



BCX53 BCX53-10 BCX53-16

PNP Plastic-Encapsulate Transistors

Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Power Dissipation: $P_{CM}=0.5W$ ($T_{amb}=25^{\circ}C$)
- Collector Current: $I_{CM}=-1.0A$
- Collector-Base Voltage: $V_{(BR)CBO}=-100V$
- Marking Code: BCX53=AH, BCX53-10=AK, BCX53-16=AL
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

Symbol	Rating	Value	Unit
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	-100	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	-80	V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	-5	V
I_C	Collector Current DC	-1.0	A
P_C	Collector Power Dissipation	0.5(Note1)	W
		0.95(Note2)	
		1.35(Note3)	
T_J	Junction Temperature Range	-55 to +150	$^{\circ}C$
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}C$

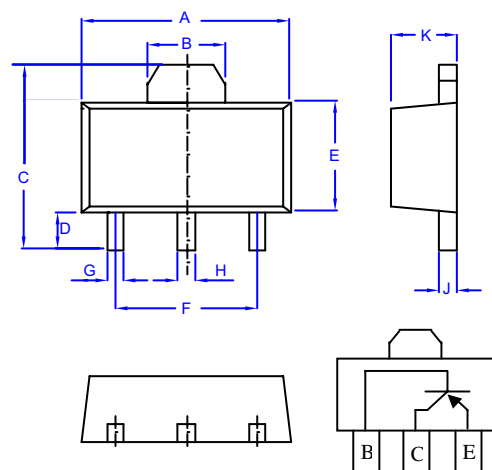
- [1] Device mounted on an FR4 Printed-Circuit Board (PCB), single-sided copper, tin-plated and standard footprint.
 [2] Device mounted on an FR4 PCB, single-sided copper, tin-plated, mounting pad for collector 1 cm².
 [3] Device mounted on an FR4 PCB, single-sided copper, tin-plated, mounting pad for collector 6 cm².

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=-100\mu A$, $I_E=0$)	-100	---	---	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage * ($I_C=-10mA$, $I_B=0$)	-80	---	---	V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=-100\mu A$, $I_C=0$)	-5	---	---	V
I_{CBO}	Collector Cutoff Current ($V_{CB}=-30V$, $I_E=0$)	---	---	-0.1	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=-5.0V$, $I_C=0$)	---	---	-0.1	μA
$h_{FE(1)}$	DC Current Gain* ($V_{CE}=-2.0V$, $I_C=-5mA$)	63	---	---	
$h_{FE(2)}$	DC Current Gain * ($V_{CE}=-2.0V$, $I_C=-150mA$)	BCX53	63	---	250
		BCX53-10	63	---	160
		BCX53-16	100	---	250
$h_{FE(3)}$	DC Current Gain * ($V_{CE}=-2.0V$, $I_C=-500mA$)	40	---	---	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage * ($I_C=-500mA$, $I_B=-50mA$)	---	---	-0.5	V
V_{BE}	Base-Emitter Voltage* ($I_C=-500mA$, $V_{CE}=-2.0V$)	---	---	-1.0	V
f_T	Transition Frequency ($V_{CE}=-5V$, $I_C=-10mA$, $f=100MHz$)	---	50	---	MHz

