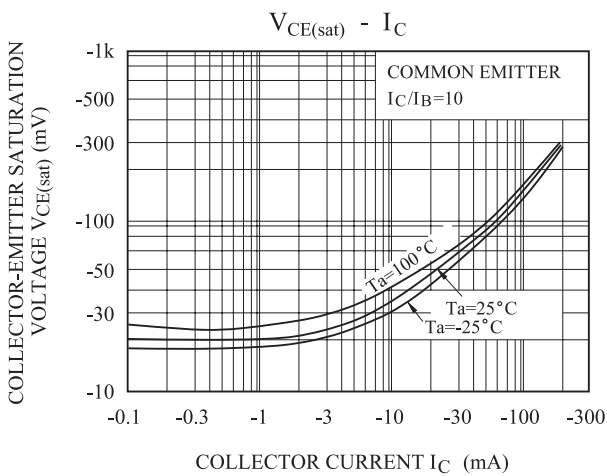
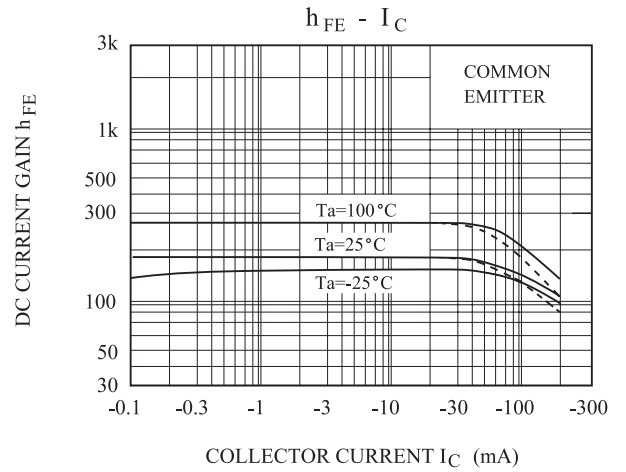
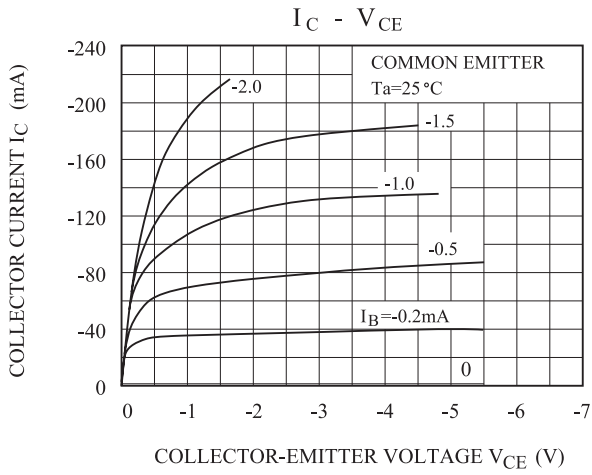
#### Marking



#### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

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	$V_{CE}=-6V, I_C=-0.1mA$ $f=1kHz, R_g=10k\Omega$	-	1.0	10	dB

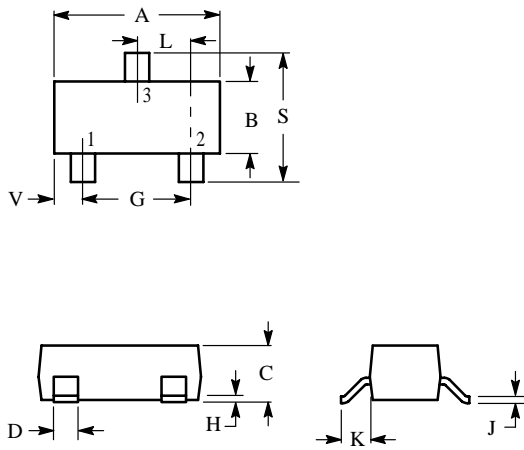
Note :  $h_{FE}$  Classification O:70 ~ 140 , Y:120 ~ 240 , GR(G):200 ~ 400



# 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

