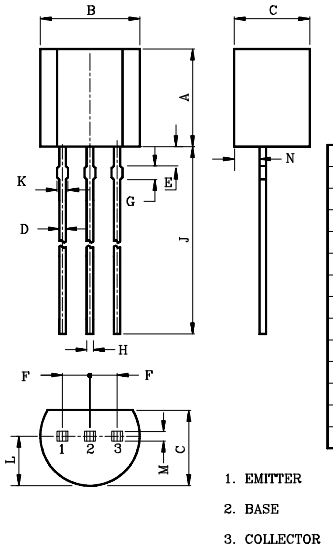
MPS751

EPITAXIAL PLANAR PNP TRANSISTOR

VOLTAGE REGULATOR, RELAY,
RAMP DRIVER, INDUSTRIAL USE

FEATURES

- High Voltage : V_{CEO}=-60V(Min.).
- High Current : I_C(Max.)=-1A.
- High Transition Frequency : f_T=150MHz(Typ.).
- Wide Area of Safe Operation.
- Complementary to MPS651,



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. EMITTER
2. BASE
3. COLLECTOR

TO-92

MAXIMUM RATINGS (Ta=25℃)

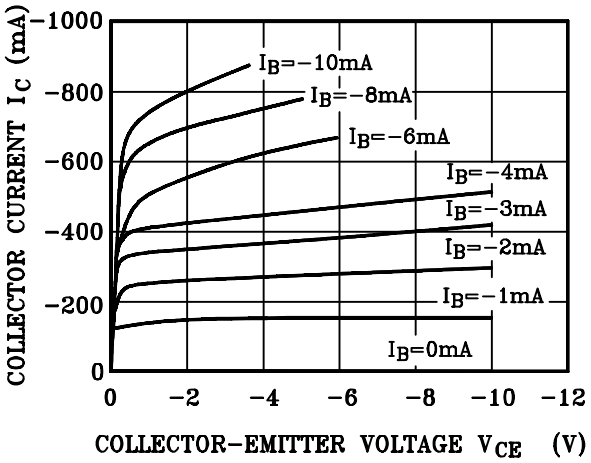
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-80	V
Collector-Emitter Voltage		V_{CEO}	-60	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current	DC	I_C	-1	A
	Pulse	I_{CP}	-2	
Collector Power Dissipation		P_C	625	mW
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55~150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

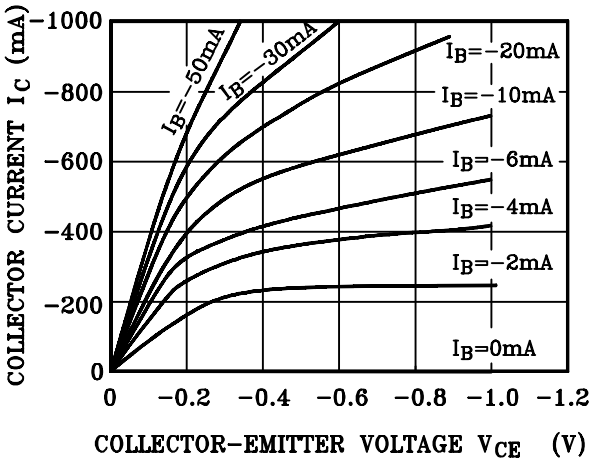
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-50V, I_E=0	-	-	-100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-4V, I_C=0	-	-	-100	nA
DC Current Gain	h_{FE}(1)	V_{CE}=-2V, I_C=-50mA	60	-	200	
	h_{FE}(2)	V_{CE}=-2V, I_C=-1A	30	-	-	
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-1mA, I_B=0	60	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA	-	-0.2	-0.7	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-500mA, I_B=-50mA	-	-0.85	-1.2	V
Transition Frequency	f_T	V_{CE}=-10V, I_C=-50mA	-	150	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	12	-	pF