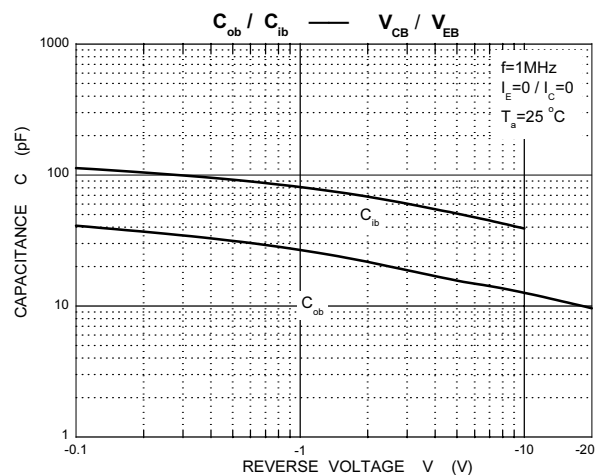
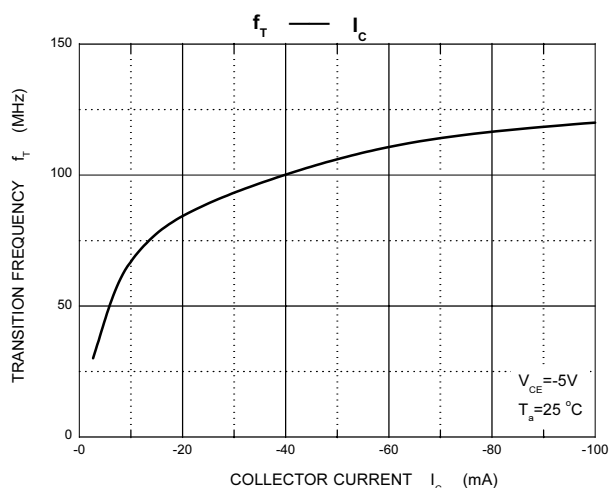
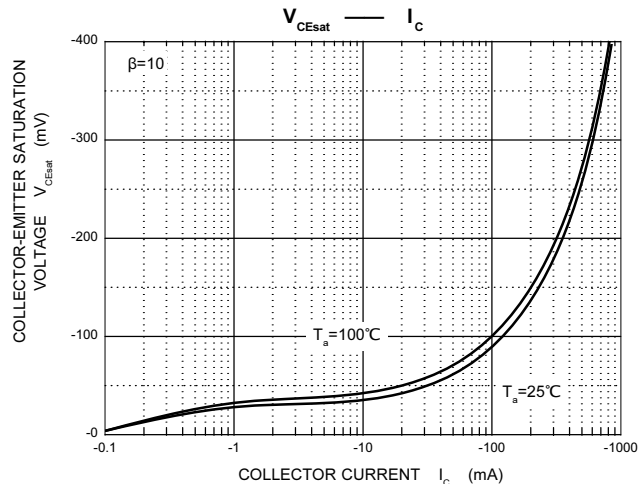
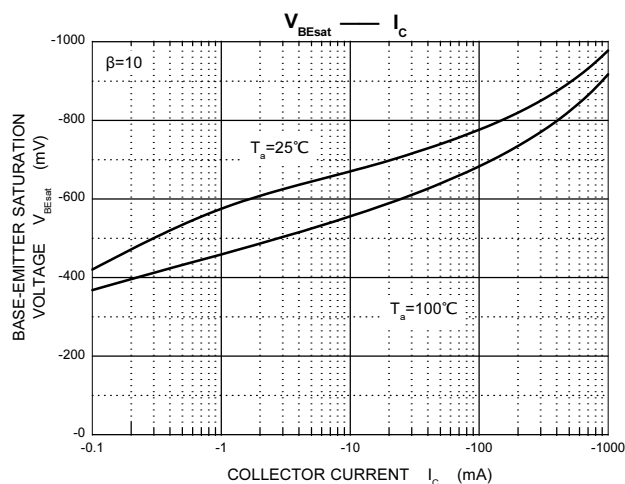
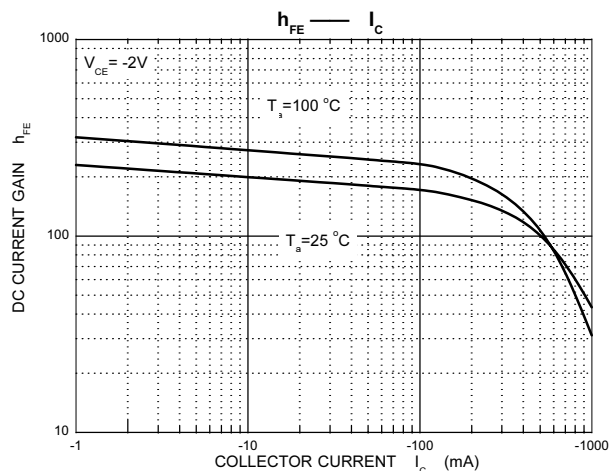
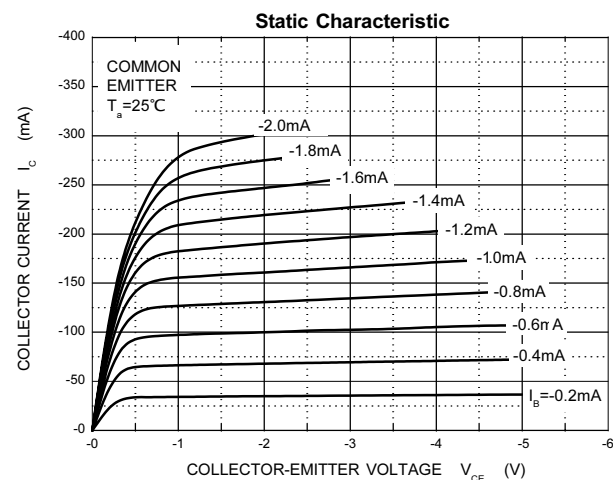
* Pulse Test

