

**Small Signal Product**

**NPN Transistor**

**FEATURES**

- For switching and AF amplifier applications
- These types are subdivided into three groups A, B and C according to their current gain
- Moisture sensitivity level 1
- Driver transistor
- Pb free and RoHS compliant
- Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code



1. Collector 2. Base 3. Emitter  
TO-92 Plastic Package



**MECHANICAL DATA**

- Case: TO-92 small outline plastic package
- Terminal: Matte tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- High temperature soldering guaranteed: 260°C/10s
- Weight: 190 mg (approximately)

**TO-92**

<b>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</b> (T <sub>A</sub> =25°C unless otherwise noted)				
<b>PARAMETER</b>		<b>SYMBOL</b>	<b>VALUE</b>	<b>UNIT</b>
Total Power dissipation		P <sub>TOT</sub>	500	mW
Collector-Base Voltage	BC546	V <sub>CBO</sub>	80	V
	BC547, BC550		50	
	BC548, BC549		30	
Collector-Emitter Voltage	BC546	V <sub>CEO</sub>	65	V
	BC547, BC550		45	
	BC548, BC549		30	
Emitter-Base Voltage	BC546	V <sub>EBO</sub>	6	V
	BC547, BC550		6	
	BC548, BC549		6	
Collector Current		I <sub>C</sub>	100	mA
Peak Collector Current		I <sub>CM</sub>	200	mA
Junction and Storage Temperature Range		T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	°C

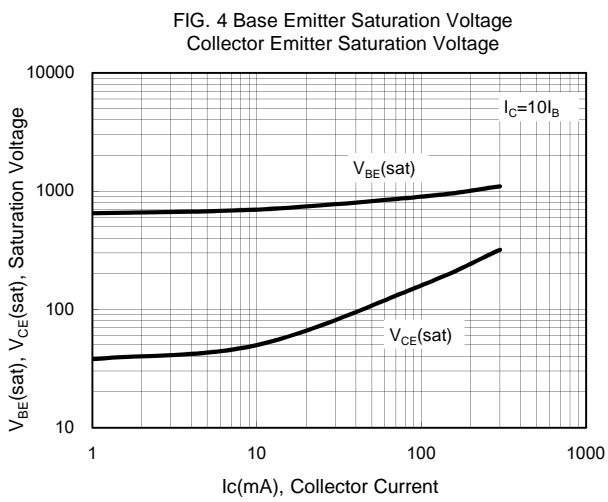
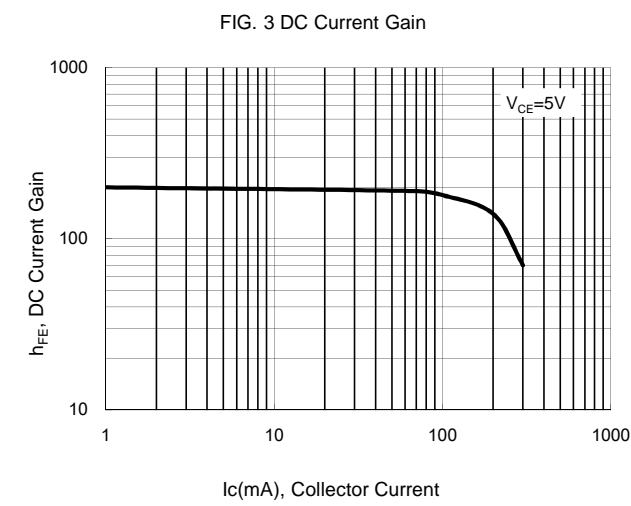
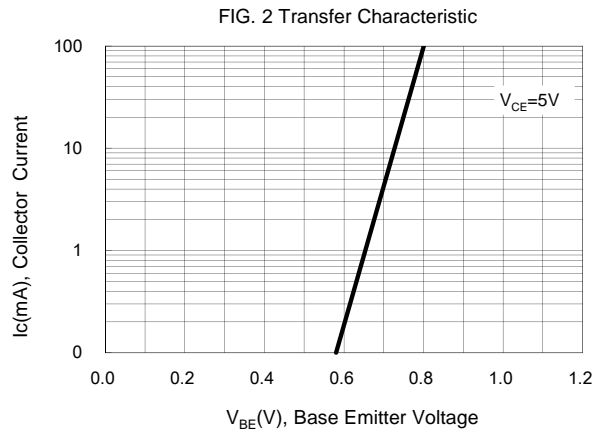
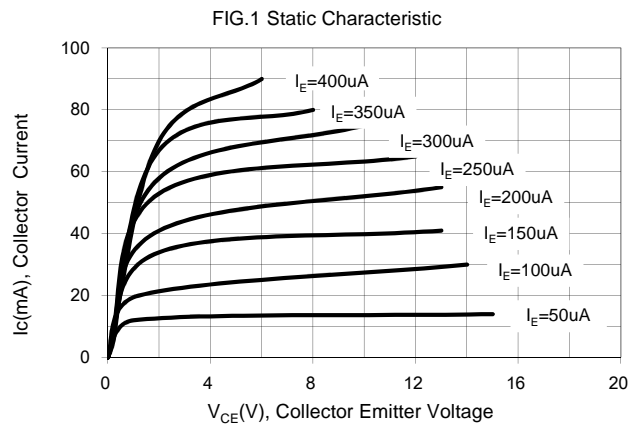
# Datasheet.Directory

