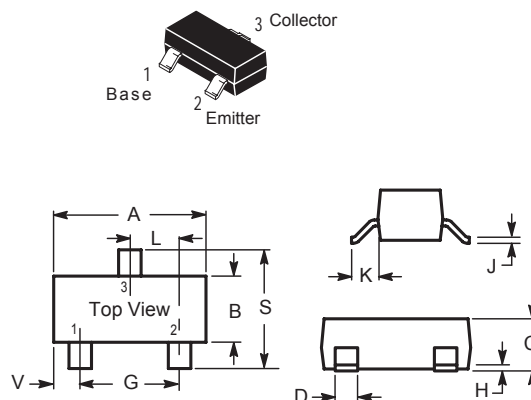


RoHS Compliant Product  
A suffix of "-C" specifies halogen and lead free

## DESCRIPTION

The 2SC1623K is designed for use in driver stage of AF amplifier and general purpose application.

## PACKAGE DIMENSIONS



SOT-23		
Dim	Min	Max
A	2.800	3.040
B	1.200	1.400
C	0.890	1.110
D	0.370	0.500
G	1.780	2.040
H	0.013	0.100
J	0.085	0.177
K	0.450	0.600
L	0.890	1.020
S	2.100	2.500
V	0.450	0.600
All Dimension in mm		

## ABSOLUTE MAXIMUM RATINGS at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CBO}$	60	V
Collector to Emitter Voltage	$V_{CEO}$	50	V
Emitter to Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	100	mA
Total Power Dissipation	$P_c$	200	mW
Junction, Storage Temperature	$T_J, T_{STG}$	+150, -55 ~ +150	°C

## CHARACTERISTICS at Ta = 25°C

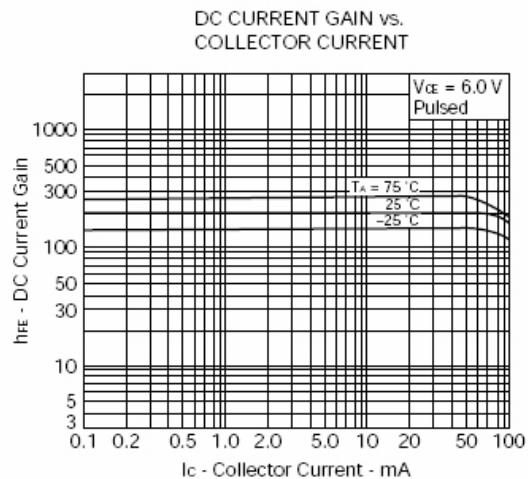
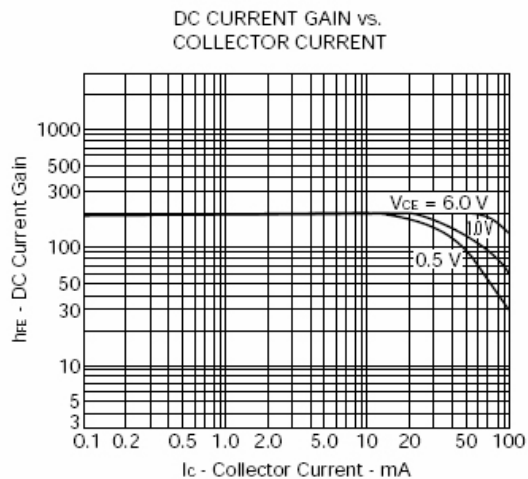
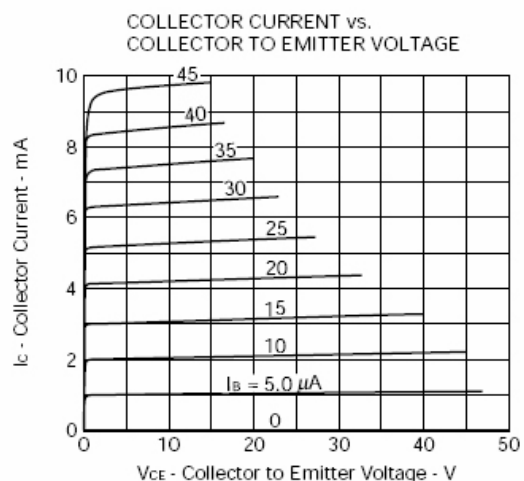
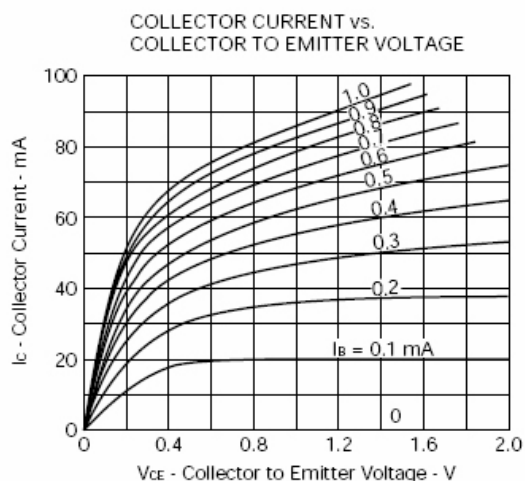
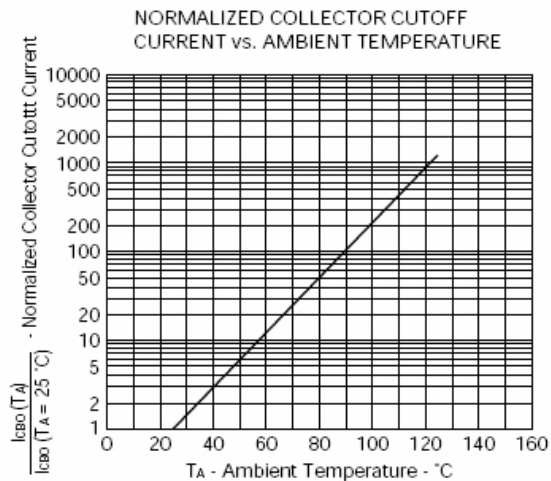
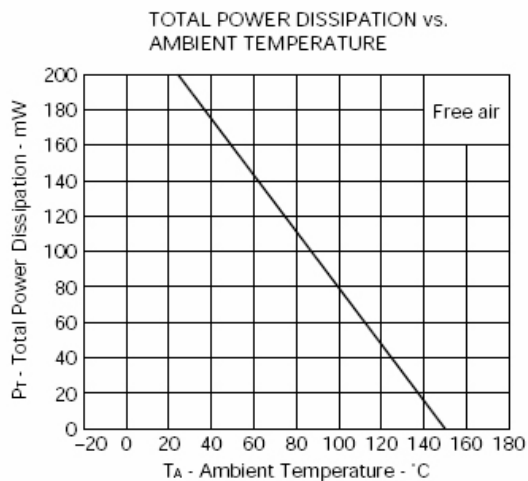
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	60	-	-	V	$I_C=100\mu A$
BVCEO	50	-	-	V	$I_C=1mA$
BVEBO	5	-	-	V	$I_E=100\mu A$
ICBO	-	-	100	nA	$V_{CB}=60V$
IEBO	-	-	100	nA	$V_{EB}=5V$
* $V_{CE(sat)}$	-	-	300	mV	$I_C=100mA, I_B=10mA$
* $V_{BE(sat)1}$	-	-	1.0	V	$I_C=100mA, I_B=10mA$
* $h_{FE1}$	90	-	600		$V_{CE}=6V, I_C=1mA$
fT	-	250	-	MHz	$V_{CE}=6V, I_C=10mA$

