



# TO-92 Plastic-Encapsulate Transistors

## BC350 TRANSISTOR (PNP)

### FEATURES

Power dissipation

$$P_{CM}: 0.3 \text{ W ( } T_{amb}=25 \text{ )}$$

Collector current

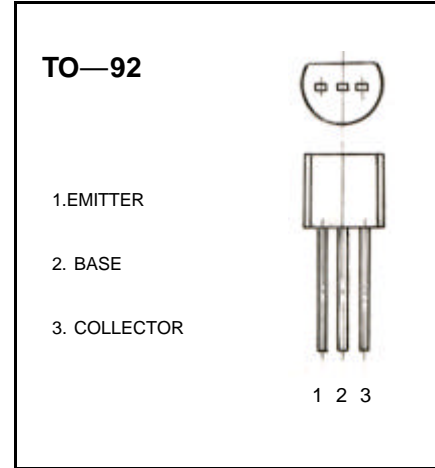
$$I_{CM}: -0.1 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -50 \text{ V}$$

Operating and storage junction temperature range

$$T_J , T_{stg}: -55 \text{ to } +150$$

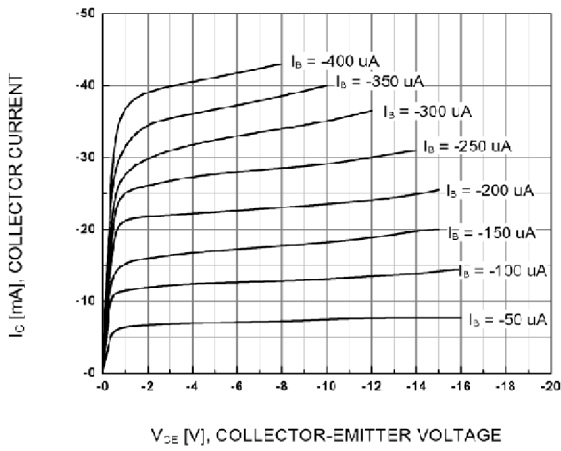


### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25$ unless otherwise specified )

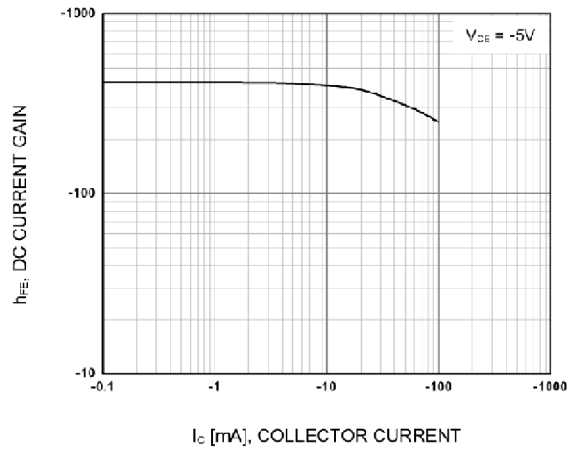
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu A, I_E = 0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 \text{ mA}, I_B = 0$	-45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu A, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -50 \text{ V}, I_E = 0$			-0.1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE} = -35 \text{ V}, I_B = 0$			-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -3 \text{ V}, I_C = 0$			-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -5 \text{ V}, I_C = -2 \text{ mA}$	40		450	
Collector-emitter saturation voltage	$V_{CEsat}$	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$			-0.3	V
Base-emitter saturation voltage	$V_{BEsat}$	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$			-1	V
Transition frequency	$f_T$	$V_{CE} = -5 \text{ V}, I_C = -10 \text{ mA}, f = 30 \text{ MHz}$	125			MHz

# Typical Characteristics

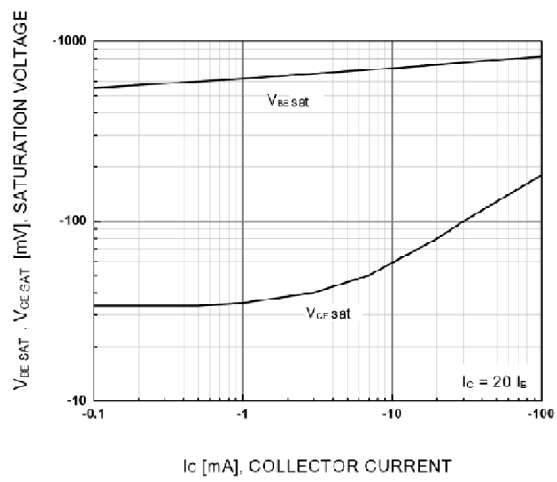
**BC350**



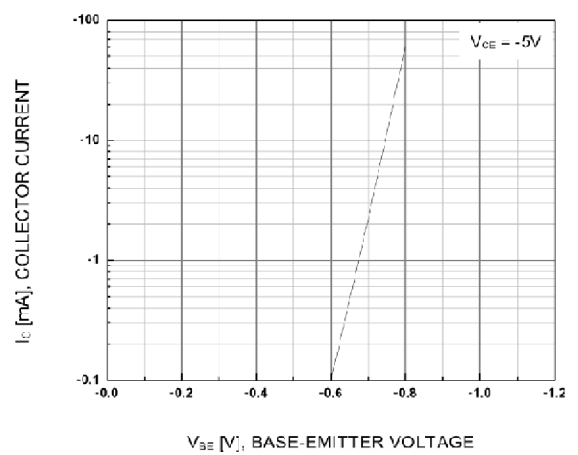
**Figure 1. Static Characteristic**



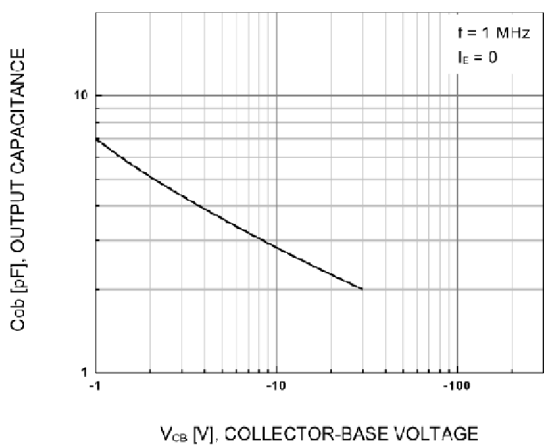
**Figure 2. DC current Gain**



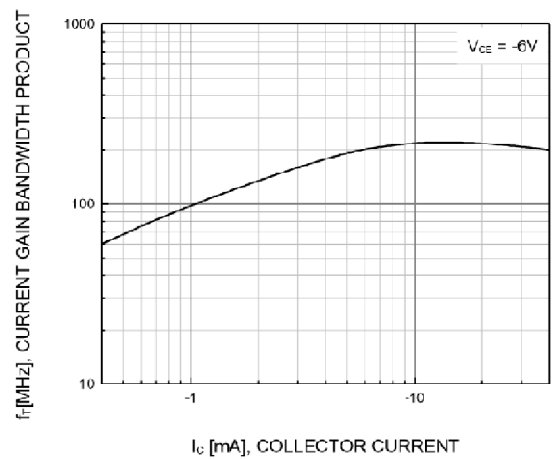
**Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage**



**Figure 4. Base-Emitter On Voltage**



**Figure 5. Collector Output Capacitance**



**Figure 6. Current Gain Bandwidth Product**

## TO-92 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.400	4.700	0.173	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270TYP		0.050TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Ö		1.600		0.063
↓	0.000	0.380	0.000	0.015