

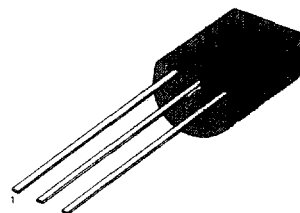
SWITCHING AND AMPLIFIER

- HIGH VOLTAGE: BC546, $V_{CE0}=65V$
- LOW NOISE: BC549, BC550
- Complement to BC556 ... BC 560

ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}C$)

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	V_{CBO}	80	V
:BC546		50	V
:BC547/550		30	V
:BC548/549			
Collector-Emitter Voltage	V_{CEO}	65	V
:BC546		45	V
:BC547/550		30	V
:BC548/549/550			
Emitter-Base Voltage	V_{EBO}	6	V
:BC546/547		5	V
:BC548/549/550			
Collector Current (DC)	I_C	100	mA
Collector Dissipation	P_C	500	mW
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-65 ~ 150	$^{\circ}C$

TO-92



1. Collector 2. Base 3. Emitter

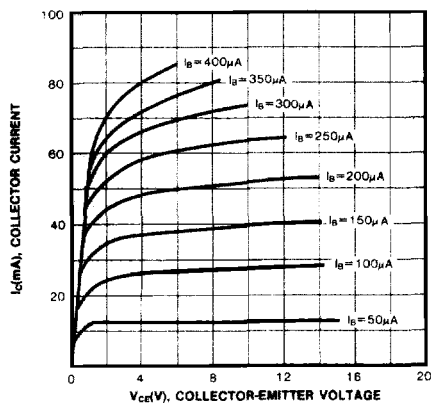
ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}C$)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-off Current	I_{CBO}	$V_{CB}=30V, I_E=0$			15	nA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=2mA$	110		800	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=0.5mA$		90	250	mV
		$I_C=100mA, I_B=5mA$		200	600	mV
Collector Base Saturation Voltage	$V_{BE(on)}$	$I_C=10mA, I_B=0.5mA$		700		mV
		$I_C=100mA, I_B=5mA$		900		mV
Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE}=5V, I_C=2mA$	580	660	700	mV
		$V_{CE}=5V, I_C=10mA$			720	mV
Current Gain Bandwidth Product	f_T	$V_{CE}=5V, I_C=10mA$		300		MHz
Collector Base Capacitance	C_{CBO}	$V_{CB}=10V, f=1MHz$		3.5	6	pF
Emitter Base Capacitance	C_{EBO}	$V_{EB}=0.5V, f=1MHz$		9		pF
Noise Figure :BC546/547/548	NF	$V_{CE}=5V, I_C=200\mu A$		2	10	dB
:BC549/550		$f=1KHz, R_G=2k\Omega$		1.2	4	dB
:BC549	NF	$V_{CE}=5V, I_C=200\mu A$		1.4	4	dB
:BC550		$R_G=2k\Omega, f=30\sim 15000MHz$		1.4	3	dB

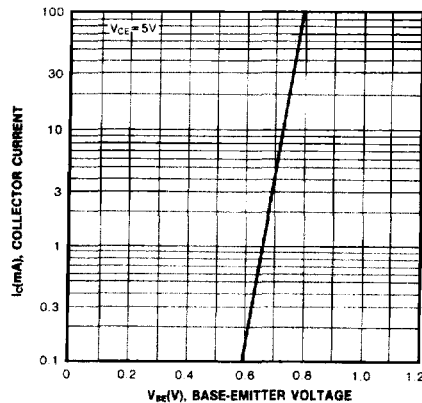
 h_{FE} CLASSIFICATION

Classification	A	B	C
h_{FE}	110-220	200-450	420-800

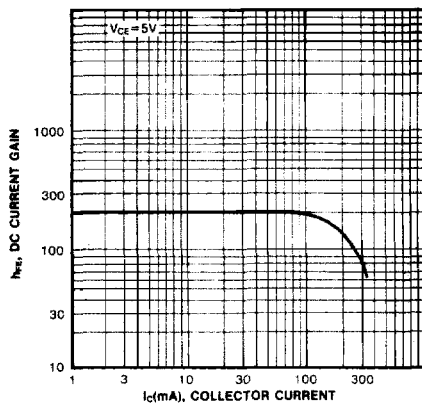
STATIC CHARACTERISTIC



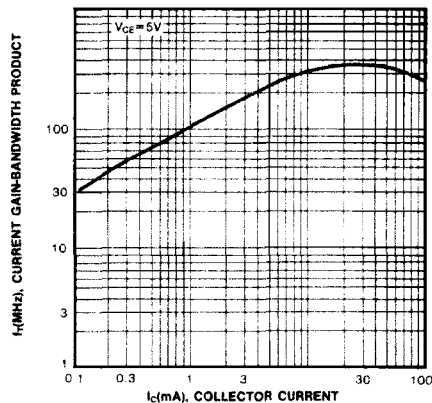
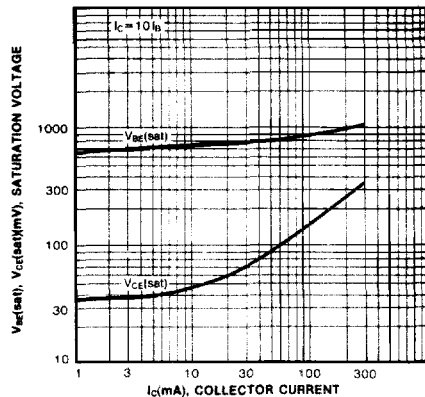
TRANSFER CHARACTERISTIC



DC CURRENT GAIN



CURRENT GAIN BANDWIDTH PRODUCT

BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

OUTPUT CAPACITANCE

