2SC2411 TRANSISTOR(NPN)

1.BASE

2.COLLECTOR

3.EMITTER

SOT-23-3

FEATURES

- High $I_{CMax.}I_{CMax.}$ = 0.5mA
- Low $V_{CE(sat)}$.Optimal for low voltage operation.
- Complements the 2SA1036

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

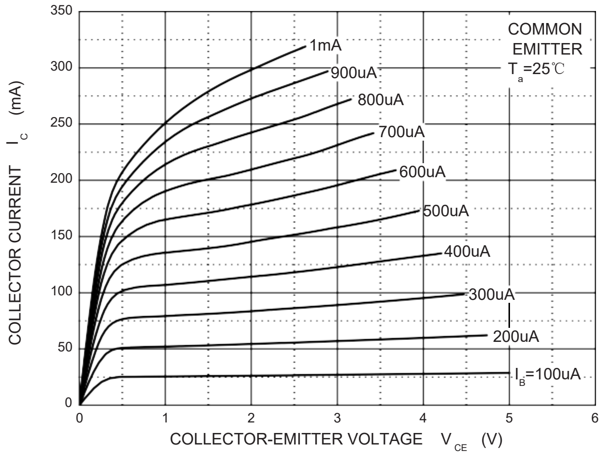
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	32	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	500	mA
P_C	Collector Power Dissipation	200	mW
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

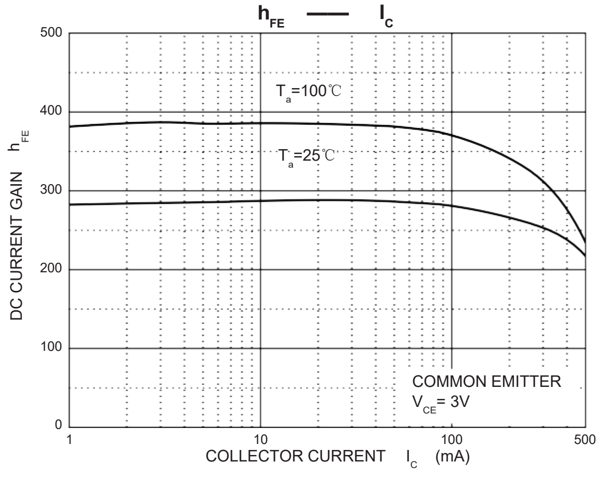
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

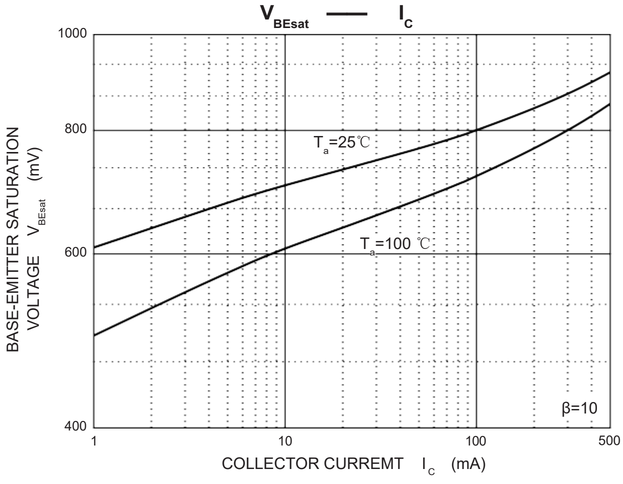
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	32			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=20V,I_E=0			1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			1	μA
DC current gain	h_{FE}	V_{CE}=3V,I_C=100mA	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500mA,I_B=50mA			0.4	V
Transition frequency	f_T	V_{CE}=5V,I_C=20mA,f=100MHz		250		MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz		6.0		pF

