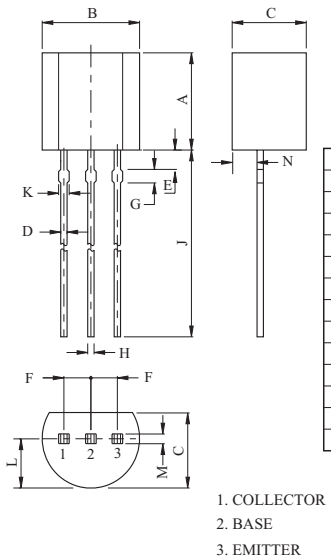
BC517

EPITAXIAL PLANAR NPN TRANSISTOR

GENERAL PURPOSE HIGH DARLINGTON TRANSISTOR.



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

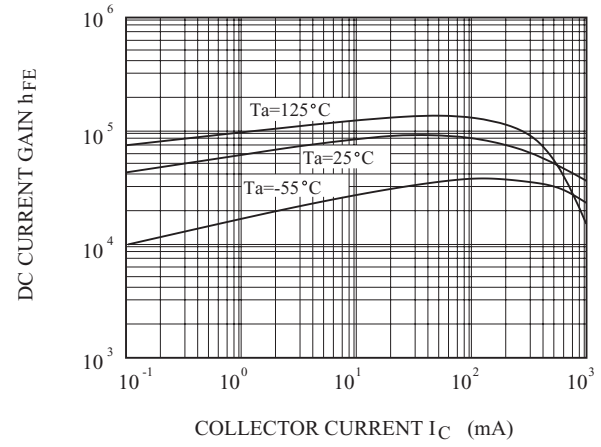
MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	10	V
Collector Current	I_C	500	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55～150	℃

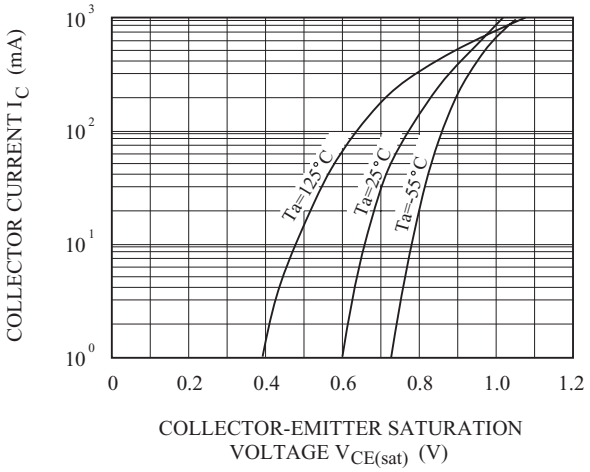
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=0.1mA, I_E=0	40	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0	30	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=1.0mA, I_C=0	10	-	-	V
Collector Cut-off Current	I_{CBO}	V_{CB}=40V, I_E=0	-	-	1.0	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=10V, I_C=0	-	-	1.0	μA
DC Current Gain	h_{FE}	I_C=100mA, V_{CE}=2V	30k	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=100mA, I_B=1mA	-	-	1.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=100mA, I_B=1mA	-	1.5	2.0	V
Current Gain Bandwidth Product	f_T	I_C=100mA, V_{CE}=2V, f=100MHz	-	220	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, f=1MHz, I_E=0	-	5.0	-	pF

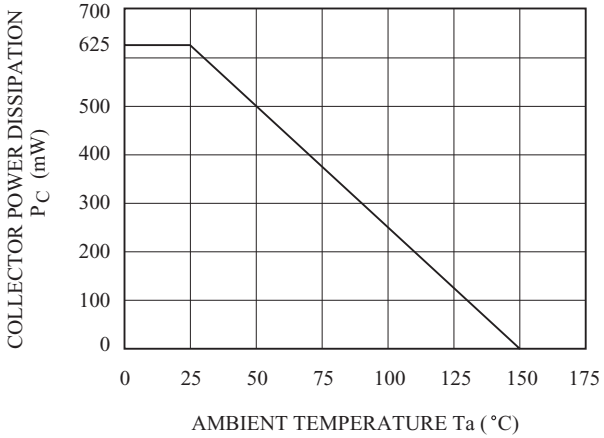
h_{FE} - I_C



I_C - $V_{CE(sat)}$



P_C - Ta



I_C - V_{BE}