

**GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.**

FEATURES

- Complementary to BC807.
- Suffix U : Qualified to AEC-Q101
ex) BC817-40-RTK/PU

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	800	mA
Emitter Current	I_E	-800	mA
Collector Power Dissipation	P_C^*	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~ 150	°C

* : Package Mounted On 99.9% Alumina 10 x 8 x 0.6mm.

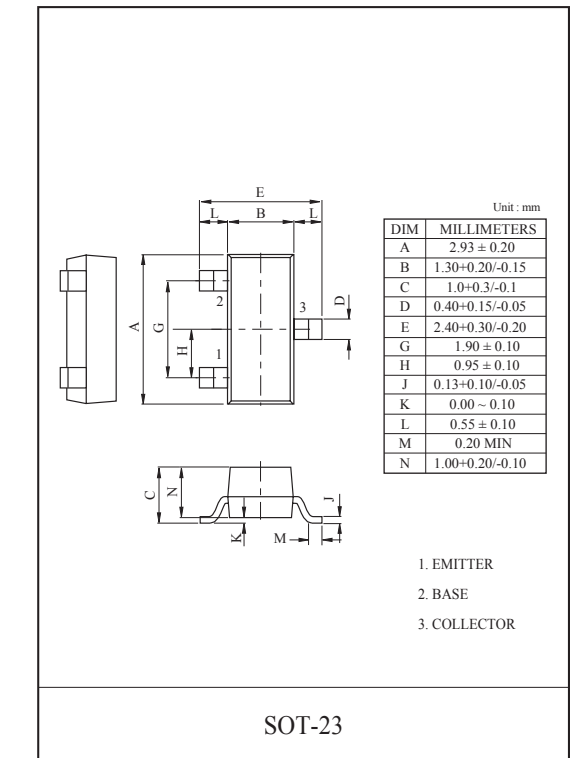
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	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

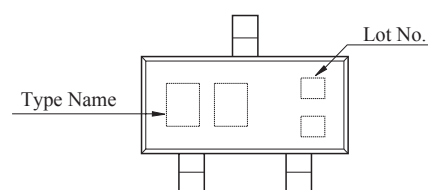
Note : $h_{FE(1)}$ Classification 16:100 ~ 250 , 25:160 ~ 400 , 40:250 ~ 630

MARK SPEC

TYPE	BC817-16	BC817-25	BC817-40
MARK	6A	6B	6C

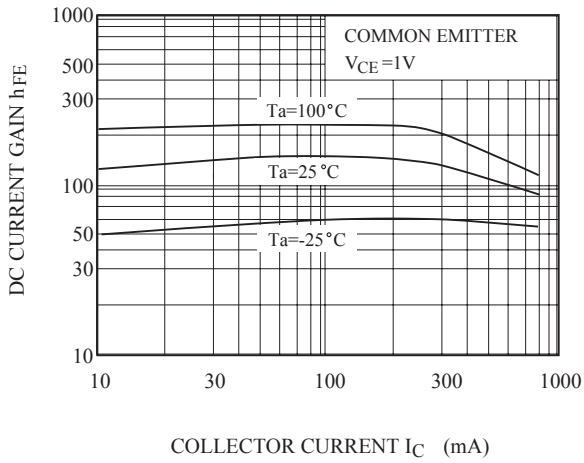


Marking

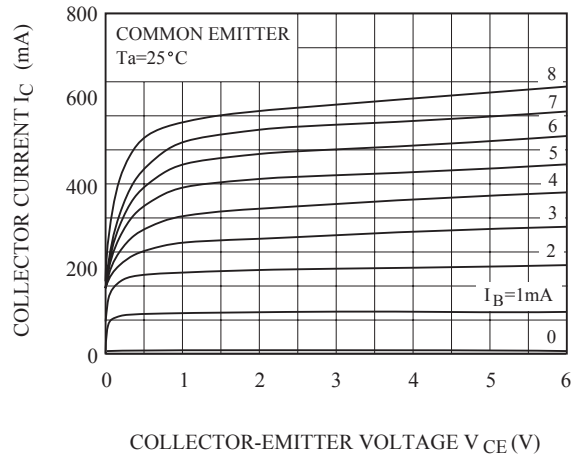


BC817

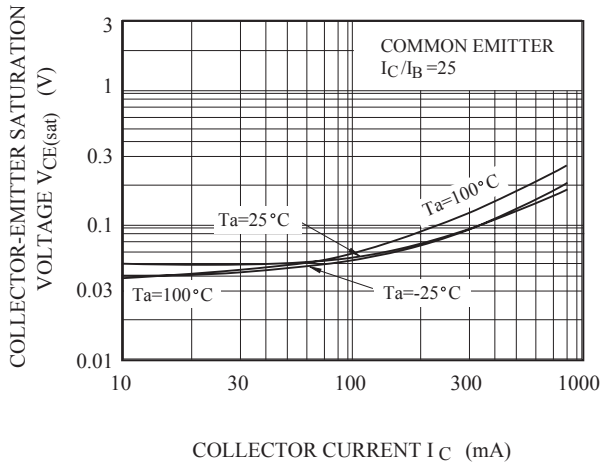
$h_{FE} - I_C$



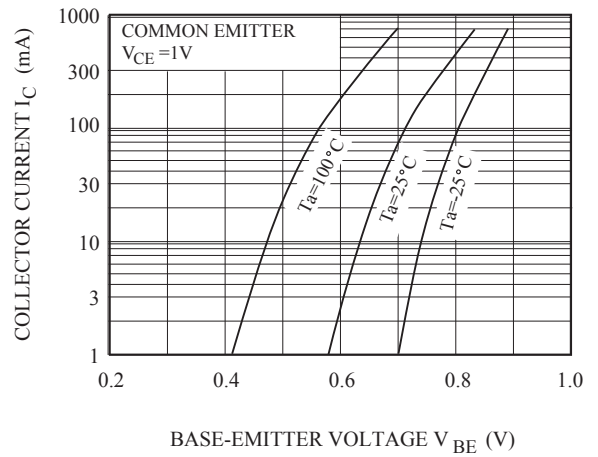
$I_C - V_{CE}$



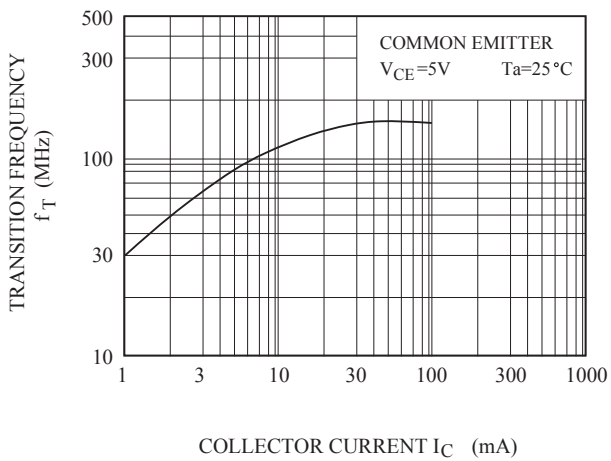
$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



$f_T - I_C$



$P_C - T_a$

