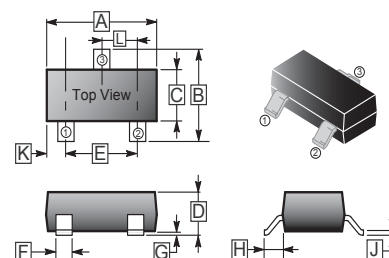


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

### FEATURE

- For high-frequency Amplification Complementary to 2SA1532
- Optimum for RF amplification of FM/AM radios
- High transition frequency  $f_T$

### SOT-323



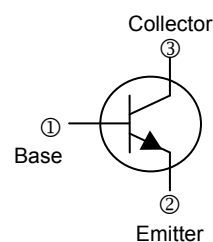
### CLASSIFICATION OF $h_{FE}$

Product-Rank	2SC3930-VB	2SC3930-VC
Range	70~140	110~220

### PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-323	3K	7' inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.80	2.20	G	0.100 REF.	
B	1.80	2.45	H	0.525 REF.	
C	1.15	1.35	J	0.08	0.25
D	0.80	1.10	K	-	-
E	1.20	1.40	L	0.650 TYP.	
F	0.20	0.40			



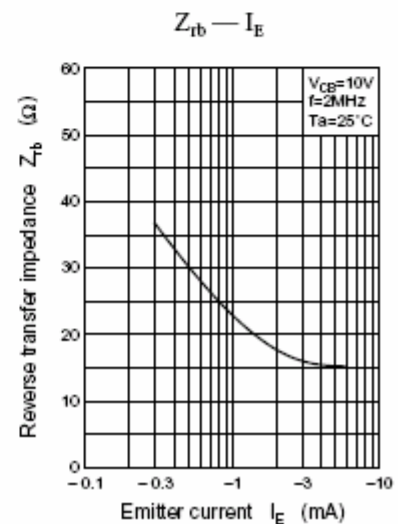
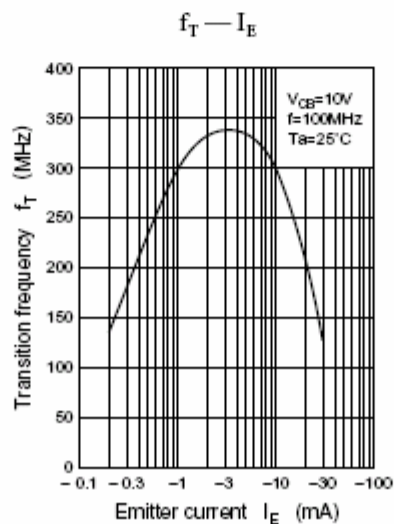
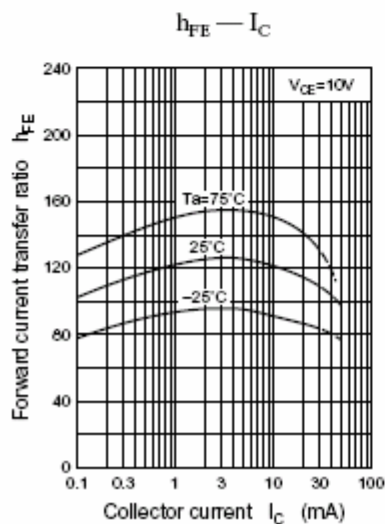
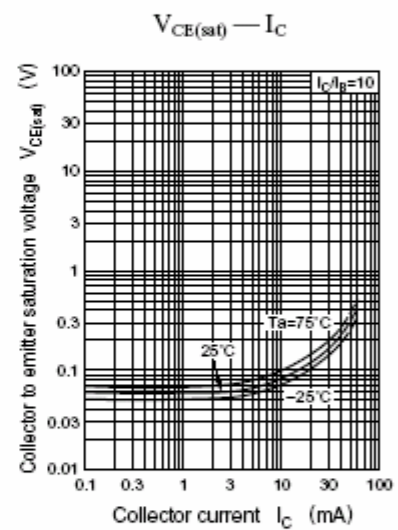
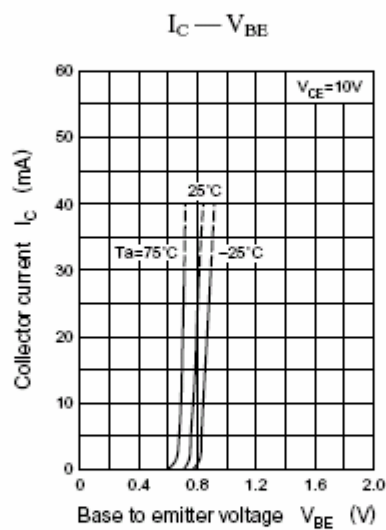
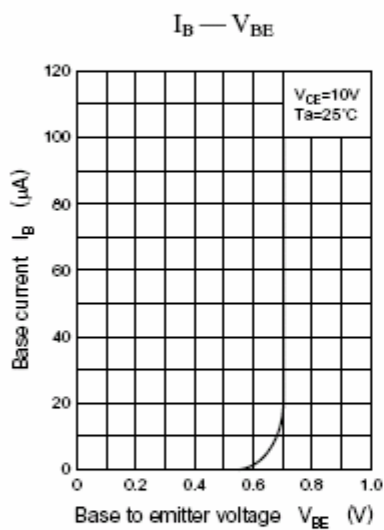
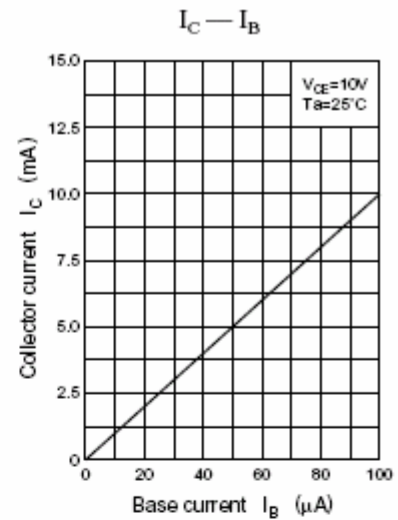
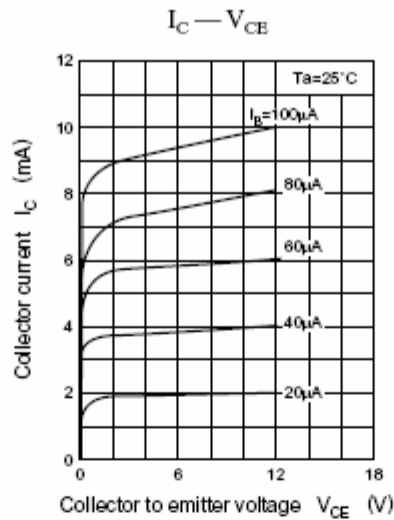
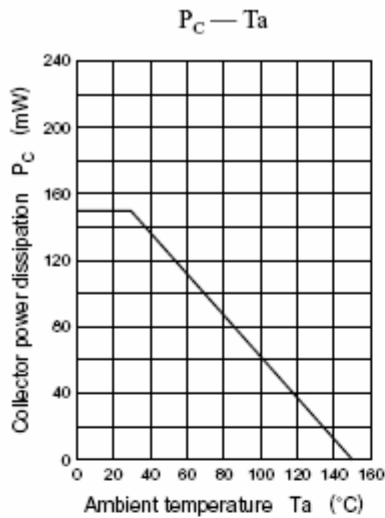
### ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CBO}$	30	V
Collector to Emitter Voltage	$V_{CEO}$	20	V
Emitter to Base Voltage	$V_{EBO}$	5	V
