Shandong Yiguang Electronic Joint stock Co., Ltd

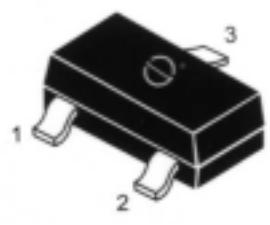
SEMICONDUCTOR
TECHNICAL DATA

2SC1623

NPN EPITAXIAL SILICON TRANSISTOR

AUDIO FREQUENCY GENERAL PURPOSE AMPLIFIER

Package:SOT-23



PIN: / STYLE	1	2	3
NO.1	B	E	C

ABSOLUTE MAXIMUM RATINGS at Ta=25℃

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	Vcbo	60	V
Collector-Emitter Voltage	Vceo	50	V
Emitter-Base Voltage	Vebo	5	V
Collector Current	Ic	100	mA
Collector Dissipation Ta=25℃*	P_D	200	mW
Junction Temperature	Tj	150	℃
Storage Temperature	Tstg	-55-150	℃

ELECTRICAL CHARACTERISTICS at Ta=25℃

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BVcbo	60			V	Ic= 100uA Ie=0
Collector-Emitter Breakdown Voltage#	BVceo	50			V	Ic= 1mA Ib=0
Emitter-Base Breakdown Voltage	BVebo	5			V	Ie= 100uA Ic=0
Collector-Base Cutoff Current	Icbo			100	nA	Vcb= 60V Ie=0
Emitter-Base Cutoff Current	Iebo			100	nA	Veb=5V Ic= 0
DC Current Gain	Hfe	90	200	600		Vce= 6V Ic= 1mA
Collector-Emitter Saturation Voltage	Vce(sat)		0.15	0.3	V	Ic= 100mA Ib= 10mA
Base-Emitter Saturation Voltage	Vbe(sat)		0.86	1	V	Ic=100mA Ib=10mA
Base-Emitter On Voltage	Vbe	0.55	0.62	0.65	V	Ic=1mA Vce=6V
Collector-Base Capacitance	Cob		3		PF	Vcb= 6V Ie=0 f=1MHZ
Current Gain-Bandwidth Product	f_T		250		MHz	Vce= 6V Ic= 10mA

* Total Device Dissipation : FR=1x0.75x0.062in Board,Derate 25℃.

\# Pulse Test : Pulse Width ≤300uS,Duty cycle ≤2%

h_{FE} Classification

Marking	L3	L4	L5	L6	L7
h_{FE}	60-90	90—180	135—270	200—400	300—600

Fig. 1 P_C –T_a

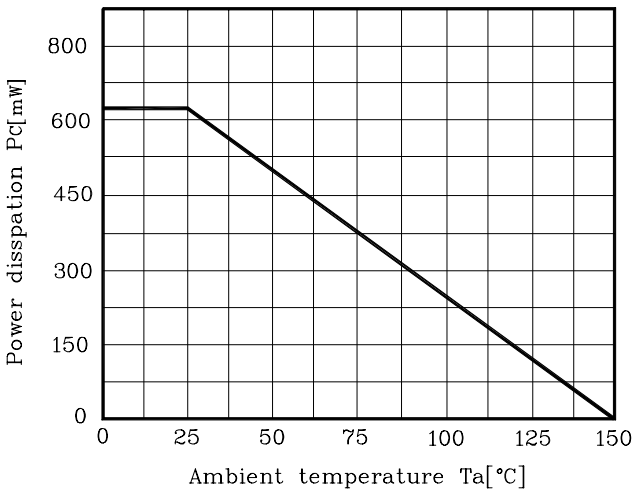


Fig. 2 I_C -V_{BE}

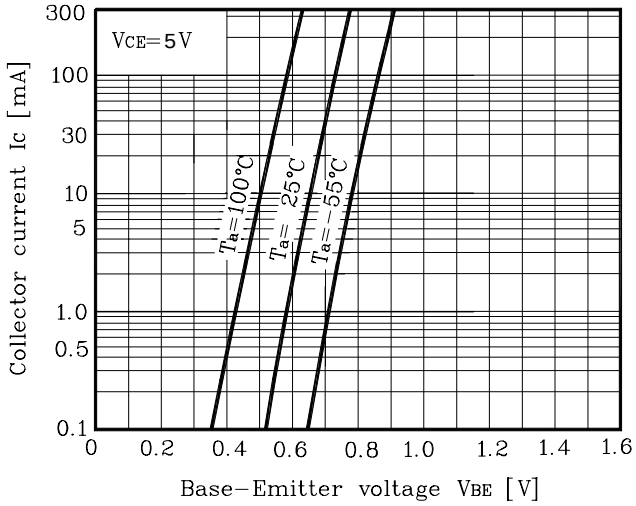


Fig. 3 I_C -V_{CE}

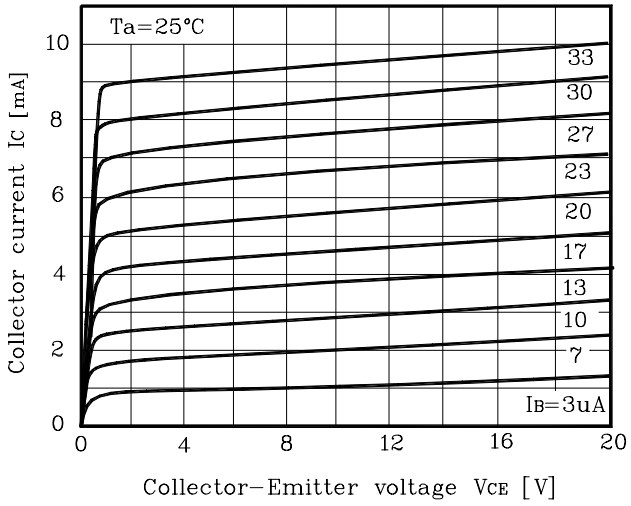


Fig. 4 h_{FE} -I_C

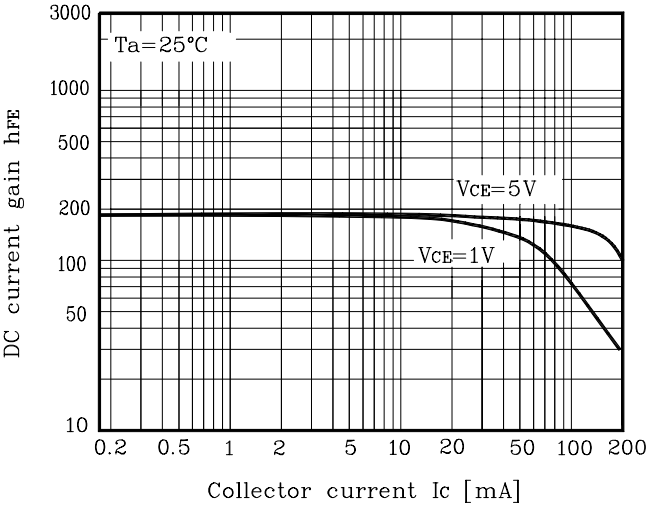


Fig. 5 $V_{CE(sat)}$ -I_C