

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

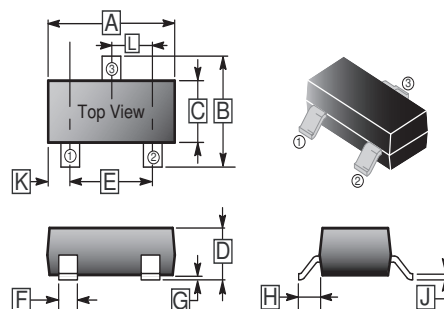
FEATURE

- High DC current gain : $h_{FE}=200$ (Typ), $V_{CE}=6V$, $I_C=1mA$.
- High Voltage: $V_{CEO}=50V$.

CLASSIFICATION OF h_{FE}

Product-Rank	2SC1623K-P	2SC1623K-Y	2SC1623K-G	2SC1623K-B
Range	90~180	135~270	200~400	300~600
Marking Code	L4	L5	L6	L7

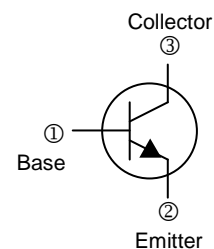
SOT-23



PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-23	3K	7' inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.80	3.04	G	0.09	0.18
B	2.10	2.55	H	0.45	0.60
C	1.20	1.40	J	0.08	0.177
D	0.89	1.15	K	0.6 REF.	
E	1.78	2.04	L	0.89	1.02
F	0.30	0.50			



ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ C$ unless otherwise specified)

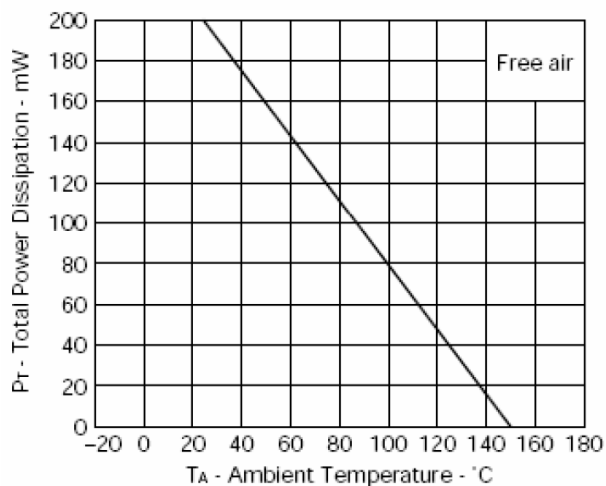
Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	200	mW
Junction, Storage Temperature	T_J, T_{STG}	150, -55 ~ 150	$^\circ C$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ C$ unless otherwise specified)

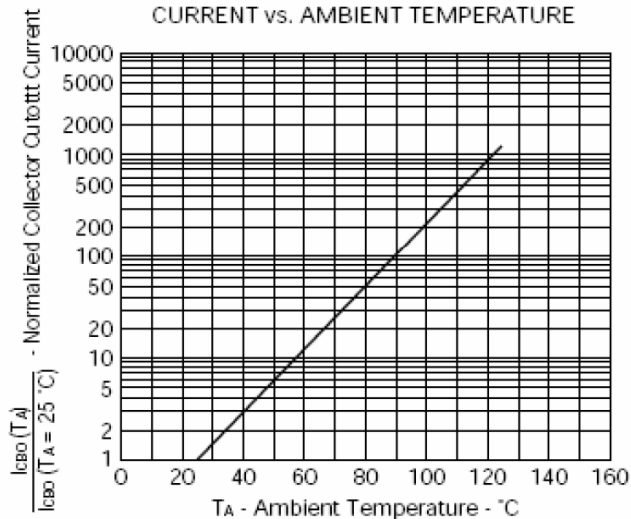
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	60	-	-	V	$I_C=100\mu A, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	50	-	-	V	$I_C=1mA, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	$I_E=100\mu A, I_C=0$
Collector Cut-Off Current	I_{CBO}	-	-	0.1	μA	$V_{CB}=60V, I_E=0$
Emitter Cut-Off Current	I_{EBO}	-	-	0.1	μA	$V_{EB}=5V, I_C=0$
DC Current Gain	h_{FE}	90	200	600		$V_{CE}=6V, I_C=1mA$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.3	V	$I_C=100mA, I_B=10mA$
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	1.0	V	$I_C=100mA, I_B=10mA$
Transition Frequency	f_T		250	-	MHz	$V_{CE}=6V, I_C=10mA$

