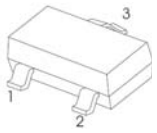
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-23 Plastic-Encapsulate Transistors

BCX19 TRANSISTOR (NPN)

SOT-23



1. BASE
2. EMITTER
3. COLLECTOR

FEATURES

- **Low voltage**

MARKING : U1

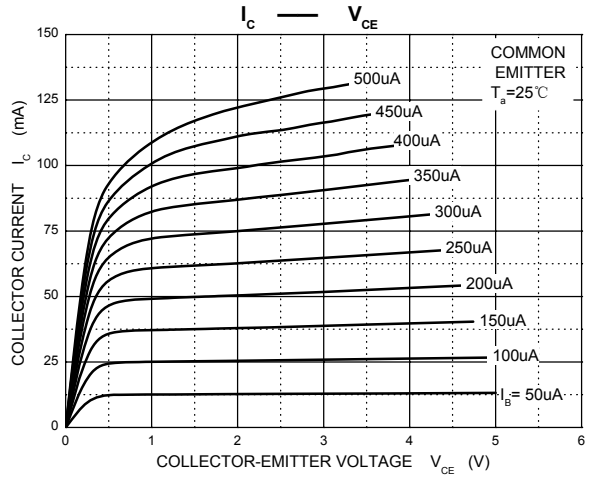
MAXIMUM RATINGS(Ta=25℃ unless otherwise noted)

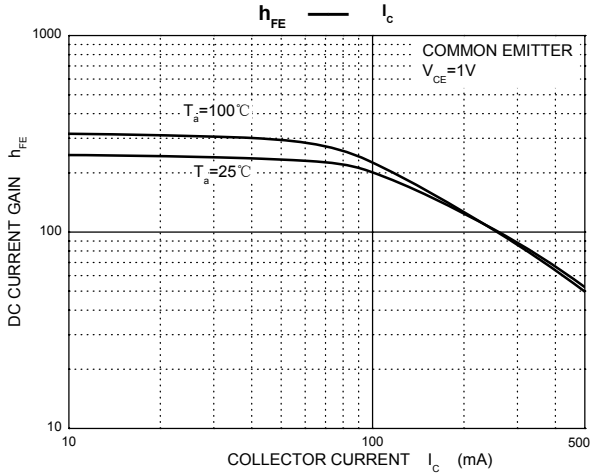
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	45	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	500	mA
P_C	Collector Dissipation	225	mW
T_J, T_{stg}	Junction and Storage Temperature	-55-150	℃

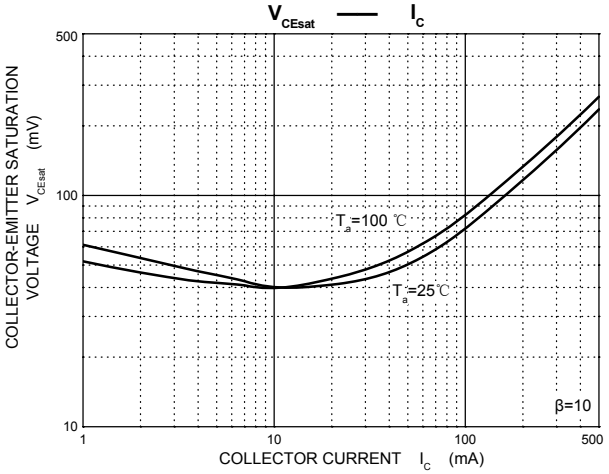
ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

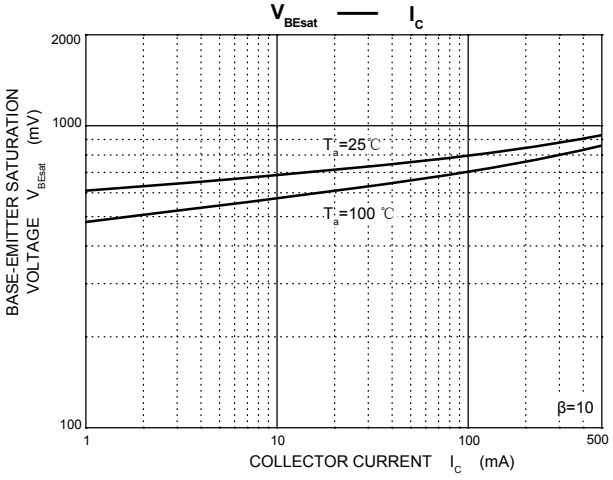
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-emitter breakdown voltage	$V_{(BR)CBO}$	I_C=100μA, I_E=0	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0	45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=20V , I_E=0			0.1	μA
Collector cut-off current	I_{EBO}	V_{EB}=5V , I_C=0			10	μA
DC current gain	h_{FE1}	V_{CE}=1V, I_C=100mA	100		600	
	h_{FE2}	V_{CE}=1V, I_C=300mA	70			
	h_{FE3}	V_{CE}=1V, I_C=500mA	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	Ic=500mA, I_B=50mA			0.62	V
Base-emitter voltage	$V_{BE(on)}$	Ic=500mA, V_{CE}=1V			1.2	V

