

GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

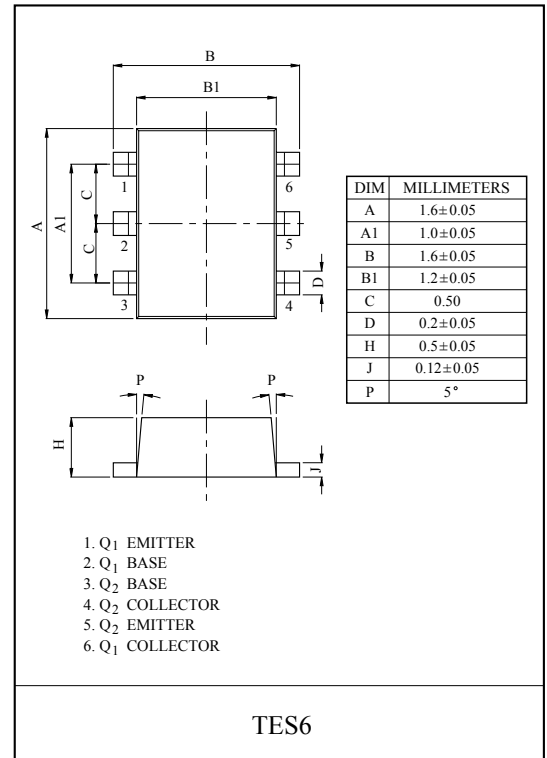
### FEATURES

- A super-minimold package houses 2 transistor.
- Excellent temperature response between these 2 transistor.
- High pairing property in  $h_{FE}$ .
- The following characteristics are common for  $Q_1, Q_2$ .

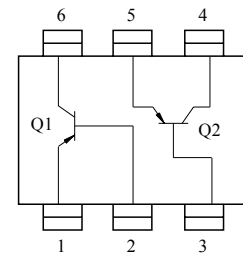
### MAXIMUM RATING (Ta=25°C)

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	$P_C^*$	200	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C

\* Total Rating



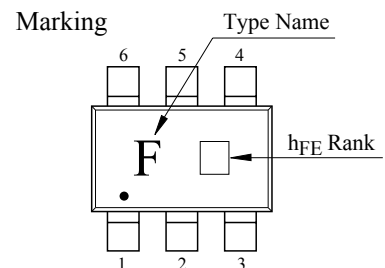
### EQUIVALENT CIRCUIT (TOP VIEW)



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

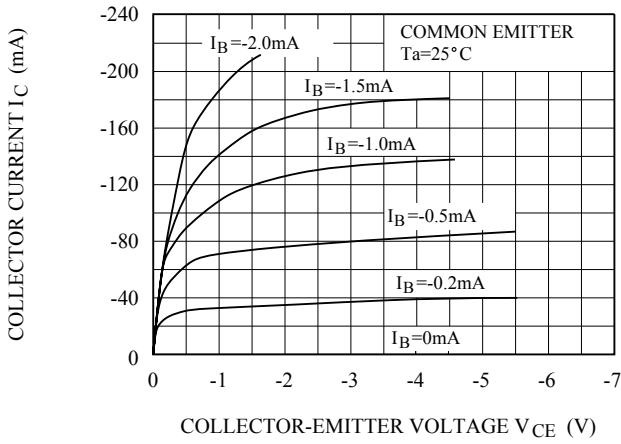
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=-50V, I_E=0$	-	-	-0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5V, I_C=0$	-	-	-0.1	$\mu A$
DC Current Gain	$h_{FE}$ (Note)	$V_{CE}=-6V, I_C=-2mA$	120	-	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100mA, I_B=-10mA$	-	-0.1	-0.30	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	7	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 Y(4):120 ~ 240, GR(6):200 ~ 400