CHARACTERISTIC CURVES

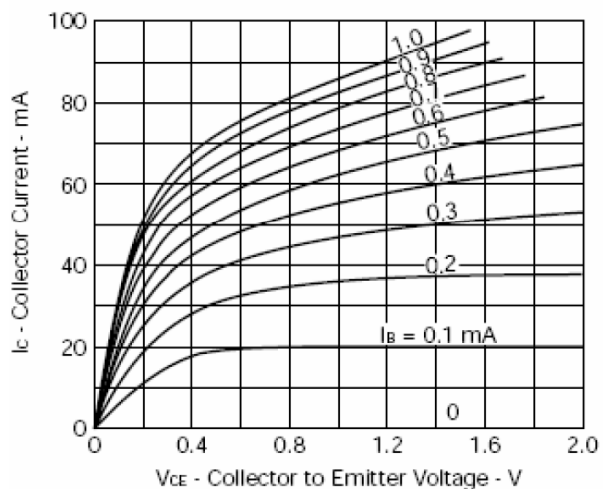
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



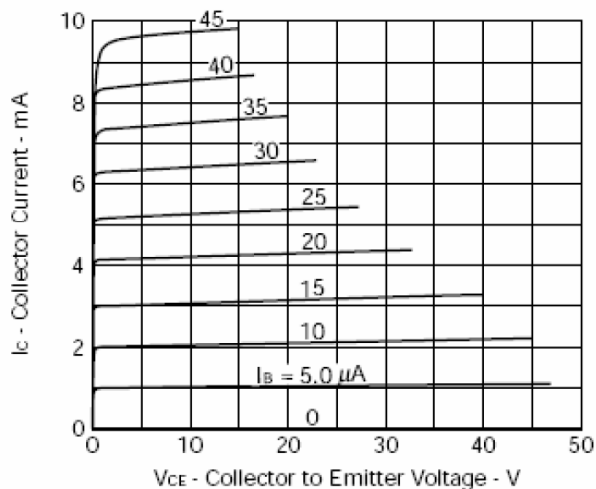
NORMALIZED COLLECTOR CUTOFF CURRENT vs. AMBIENT TEMPERATURE



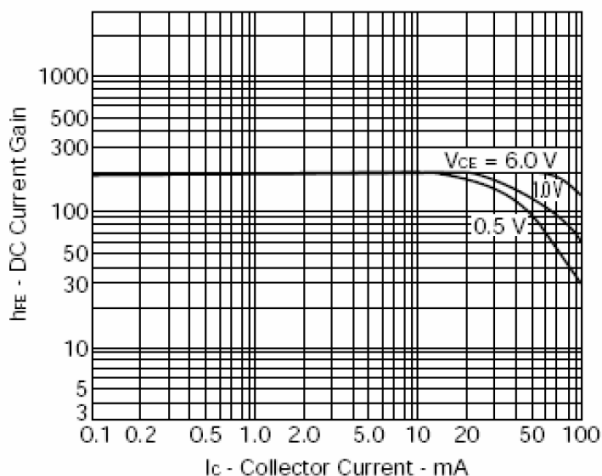
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



