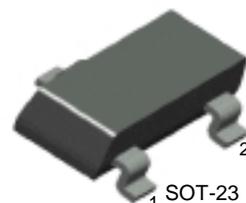


KST1623L3/L4/L5/L6/L7

Amplifier Transistor



SOT-23
1. Base 2. Emitter 3. Collector

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ\text{C}$ 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	$^\circ\text{C}$

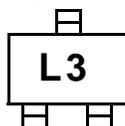
Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

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

MARKING CODE

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

Marking



Typical Characteristics

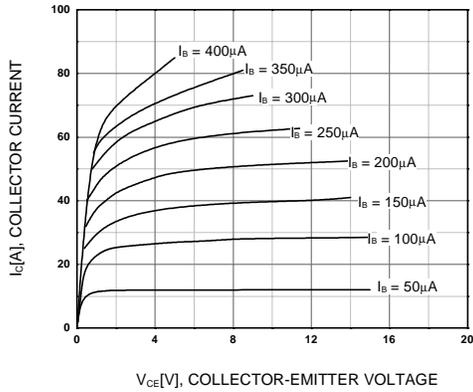


Figure 1. Static Characteristic

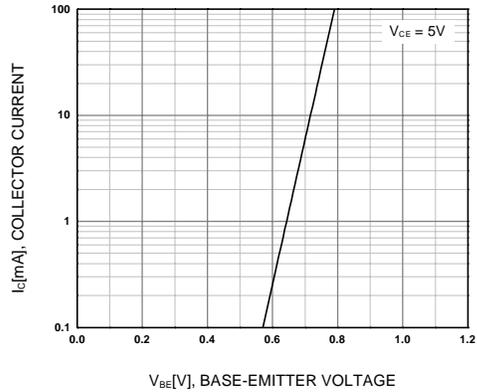


Figure 2. Transfer Characteristic

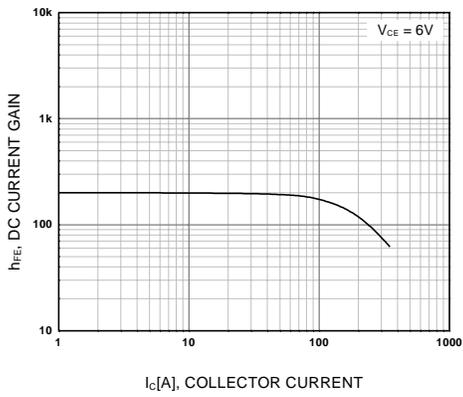


Figure 3. DC current Gain

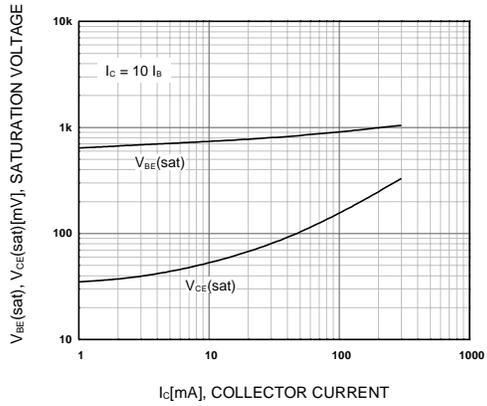


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

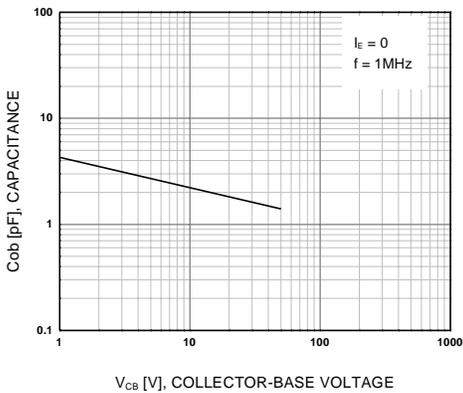


Figure 5. Output Capacitance

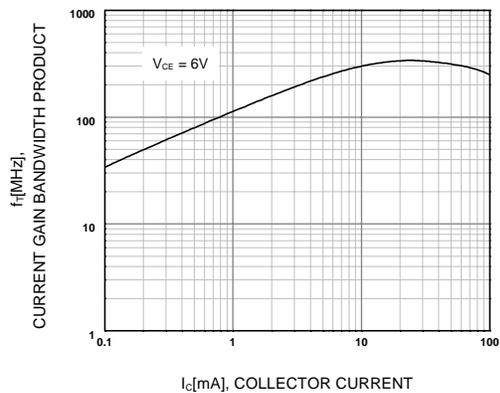
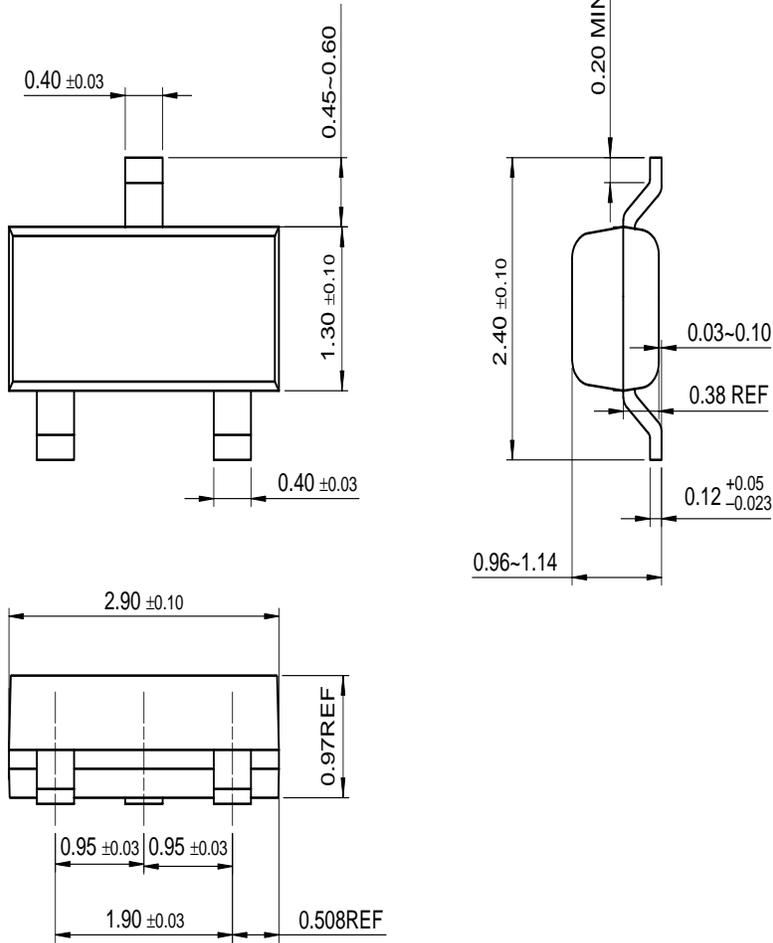


Figure 6. Current Gain Bandwidth Product

Package Dimensions

SOT-23



Dimensions in Millimeters

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FASTr™	SuperSOT™-3	
GTO™	SuperSOT™-6	

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