TAIGITON

2SC1623

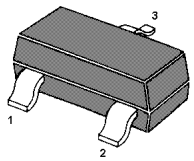
TRANSISTOR (NPN)

FEATURE

High DC current gain :h_{FE}=200(Typ)V_{CE}=6V, I_C=1mA

High voltage: V_{CEO}=50V

SOT-23



1. BASE
2. EMITTER
3. COLLECTOR

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

S mbol	Pa amete	alue	Units
V_{CBO}	Collecto -Base Vol age	60	V
V_{CEO}	Collecto -Emitter Vol a e	50	V
V_{EBO}	Emitte -Base Vol a e	5	V
I_C	Collector Current -Continuous	100	mA
P_C	Collector Po er Dissi ation	200	mW
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=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	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=60V, I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V, I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=6V, I_C=1mA	90		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100mA, I_B=10mA			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=100mA, I_B=10mA			1	V
Transition frequency	f_T	V_{CE}=6V, I_C=10mA		250		MHz

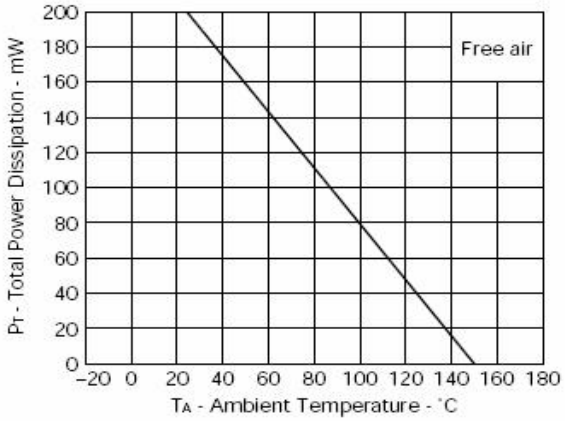
CLASSIFICATION OF hFE

Range	90-180	135-270	200-400	400-700
Marking	L4	L5	L6	L7

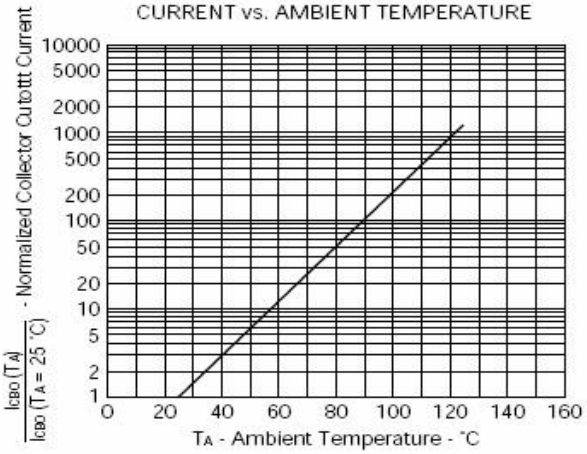
Typical Characteristics

2SC1623

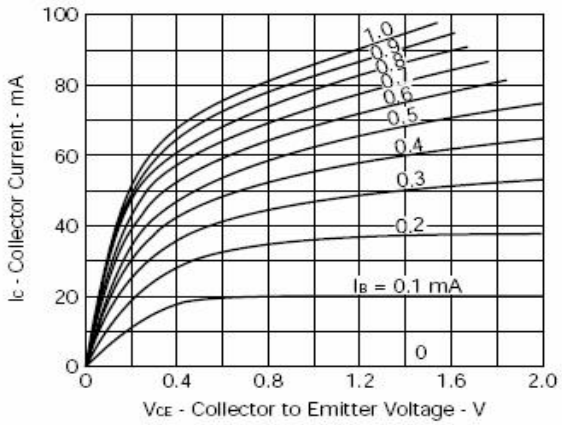
TOTAL POWER DISSIPATION vs.
AMBIENT TEMPERATURE



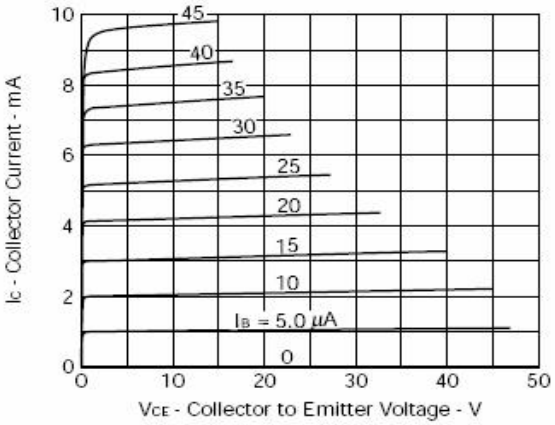
NORMALIZED COLLECTOR CUTOFF
CURRENT vs. AMBIENT TEMPERATURE



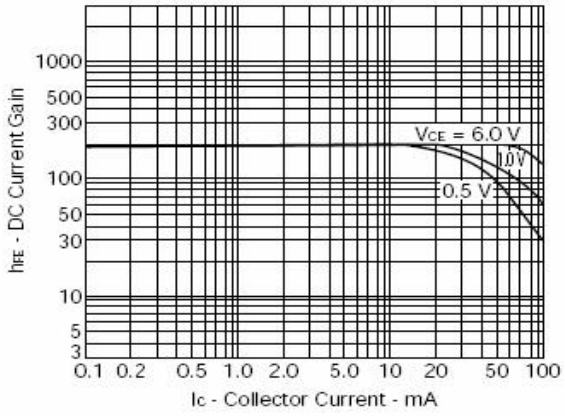
COLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGE



COLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGE



DC CURRENT GAIN vs.
COLLECTOR CURRENT



DC CURRENT GAIN vs.
COLLECTOR CURRENT