Collector Current – Continuous	$I_C$	30	mA
Collector Power Dissipation	$P_C$	150	mW
Junction, Storage Temperature	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Testing Condition
Collector-base breakdown voltage	$V_{(BR)CBO}$	30	-	-	V	$I_C=100\mu\text{A}, I_E=0$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	20	-	-	V	$I_C=100\mu\text{A}, I_B=0$
Emitter-base breakdown voltage	$V_{(BR)EBO}$	5	-	-	V	$I_E=100\mu\text{A}, I_C=0$
Collector Cut-off Current	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	$V_{CB}=10\text{V}, I_E=0$
Emitter Cut-off Current	$I_{EBO}$	-	-	0.1	$\mu\text{A}$	$V_{EB}=5\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	70	-	220		$V_{CE}=10\text{V}, I_C=1\text{mA}$
Transition Frequency	$f_T$	150	-	-	MHz	$V_{CE}=10\text{V}, I_E=1\text{mA}, f=200\text{MHz}$
Common emitter reverse transfer capacitance	$C_{re}$	-	-	1.5	pF	$V_{CB}=10\text{V}, I_C=1\text{mA}, f=10.7\text{MHz}$
Noise Figure	NF	-	-	4	dB	$V_{CB}=10\text{V}, I_C=1\text{mA}, f=5\text{MHz}$
Reverse transfer impedance	$Z_{rb}$	-	-	50	$\Omega$	$V_{CB}=10\text{V}, I_C=1\text{mA}, f=2\text{MHz}$

**CHARACTERISTIC CURVES**



**CHARACTERISTIC CURVES**