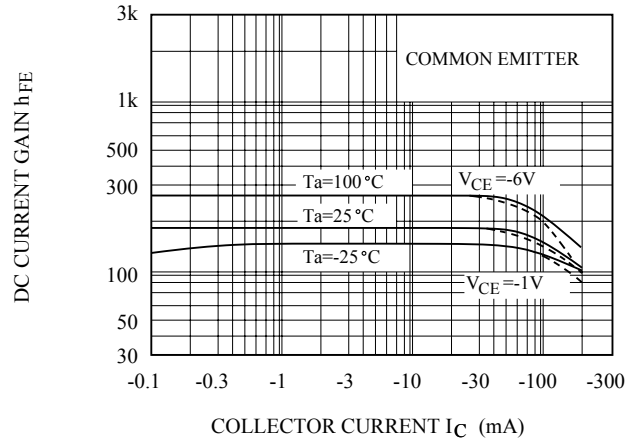


# KTA712E

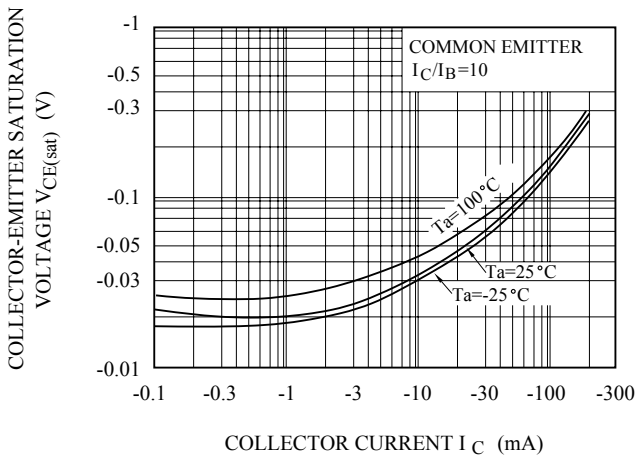
$I_C - V_{CE}$



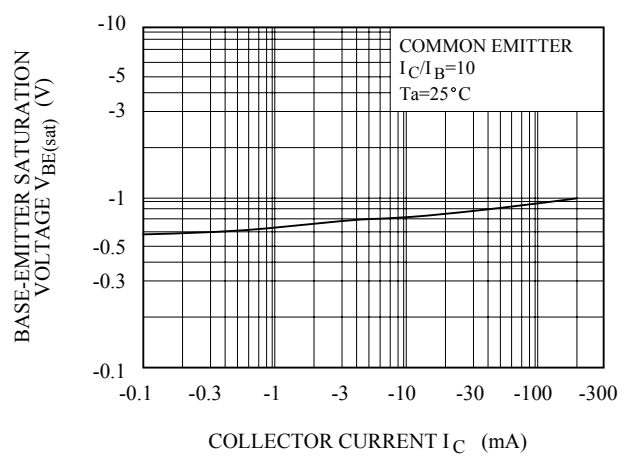
$h_{FE} - I_C$



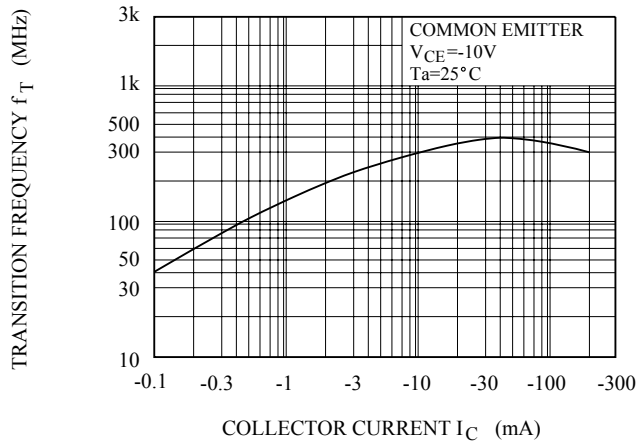
$V_{CE(sat)} - I_C$



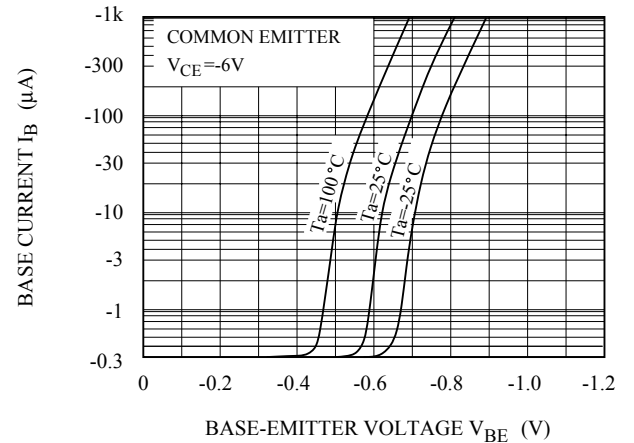
$V_{BE(sat)} - I_C$



$f_T - I_C$



$I_B - V_{BE}$



# KTA712E

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