Note : h_{FE}(1) Classification O:60~120, Y:100~200

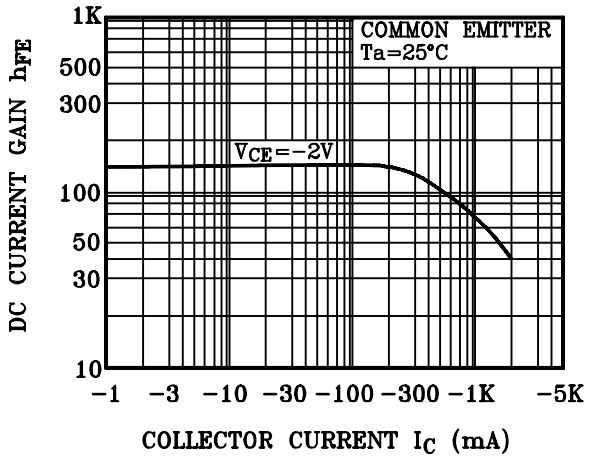
I_C – V_{CE}



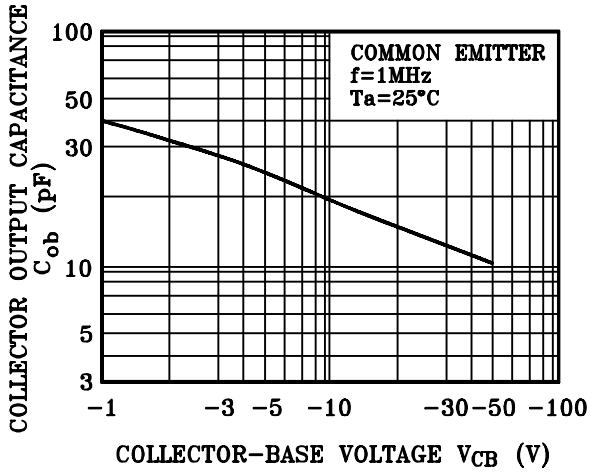
I_C – V_{CE}



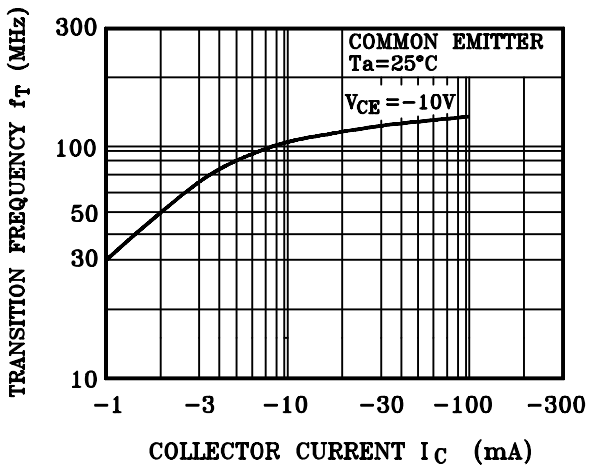
h_{FE} – I_C



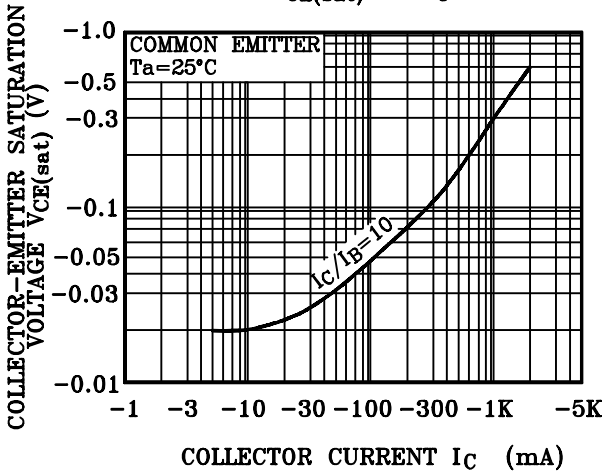
C_{ob} – V_{CB}



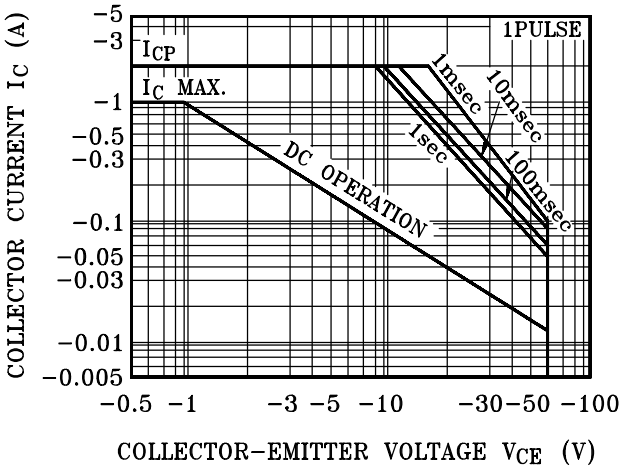
f_T – I_C



$V_{CE(sat)}$ – I_C



SAFE OPERATING AREA



P_C - Ta