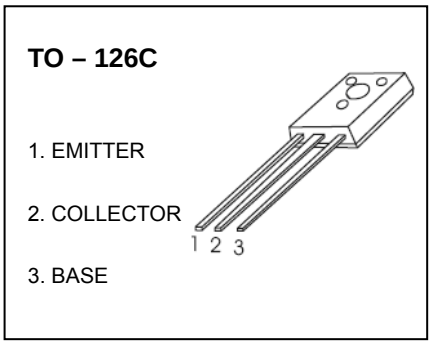
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-126C Plastic-Encapsulate Transistors

2SC3420 TRANSISTOR (NPN)



FEATURES

- High DC Current Gain
- Low Saturation Voltage
- High Collector Power Dissipation

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	20	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current	5	A
P_C	Collector Power Dissipation	1.5	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	83	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

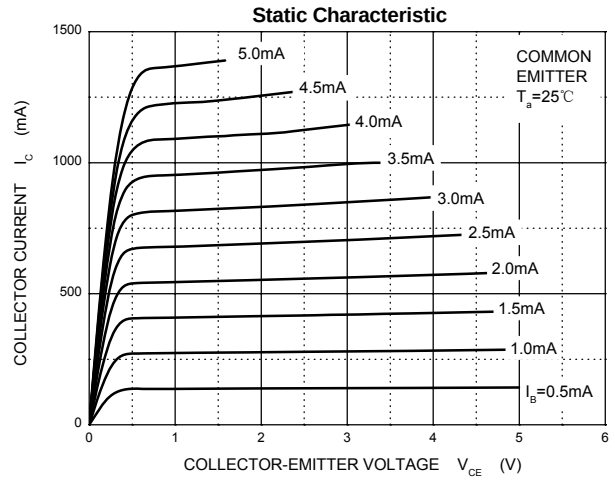
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

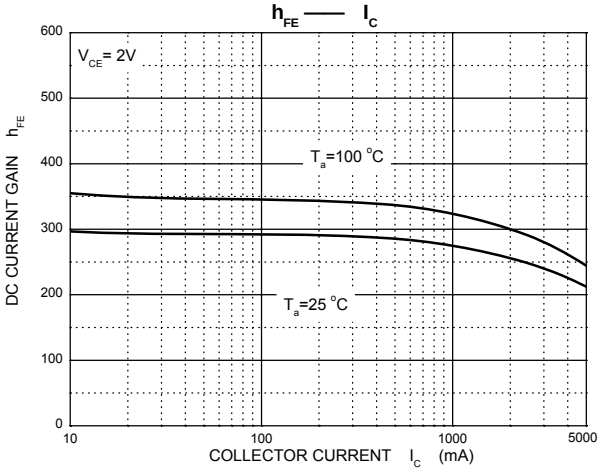
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	8			V
Collector cut-off current	I_{CBO}	V_{CB}=40V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=8V,I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=2V, I_C=0.5A	140		600	
	$h_{FE(2)}$	V_{CE}=2V, I_C=4A	70			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=4A,I_B=0.1A			1	V
Base-emitter voltage	V_{BE}	V_{CE}=2V, I_C=4A			1.5	V
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0, f=1MHz		40		pF
Transition frequency	f_T	V_{CE}=2V,I_C=0.5A		100		MHz

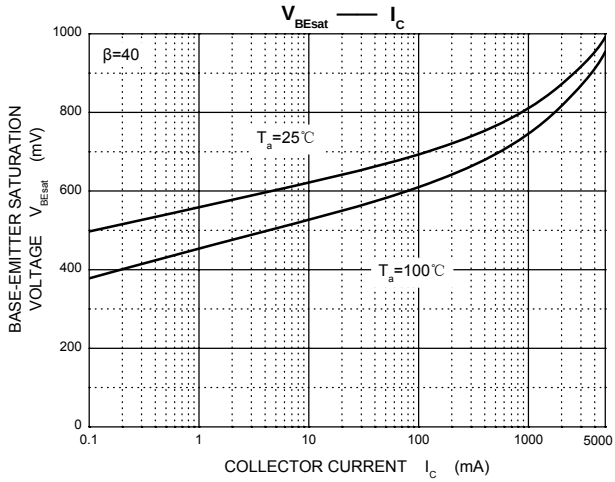
CLASSIFICATION OF $h_{FE(1)}$

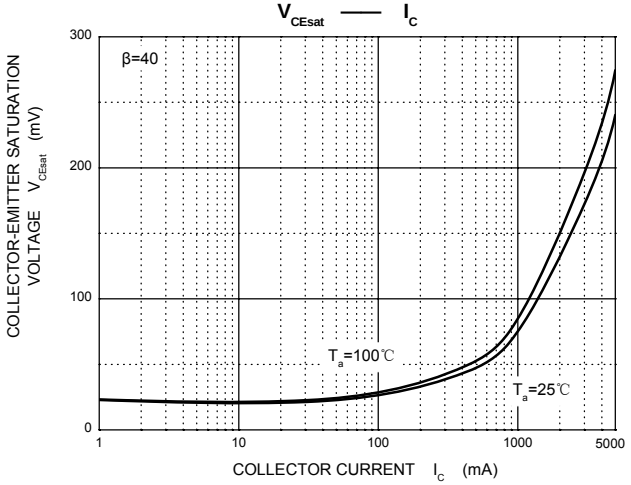
RANK	Y	GR	BL
RANGE	140-240	200-400	300-600