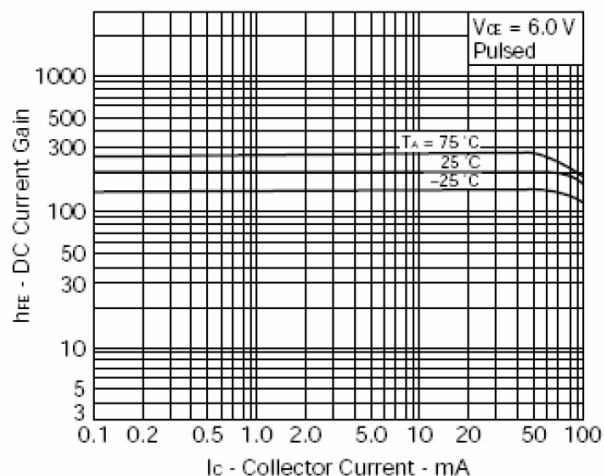
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



DC CURRENT GAIN vs.
COLLECTOR CURRENT

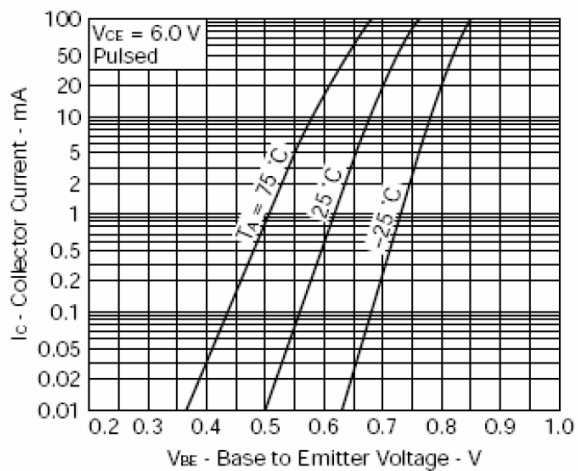


DC CURRENT GAIN vs.
COLLECTOR CURRENT

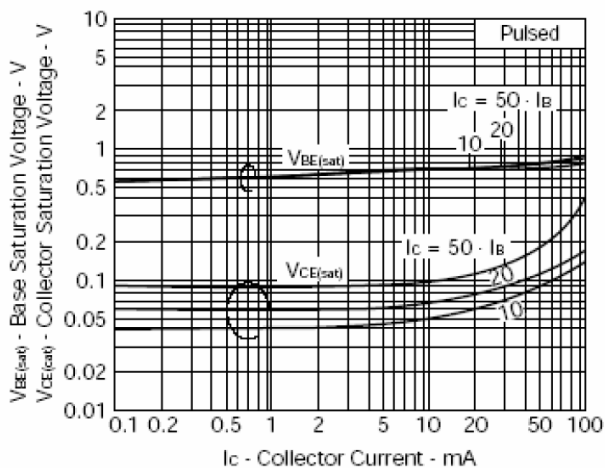


CHARACTERISTIC CURVES

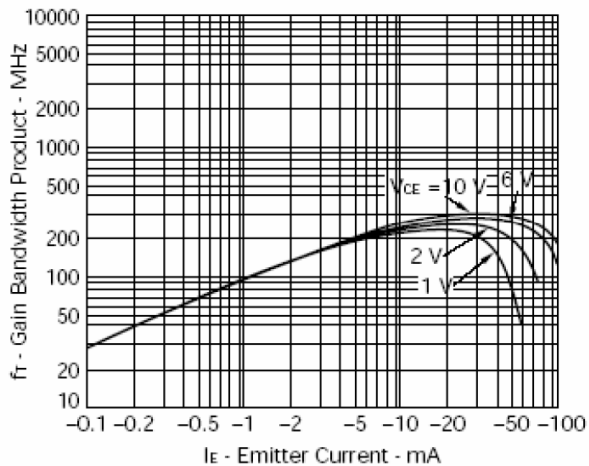
COLLECTOR CURRENT vs.
BASE TO EMITTER VOLTAGE



COLLECTOR AND BASE SATURATION
VOLTAGE vs. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT vs. EMITTER CURRENT



INPUT AND OUTPUT CAPACITANCE vs. REVERSE VOLTAGE

