

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

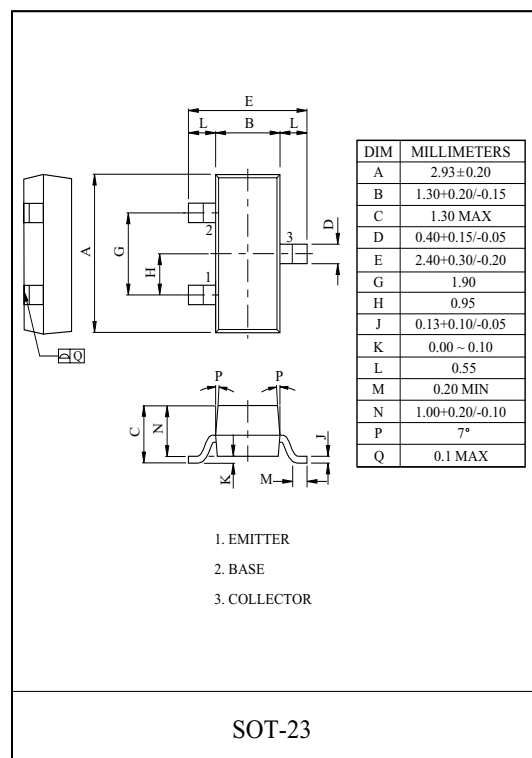
FEATURES

- Complementary to BC807A.

MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA
Emitter Current	I_E	500	mA
Collector Power Dissipation	P_C^*	300	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

* : Package Mounted On 99.9% Alumina $10 \times 8 \times 0.5$ mm



ELECTRICAL CHARACTERISTICS (Ta=25 °C)

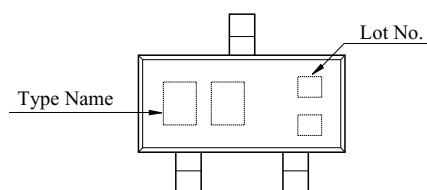
CHARACTERISTIC	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=20V, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	0.1	μA
DC Current Gain (Note)	$h_{FE}(1)$	$V_{CE}=1V, I_C=100mA$	100	-	630	
	$h_{FE}(2)$	$V_{CE}=1V, I_C=500mA$	40	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$	-	-	0.7	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=1V, I_C=500mA$	-	-	1.2	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=10mA, f=100MHz$	100	-	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	5	-	pF

Note : $h_{FE}(1)$ Classification 16:100 250 , 25:160 400 , 40:250 630

MARK SPEC

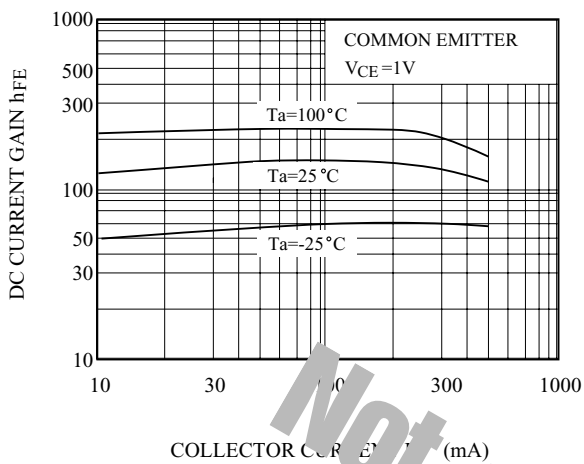
TYPE	BC817A-16	BC817A-25	BC817A-40
MARK	2M	2N	2P

