

HIGH CURRENT APPLICATION.

FEATURE

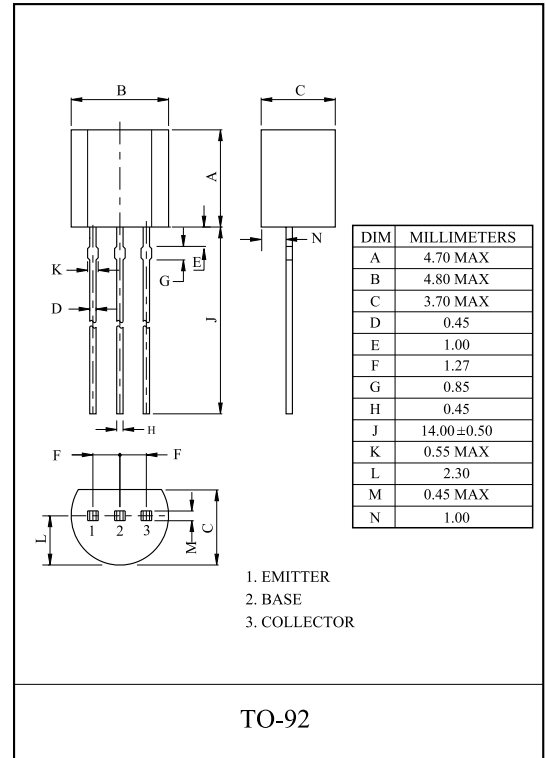
- Complementary to MPS8550.

MAXIMUM RATING (Ta=25)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CBO}	40	V
Collector-Emitter Voltage	V _{CEO}	25	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current	I _C	1.5	A
Collector Power Dissipation	*P _C	625	mW
		400	
Junction Temperature	T _j	150	
Storage Temperature Range	T _{stg}	-55 150	

*Cu Lead-Frame : 625mW

Fe Lead-Frame : 400mW



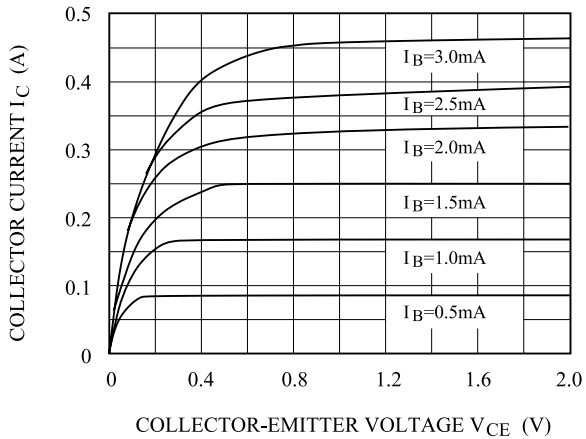
ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I _{CBO}	V _{CB} =35V, I _E =0	-	-	100	nA
Emitter Cut-off Current	I _{EBO}	V _{EB} =6V, I _C =0	-	-	100	nA
Collector-Base Breakdown Voltage	V _{(BR)CBO}	I _C =100 μA, I _E =0	40	-	-	V
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =2mA, I _B =0	25	-	-	V
DC Current Gain	h _{FE} (1)	V _{CE} =1V, I _C =5mA	45	135	-	
	h _{FE} (2) (Note)	V _{CE} =1V, I _C =100mA	85	160	300	
	h _{FE} (3)	V _{CE} =1V, I _C =800mA	40	110	-	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =800mA, I _B =80mA	-	0.28	0.5	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =800mA, I _B =80mA	-	0.98	1.2	V
Base-Emitter Voltage	V _{BE}	V _{CE} =1V, I _C =10mA	-	0.66	1.0	V
Transition Frequency	f _T	V _{CE} =10V, I _C =50mA	100	190	-	MHz
Collector Output Capacitance	C _{ob}	V _{CB} =10V, f=1MHz, I _E =0	-	9	-	pF