\* Pulse Test: Pulse Width  $\leq 380\mu s$ , Duty Cycle  $\leq 2\%$

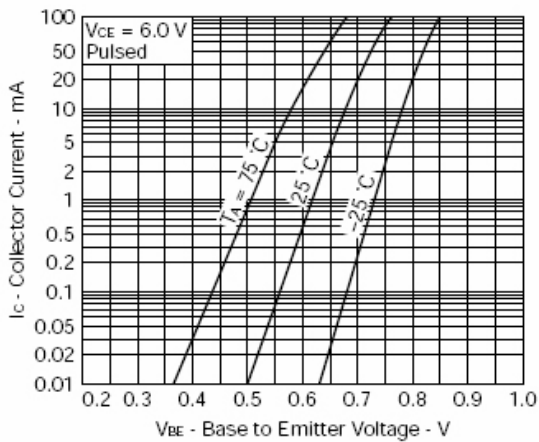
## CLASSIFICATION OF $h_{FE1}$

Rank	P	Y	G	B
Range	90 - 180	135 - 270	200 - 400	300 - 600
Marking	L4	L5	L6	L7

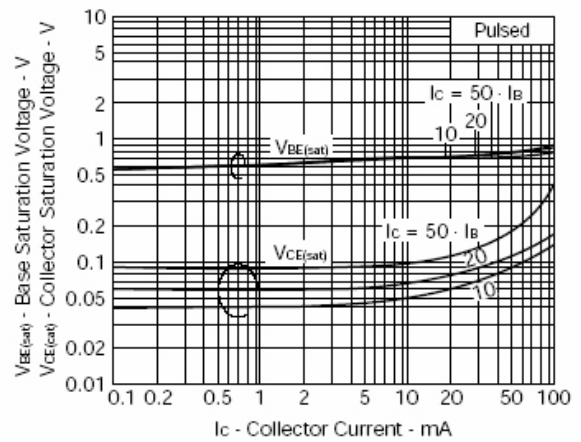
**CHARACTERISTIC CURVES**



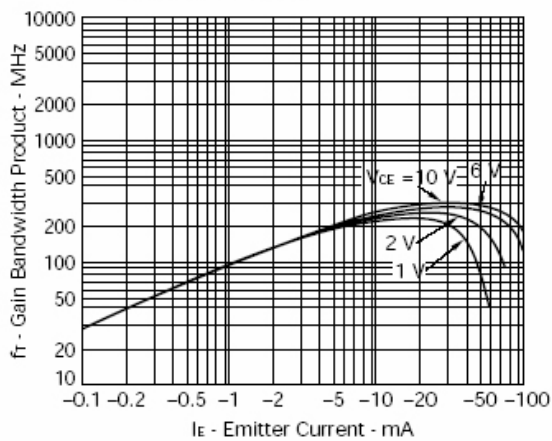
COLLECTOR CURRENT vs. BASE TO EMITTER VOLTAGE



COLLECTOR AND BASE SATURATION VOLTAGE vs. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT vs. EMITTER CURRENT



INPUT AND OUTPUT CAPACITANCE vs. REVERSE VOLTAGE