SOT-89

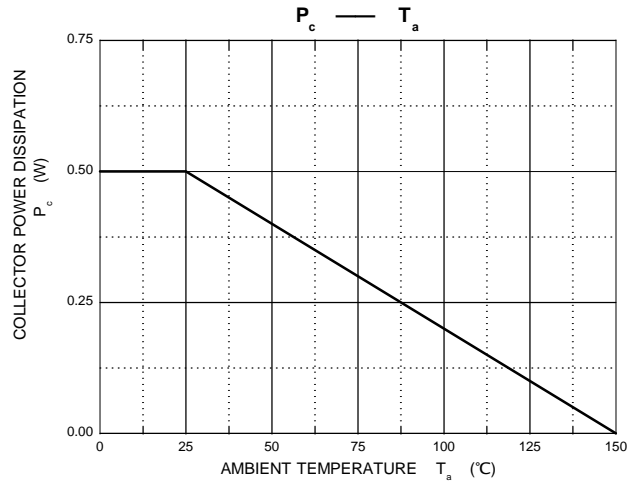
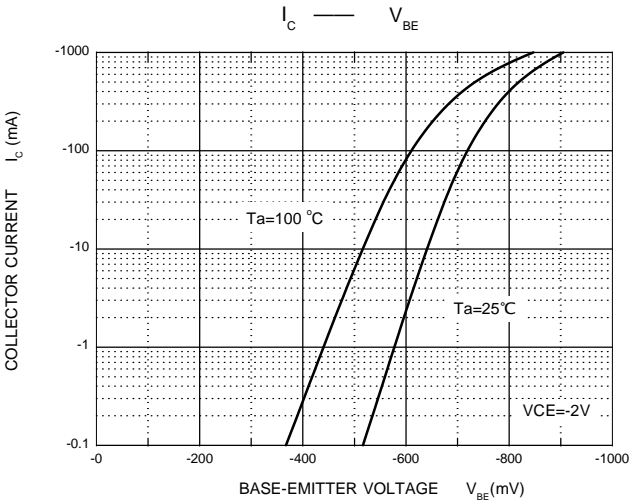


DIM	INCHES		MM		NOTES
	MIN	MAX	MIN	MAX	
A	.173	.181	4.39	4.60	
B	.061	----	1.55	----	REF.
C	.154	.165	3.91	4.25	
D	.031	.039	0.80	1.00	
E	.092	.100	2.34	2.54	
F	.118	----	3.00	----	TYP
G	.013	.019	0.33	0.48	
H	.015	.021	0.38	0.53	
J	.015	.016	0.38	0.41	
K	.055	.063	1.40	1.60	

Typical Characteristics



Typical Characteristics





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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 1Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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