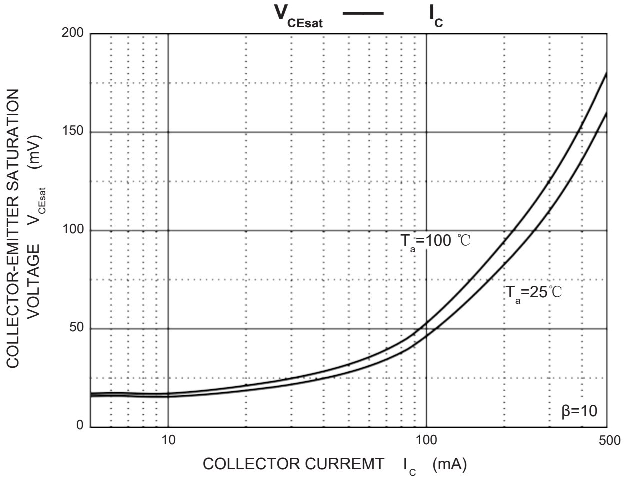
CLASSIFICATION OF h_{FE}

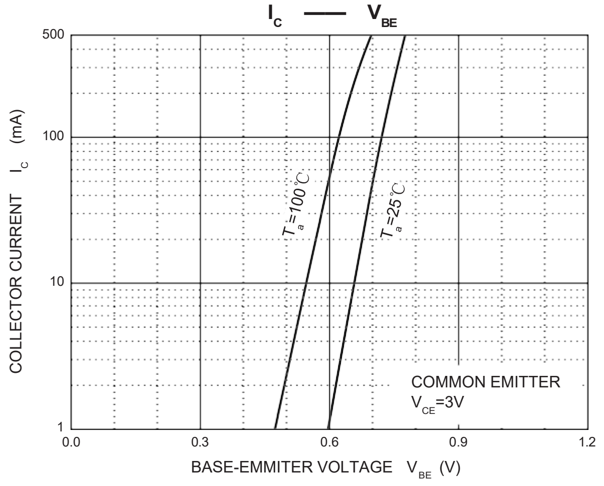
Rank	P	Q	R
Range	82-180	120-270	180-390
Marking	CP	CQ	CR

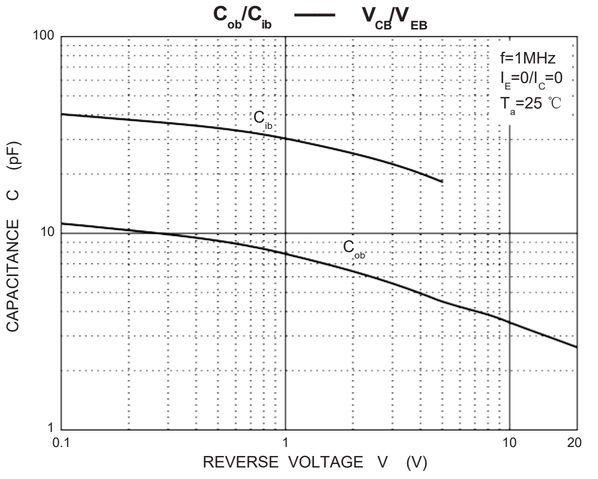

Static Characteristic

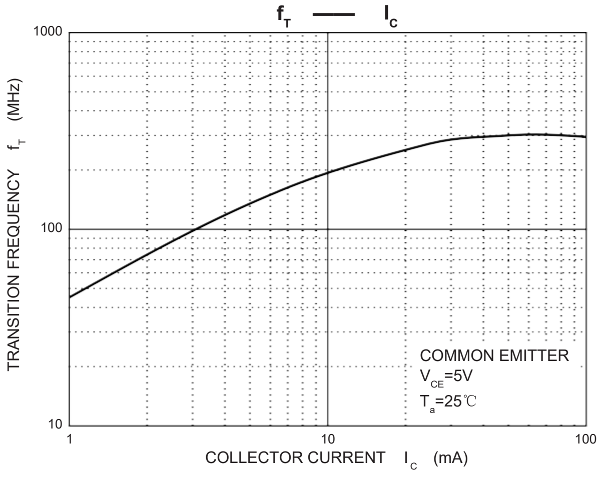

h_{FE} — I_C

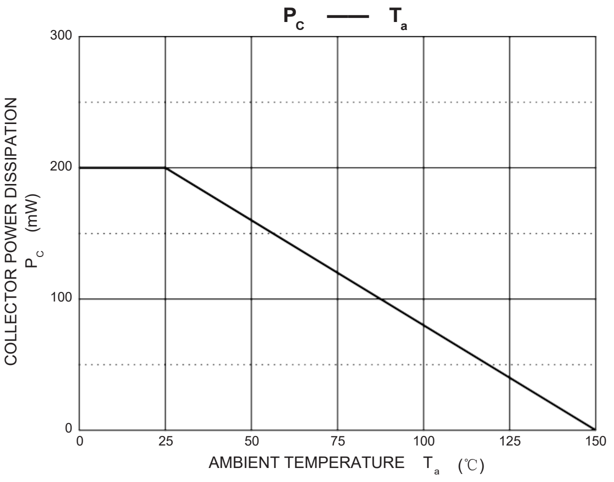

V_{BEsat} — I_C


V_{CEsat} — I_C


I_C — V_{BE}


C_{ob}/C_{ib} — V_{CB}/V_{EB}


f_T — I_C


P_C — T_a