

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES

- Complementary to BC817.
- Suffix U : Qualified to AEC-Q101
ex) BC807-25-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.

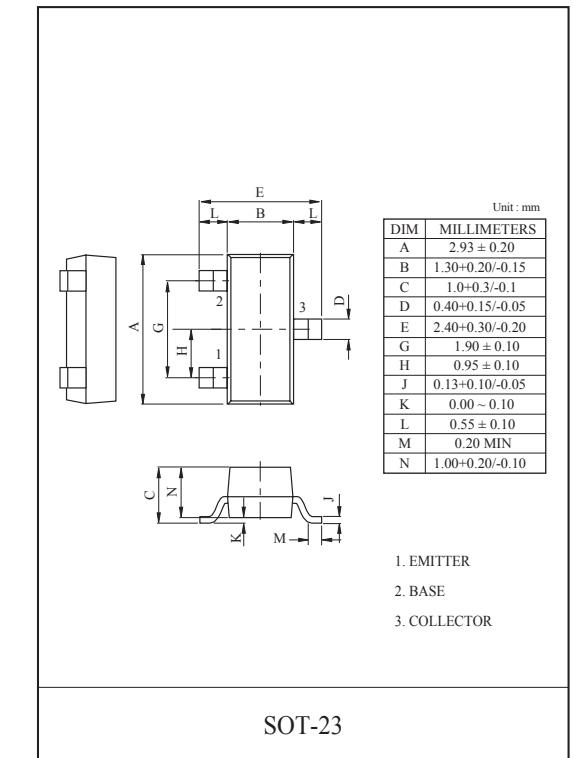
ELECTRICAL CHARACTERISTICS (Ta=25°C)

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	$V_{CE}=-5V, I_C=-10mA, f=100MHz$	80	-	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$	-	9	-	pF

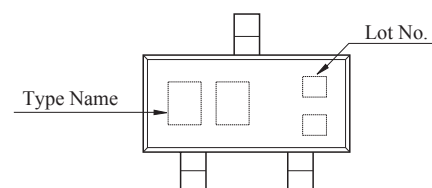
Note : h_{FE} Classification 16:100 ~ 250 , 25:160 ~ 400 , 40:250 ~ 630

MARK SPEC

TYPE.	BC807-16	BC807-25	BC807-40
MARK	5A	5B	5C

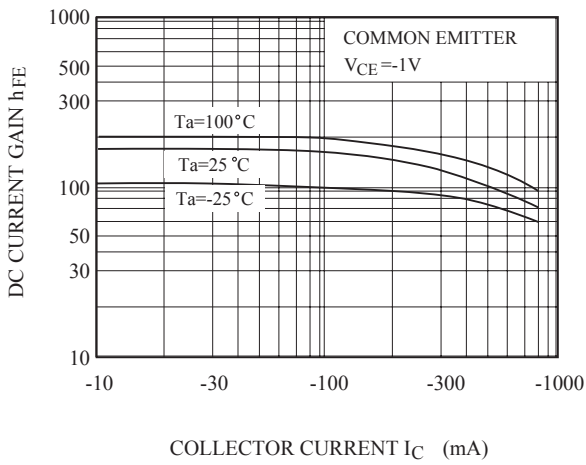


Marking

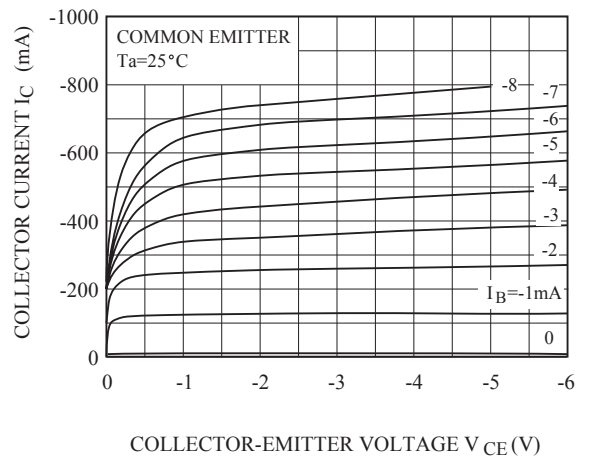


BC807

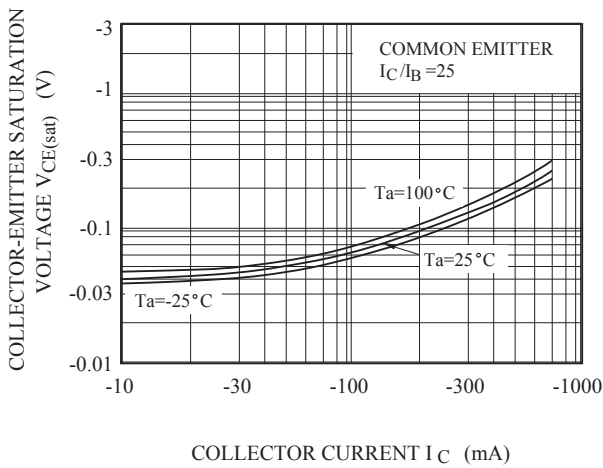
$h_{FE} - I_C$



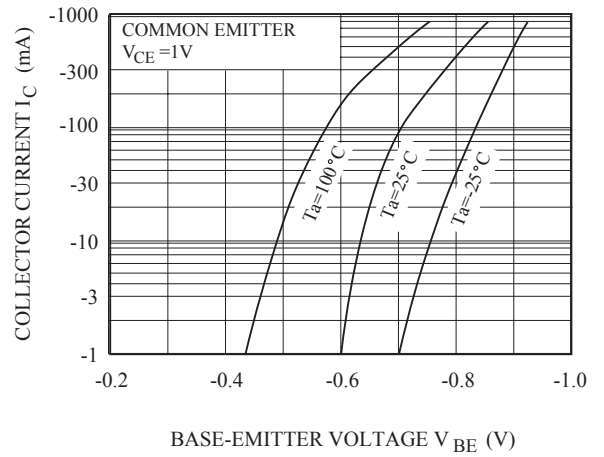
$I_C - V_{CE}$



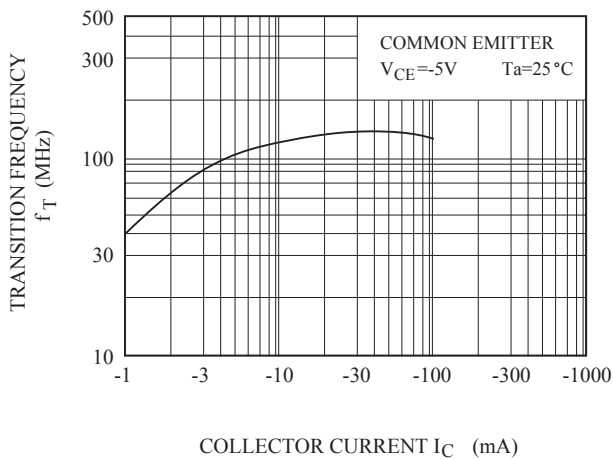
$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



$f_T - I_C$



$P_C - T_a$