Marking

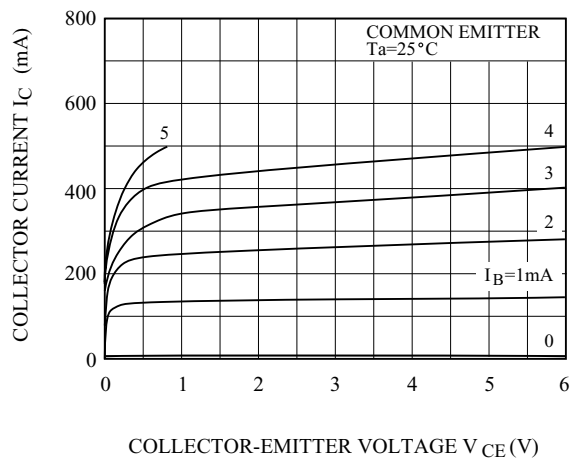


BC817A

$h_{FE} - I_C$



$I_C - V_{CE}$

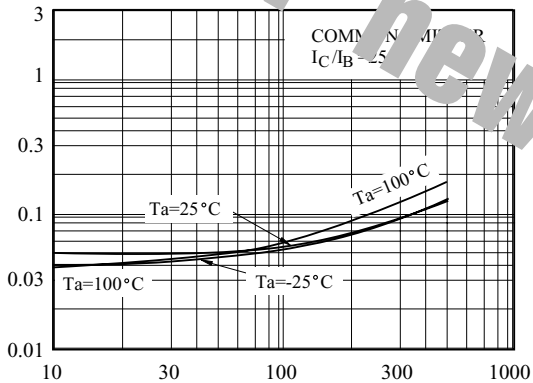


COLLECTOR CURRENT I_C (mA)

COLLECTOR-EMITTER VOLTAGE V_{CE} (V)

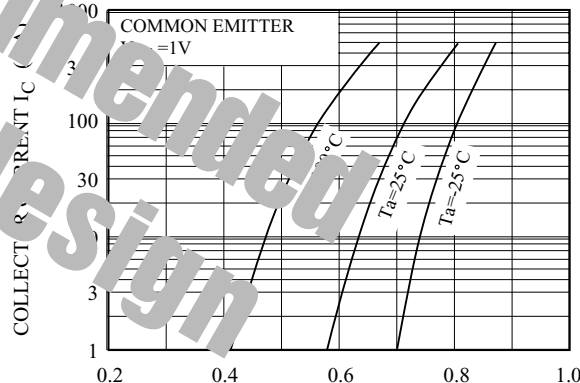
Not recommended for new design

COLLECTOR-EMITTER SATURATION VOLTAGE $V_{CE(sat)}$ (V)



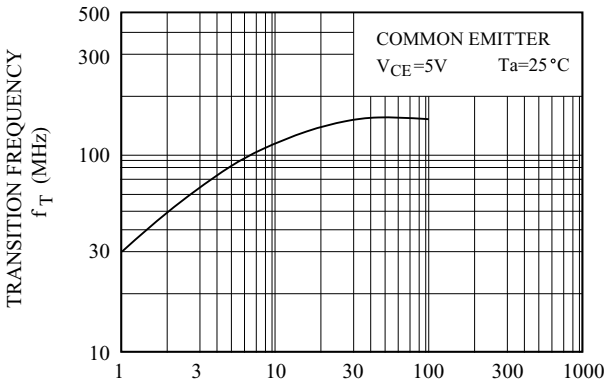
COLLECTOR CURRENT I_C (mA)

$I_C - V_{BE}$



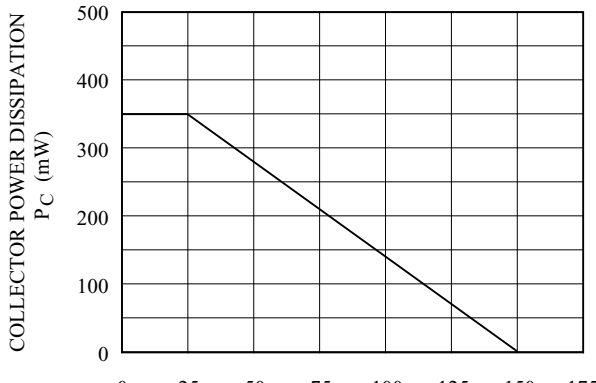
BASE-EMITTER VOLTAGE V_{BE} (V)

$f_T - I_C$



COLLECTOR CURRENT I_C (mA)

$P_C - T_a$



AMBIENT TEMPERATURE T_a ($^\circ\text{C}$)