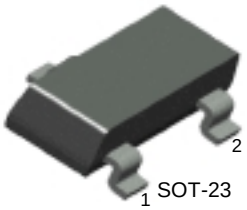
FAIRCHILD
SEMICONDUCTOR TM

KST1623L3/L4/L5/L6/L7

Amplifier Transistor



SOT-23

1. Base 2. Emitter 3. Collector

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	40	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current	100	mA
P_C	Collector Dissipation	350	mW
T_{STG}	Storage Temperature	150	°C

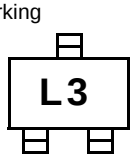
Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
I_{CBO}	Collector Cut-off Current	V_{CB} =40V, I_E=0		100	nA
I_{EBO}	Emitter Cut-off Current	V_{EB}=5V, I_C=0		100	nA
h_{FE}	DC Current Gain				
	: KST1623L3	V_{CE}=6V, I_C=1.0mA	60	120	
	: KST1623L4		90	180	
	: KST1623L5		135	270	
	: KST1623L6		200	400	
	: KST1623L7		300	600	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C=100mA, I_B=10mA		0.3	V
V_{BE} (sat)	Base-Emitter Saturation Voltage	I_C=100mA, I_B=10mA		1.0	V
V_{BE} (on)	Base-Emitter On Voltage	V_{CE}=6V, I_C=1.0mA	0.6	0.7	V
f_T	Current Gain Bandwidth Product	I_C=10mA, V_{CE}=6V, f=100MHz	200		MHz