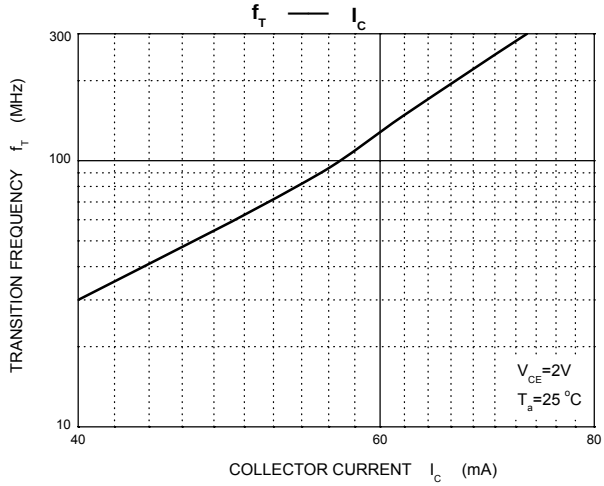
Typical Characteristics 2SC3420

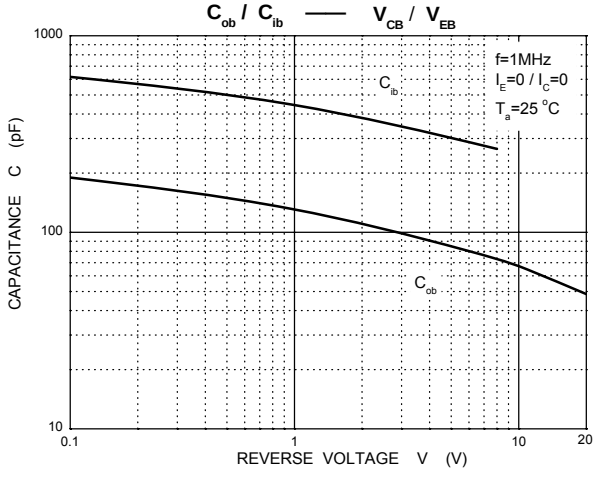


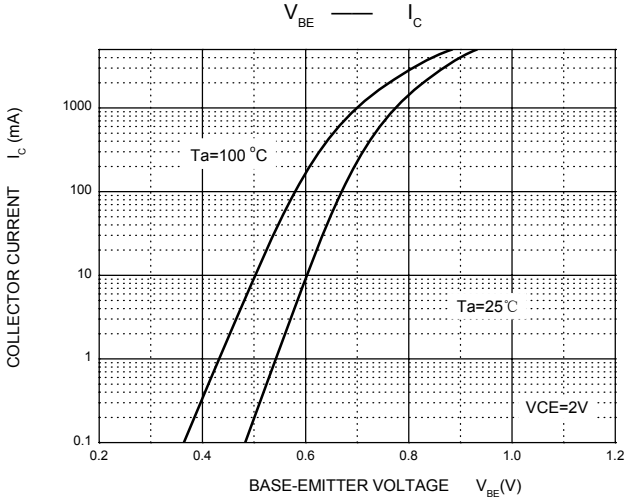


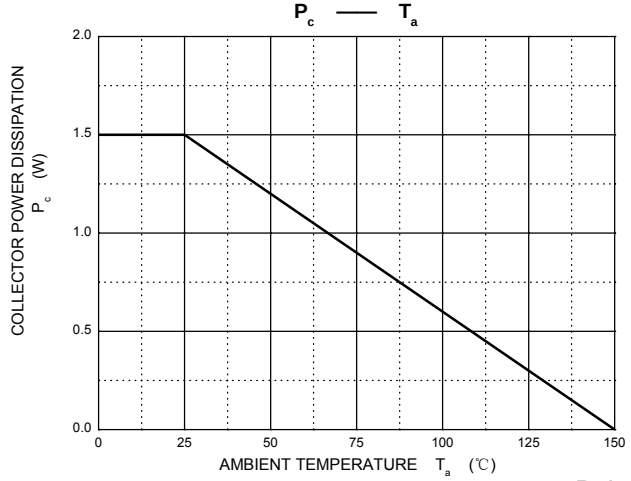












B,Jun,2012