

**KSC1623****NPN EPITAXIAL SILICON TRANSISTOR**

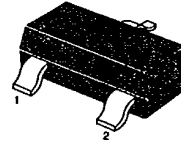
**LOW FREQUENCY AMPLIFIER  
HIGH FREQUENCY OSC**

• Complement to KSA812

**ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	60	V
Collector-Emitter Voltage	$V_{CE0}$	50	V
Emitter-Base Voltage	$V_{EB0}$	5	V
Collector Current	$I_C$	100	mA
Collector Dissipation	$P_C$	200	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55~150	$^\circ\text{C}$

SOT-23



1. Base 2. Emitter 3. Collector

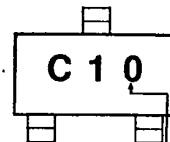
**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )**

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	$I_{CB0}$	$V_{CB}=60\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EB0}$	$V_{EB}=5\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=6\text{V}, I_C=1\text{mA}$	90	200	600	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		0.15	0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		0.86	1.0	V
Base-Emitter On Voltage	$V_{BE(on)}$	$I_C=1\text{mA}, V_{CE}=6\text{V}$	0.55	0.62	0.65	V
Current Gain-Bandwidth Product	$f_T$	$I_E=-10\text{mA}, V_{CE}=6\text{V}$		250		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=6\text{V}, I_E=0$ $f=1\text{MHz}$		3		pF

 **$h_{FE}$  CLASSIFICATION**

Classification	O	Y	G	L
$h_{FE}$	90-180	135-270	200-400	300-600

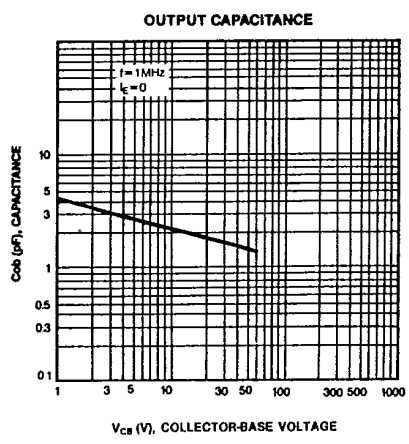
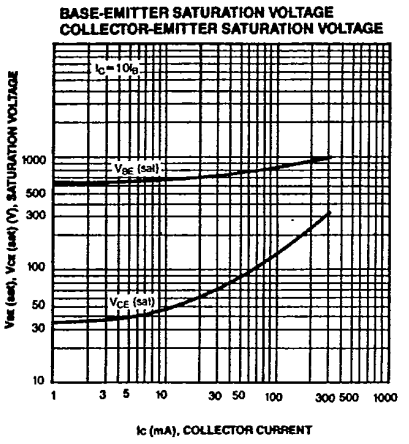
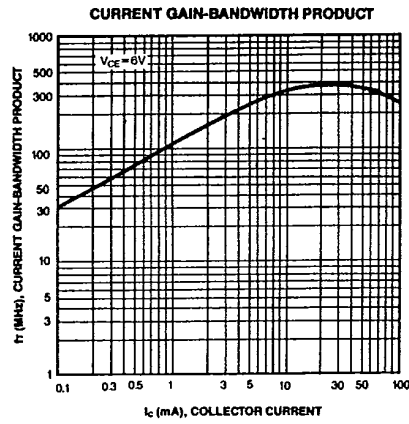
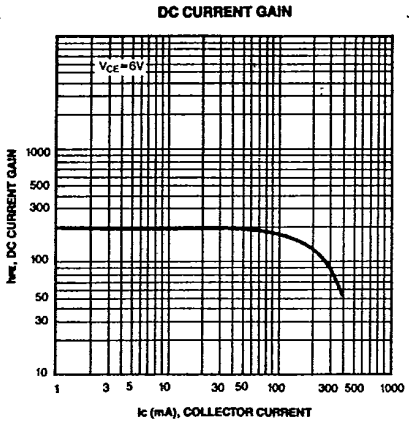
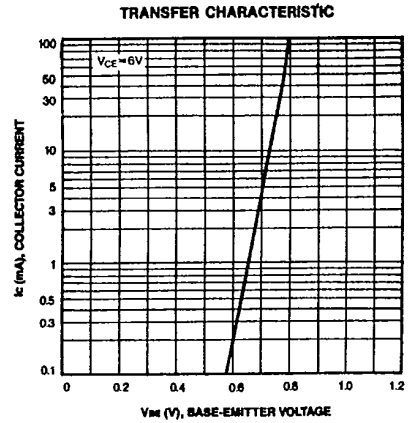
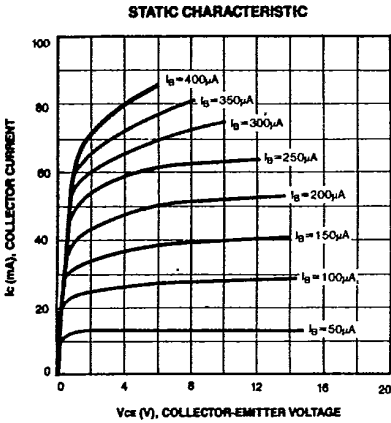
Marking

 $h_{FE}$  grade

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T-31-15



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