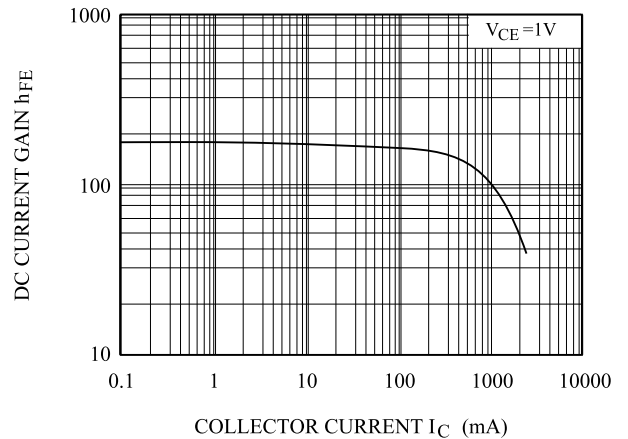
Note : h_{FE}(2) Classification B:85 160 , C: 120 200 , D: 160 300

MPS8050

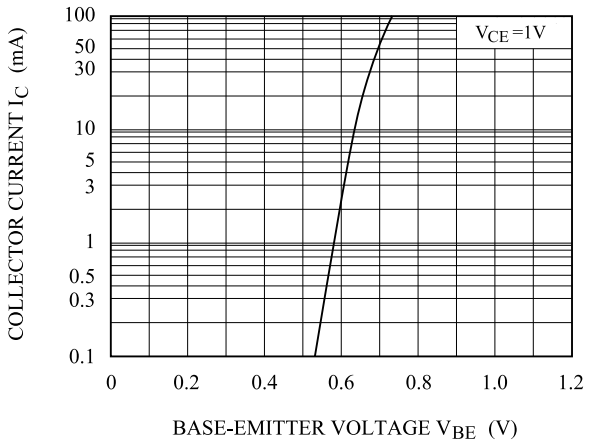
$I_C - V_{CE}$



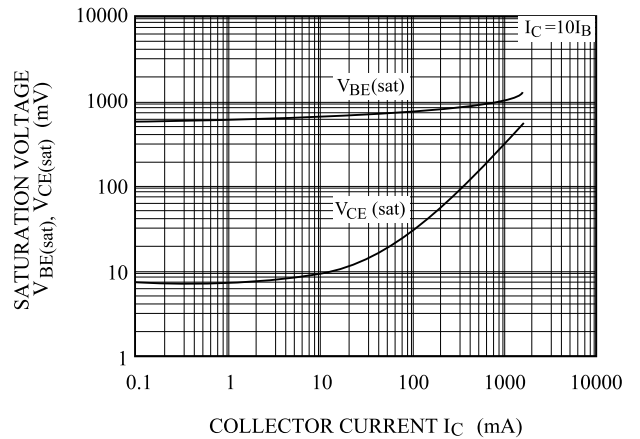
$h_{FE} - I_C$



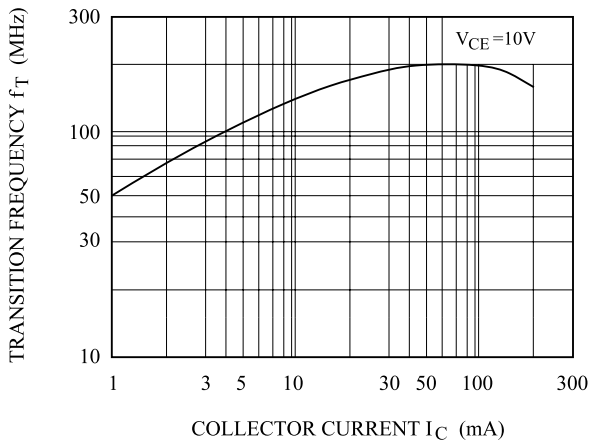
$I_C - V_{BE}$



$V_{BE(sat)}, V_{CE(sat)} - I_C$



$f_T - I_C$



$C_{ob} - V_{CB}$