MARKING CODE

Type	KST1623L3	KST1623L4	KST1623L5	KST1623L6	KST1623L7
Mark	L3	L4	L5	L6	L7

Marking



Typical Characteristics

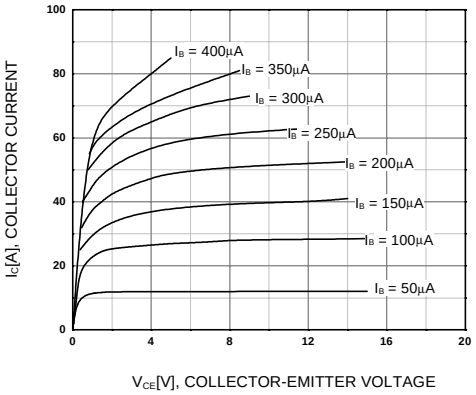


Figure 1. Static Characteristic

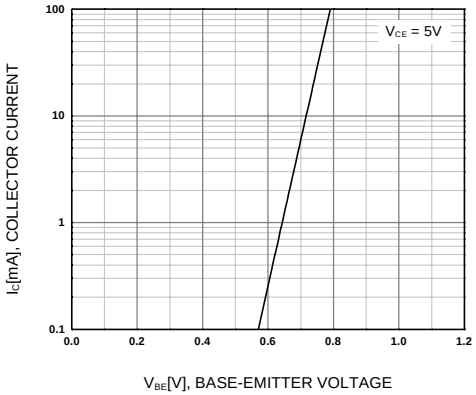


Figure 2. Transfer Characteristic

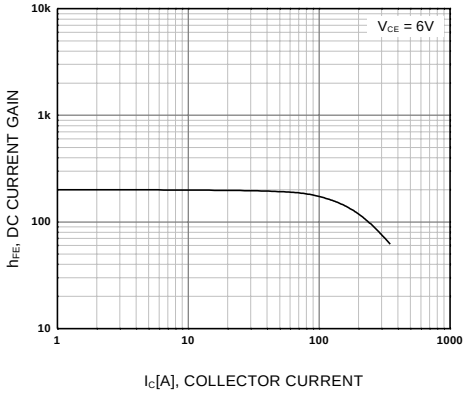


Figure 3. DC current Gain

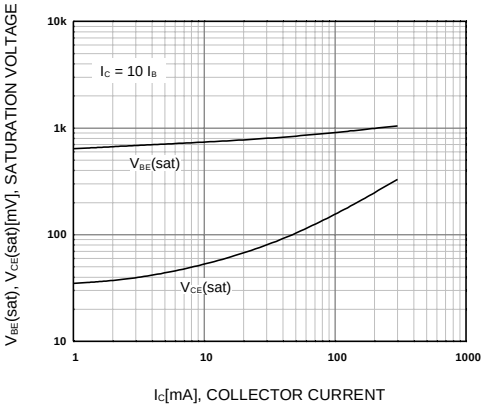


Figure 4. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

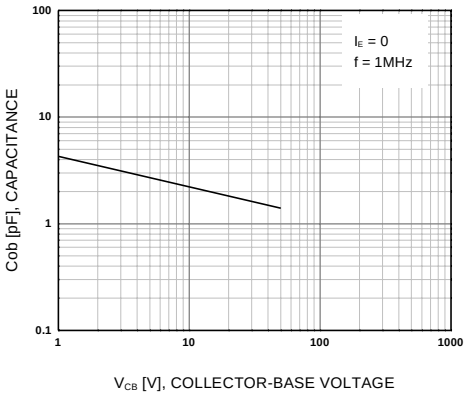


Figure 5. Output Capacitance

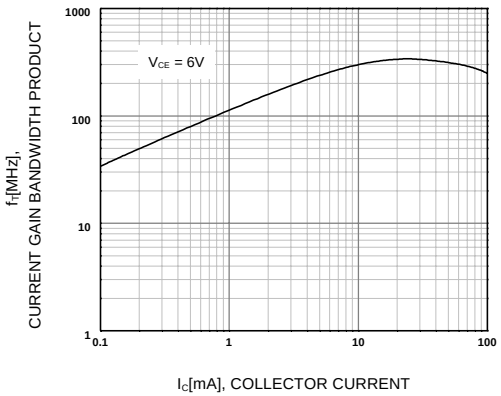
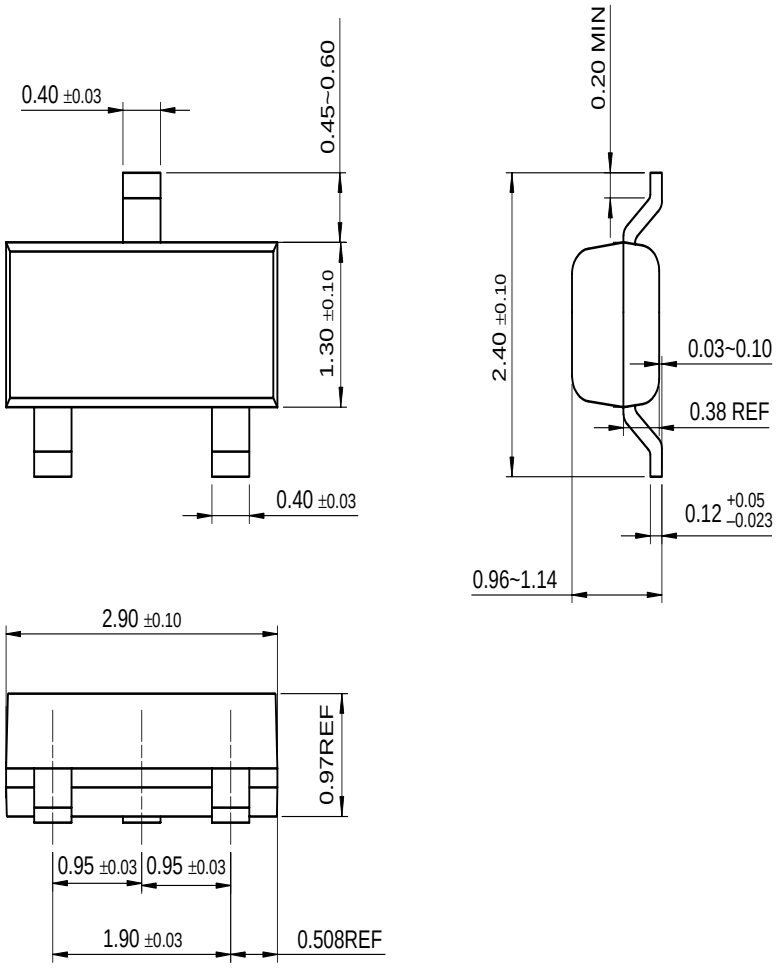


Figure 6. Current Gain Bandwidth Product

Package Demensions

SOT-23



Dimensions in Millimeters

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