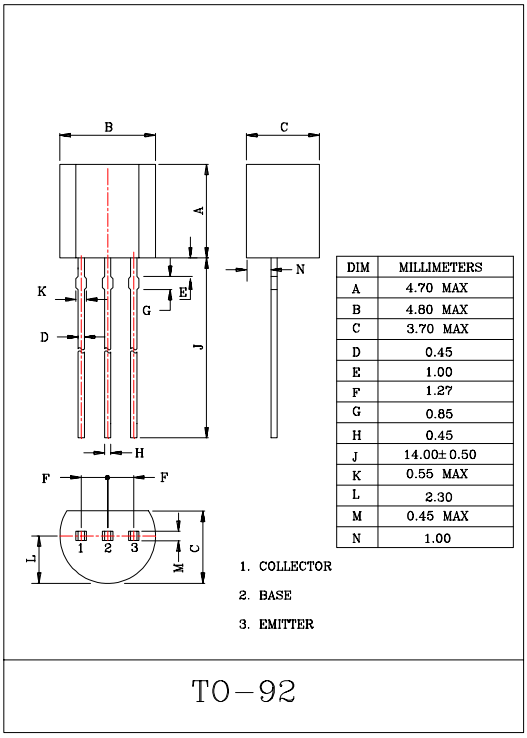
GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION .

FEATURES
- High Voltage : BC546 V_{CEO}=65V.
- For Complementary With PNP Type BC556/557/558.



DIM	MILLIMETERS
A	4.70 MAX
B	4.80 MAX
C	3.70 MAX
D	0.45
E	1.00
F	1.27
G	0.85
H	0.45
J	14.00±0.50
K	0.55 MAX
L	2.30
M	0.45 MAX
N	1.00

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MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	BC546	V_{CBO}	80	V
	BC547		50	
	BC548		30	
Collector-Emitter Voltage	BC546	V_{CEO}	65	V
	BC547		45	
	BC548		30	
Emitter-Base Voltage	BC546	V_{EBO}	6	V
	BC547		6	
	BC548		5	
Collector Current	BC546	I_C	100	mA
	BC547		100	
	BC548		100	
Emitter Current	BC546	I_E	-100	mA
	BC547		-100	
	BC548		-100	
Collector Power Dissipation		P_C	625	mW
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55~150	℃

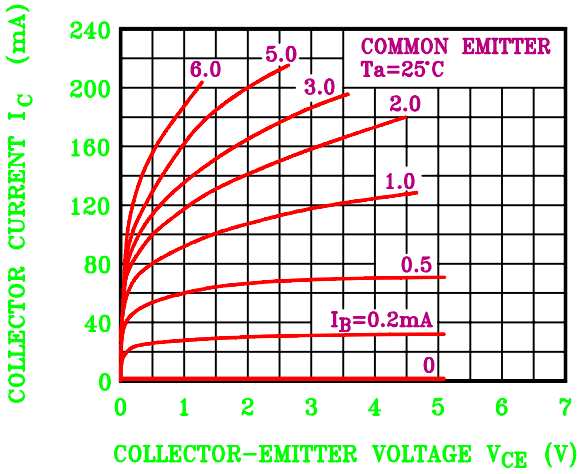
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=30V, I_E=0	-	-	15	nA
DC Current Gain (Note)	BC546	h_{FE}	V_{CE}=5V, I_C=2mA	110	-	450	
	BC547			110	-	800	
	BC548			110	-	800	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=100mA, I_B=5mA	-	-	0.6	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	I_C=100mA, I_B=5mA	-	0.9	1.1	V
Base-Emitter Voltage		$V_{BE(ON1)}$	V_{CE}=5V, I_C=2mA	0.58	-	0.7	V
		$V_{BE(ON2)}$	V_{CE}=5V, I_C=10mA	-	-	0.75	V
Transition Frequency		f_T	V_{CE}=5V, I_C=10mA, f=100MHz	-	150	-	MHz
Collector Output Capacitance		C_{ob}	V_{CB}=10V, f=1MHz	-	-	4.5	pF
Noise Figure		NF	V_{CE}=6V, I_C=0.1mA R_g=10kΩ, f=1kHz	-	1.0	10	dB