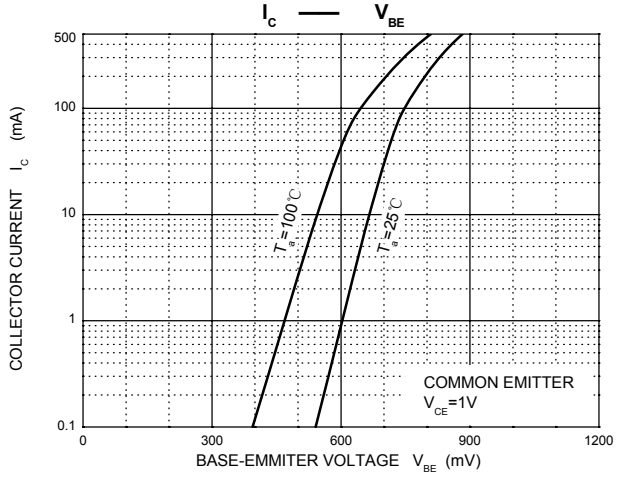
Typical Characteristics BCX19

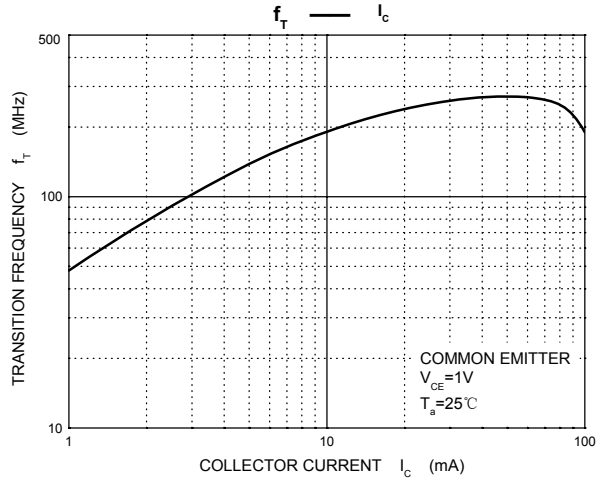


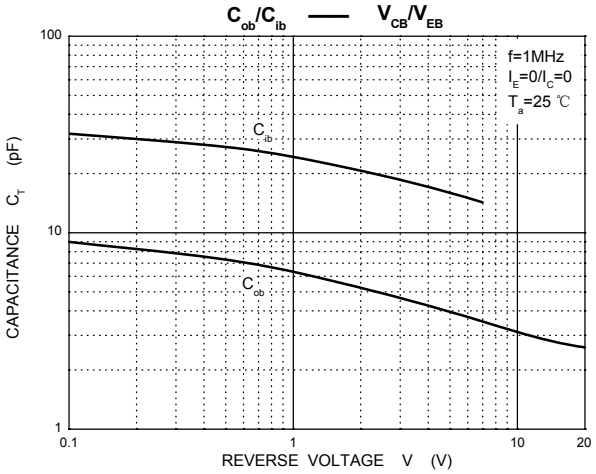


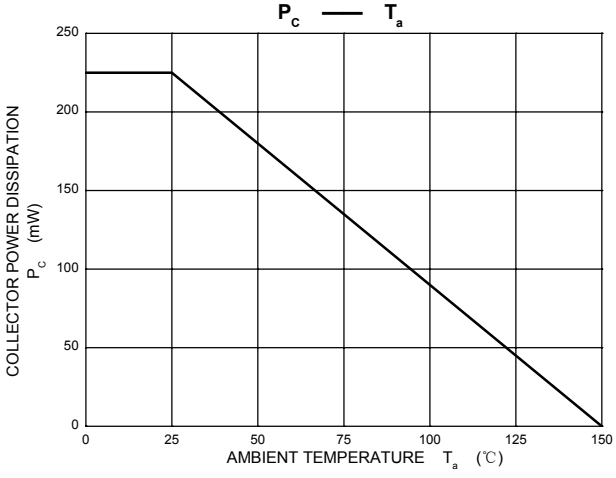












A,Jun,2011