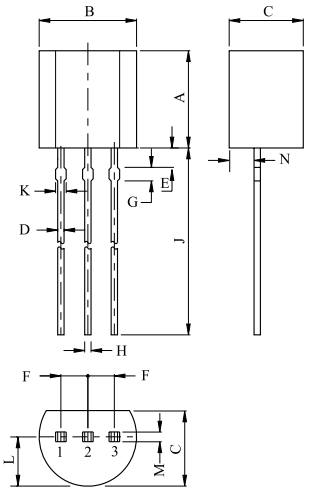
BC338

EPITAXIAL PLANAR NPN TRANSISTOR

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES

- High Current : I_C=800mA.
- DC Current Gain : h_{FE}=100 630 (V_{CE}=1V, I_c=100mA).
- For Complementary with PNP type BC328.



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

1. COLLECTOR
2. BASE
3. EMITTER

TO-92

MAXIMUM RATING (Ta=25℃)

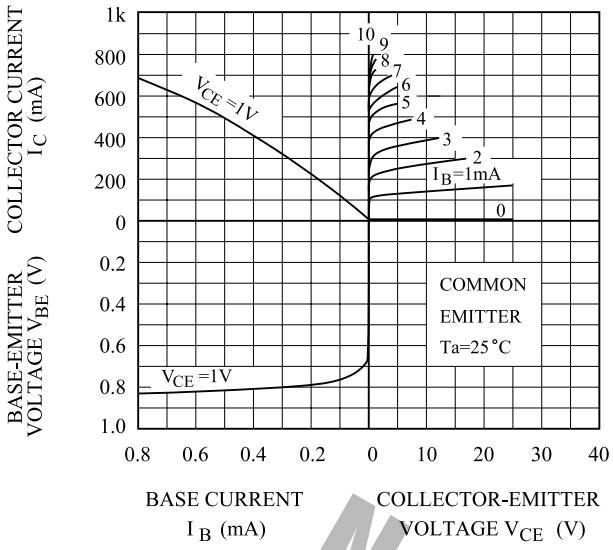
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	800	mA
Emitter Current	I_E	-800	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

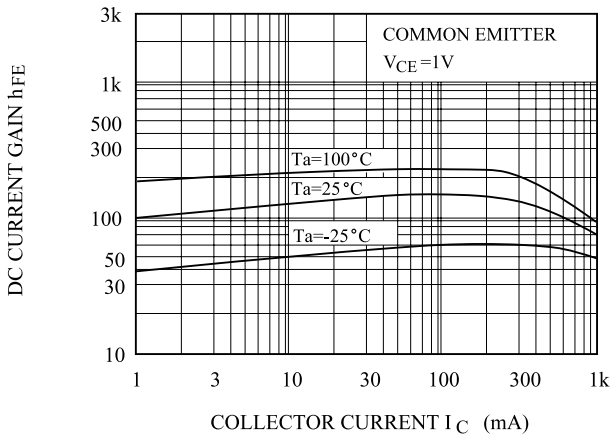
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=25V, I_E=0	-	-	100	nA
DC Current Gain (Note)	h_{FE}	V_{CE}=1V, I_C=100mA	100	-	630	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=500mA, I_B=50mA	-	-	0.7	V
Base-Emitter Voltage	$V_{BE(ON)}$	V_{CE}=1V, I_C=300mA	-	-	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, f=1MHz, I_E=0	-	12	-	pF

Note : h_{FE} Classification none:100 630, 16:100 250, 25:160 400, 40:250 630

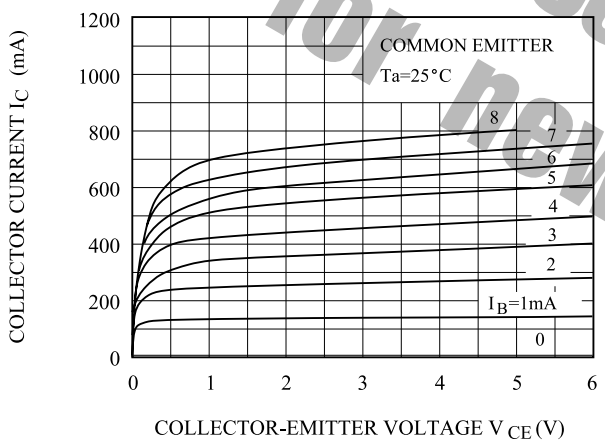
STATIC CHARACTERISTICS



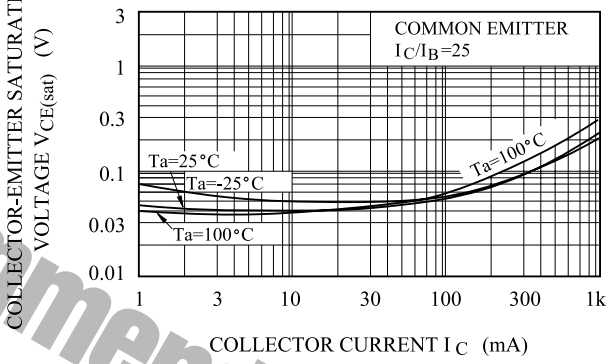
h_{FE} - I_C



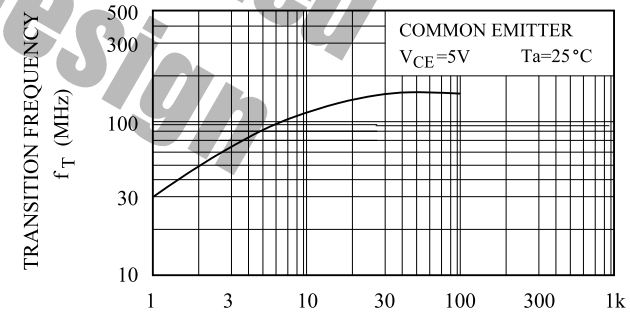
I_C - V_{CE} (LOW VOLTAGE REGION)



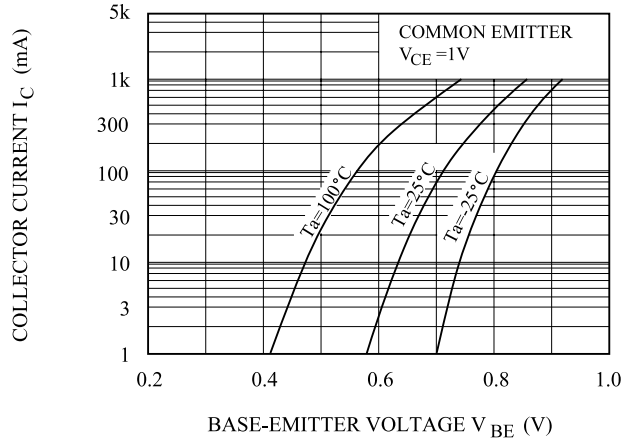
$V_{CE(sat)}$ - I_C



f_T - I_C



I_C - V_{BE}



P_C - Ta