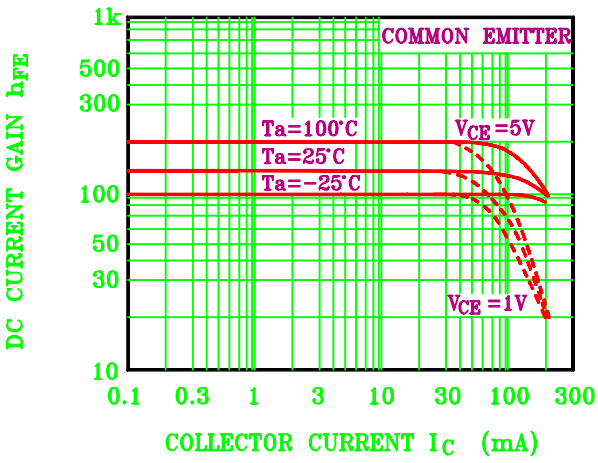
NOTE : According to the value of h_{FE} the BC546, BC547, BC548 are classified as follows.

CLASSIFICATION		none	A	B	C
h_{FE}	BC546	110~450	110~220	200~450	-
	BC547	110~800	110~220	200~450	420~800
	BC548	110~800	110~220	200~450	420~800

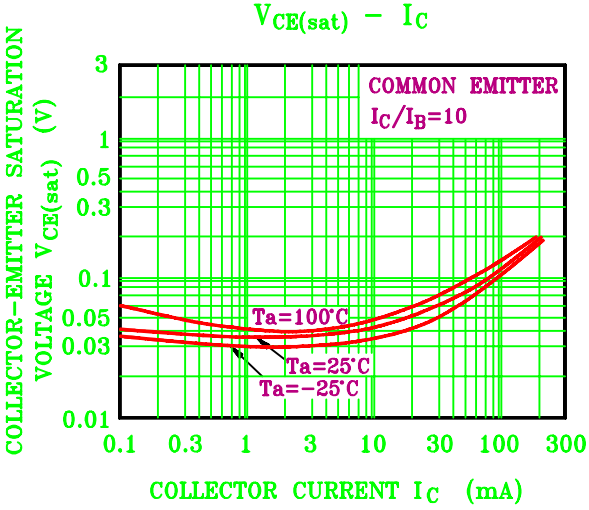
I_C – V_{CE} (LOW VOLTAGE REGION)



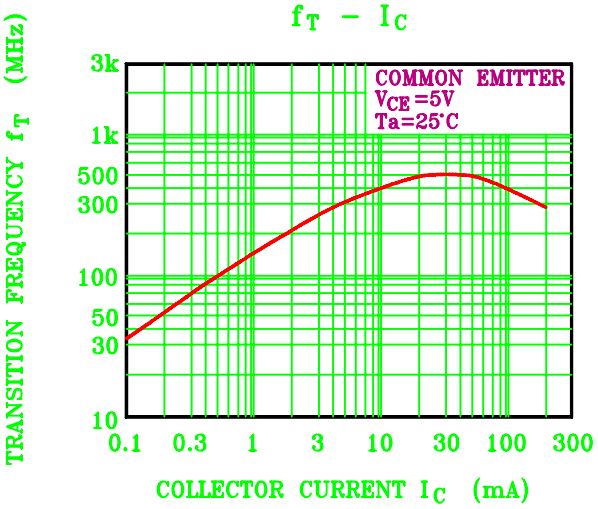
h_{FE} – I_C



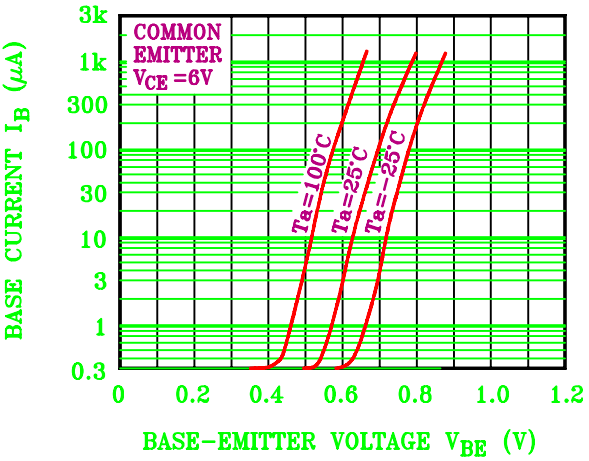
$V_{CE(sat)}$ – I_C



f_T – I_C



I_B – V_{BE}



P_C – Ta