<b>PARAMETER</b>		<b>SYMBOL</b>	<b>MIN</b>	<b>MAX</b>	<b>UNIT</b>	
Collector-Base Breakdown Voltage	BC546	V <sub>(BR)CBO</sub>	80	-	V	
	BC547, BC550		50			
	BC548, BC549		30			
Collector-Emitter Breakdown Voltage	BC546	V <sub>(BR)CEO</sub>	65	-	V	
	BC547, BC550		45			
	BC548, BC549		30			
Emitter-Base Breakdown Voltage	BC546	V <sub>(BR)EBO</sub>	6	-	V	
	BC547, BC550		6			
	BC548, BC549		6			
Collector Base Cutoff Current	V <sub>CB</sub> = 30V	I <sub>CBO</sub>	-	15	nA	
Emitter Base Cutoff Current	V <sub>EB</sub> = 5 V	I <sub>EBO</sub>	-	100	nA	
DC Current Gain	Current Gain Group: A B C	V <sub>CE</sub> = 5V, I <sub>C</sub> = 2mA	h <sub>FE</sub>	110	220	V
			h <sub>FE</sub>	200	450	
			h <sub>FE</sub>	420	800	

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RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)



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<b>ORDERING INFORMATION</b>						
<b>PART NO.</b>	<b>MANUFACTURE CODE (Note1)</b>	<b>PACKING CODE</b>	<b>GREEN COMPOUND CODE</b>	<b>PACKAGE</b>	<b>PACKING</b>	<b>MARKING</b>
BC5xxA/B/C (Note2)		A1	G	TO-92	4K / Ammo	BC5xxA/B/C (Note2)
BC5xxA/B/C (Note2)		B1	G	TO-92	5K / Bulk	BC5xxA/B/C (Note2)

Note1: Manufacture special control, if empty means no special control requirement.

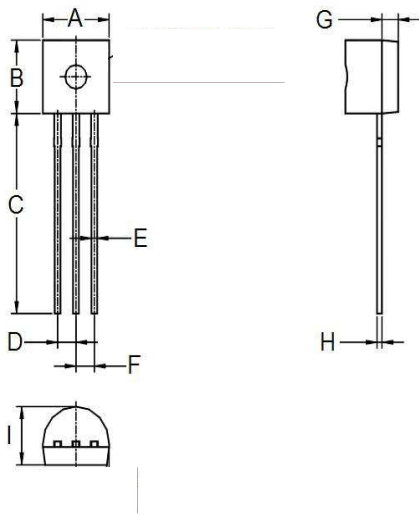
Note2: "xx" is Device Code from "46" thru "50", and "MARKING" should follow the "PART NO."

<b>EXAMPLE</b>					
<b>PREFERRED P/N</b>	<b>PART NO.</b>	<b>MANUFACTURE CODE</b>	<b>PACKING CODE</b>	<b>GREEN COMPOUND CODE</b>	<b>DESCRIPTION</b>
BC546A A1G	BC546A		A1	G	Green compound
BC546A-B0 A1G	BC546A	B0	A1	G	Green compound

**Small Signal Product**

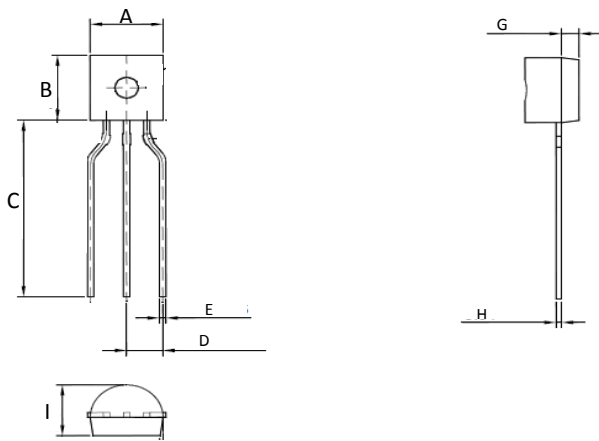
**DIMENSIONS**

**TO-92 Bulk**



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.40	5.10	0.173	0.201
B	4.30	4.70	0.169	0.185
C	12.50	14.50	0.492	-
D	1.17	1.37	0.046	0.054
E	0.35	0.55	0.014	0.022
F	1.17	1.37	0.046	0.054
G	0.59	1.40	0.023	0.055
H	0.29	0.51	0.011	0.020
I	3.300	4.100	0.130	0.161

**TO-92 Ammo**



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.30	4.70	0.169	0.185
B	4.30	4.70	0.169	0.185
C	12.50	-	0.492	-
D	2.20	2.80	0.087	0.110
E	0.35	0.55	0.014	0.022
G	1.00	1.20	0.039	0.047
H	0.29	0.51	0.011	0.020
I	3.30	3.70	0.130	0.146

**Small Signal Product****Notice**

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