

BC556/557/558/559/560

PNP EPITAXIAL SILICON TRANSISTOR

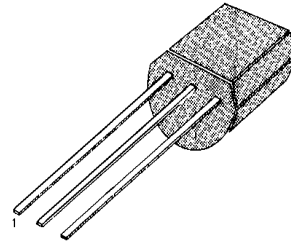
SWITCHING AND AMPLIFIER

- HIGH VOLTAGE: BC556, $V_{CE0} = -65V$
- LOW NOISE: BC559, BC560
- Complement to BC546 ... BC 550

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

Characteristic	Symbol	Rating	Unit
Collector-Base Capacitance : BC556 : BC557/560 : BC558/559	V_{CBO}	-80 -50 -30	V V V
Collector-Emitter Voltage : BC556 : BC557/560 : BC558/559	V_{CEO}	-65 -45 -30	V V V
Emitter-Base Voltage	V_{EBO}	-5	V
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 ($T_A=25^\circ C$)

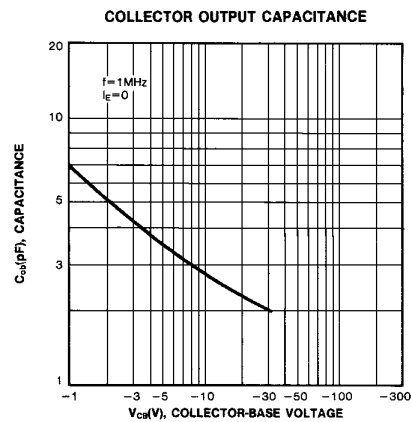
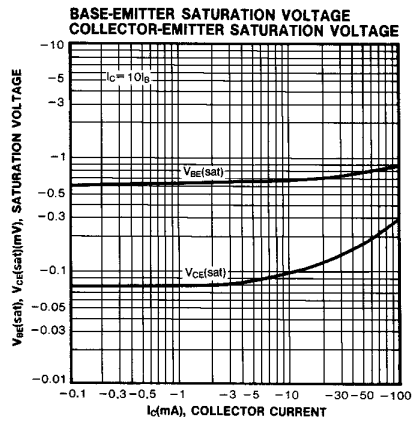
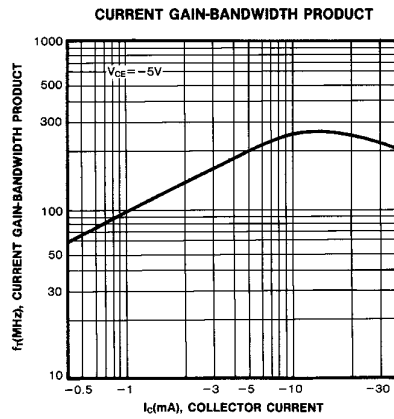
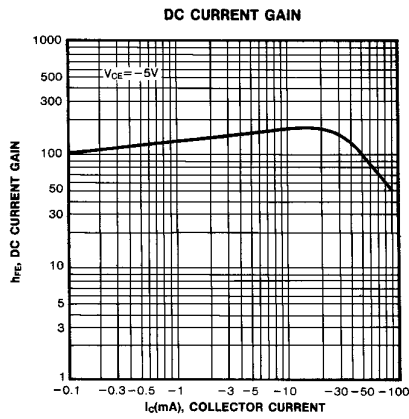
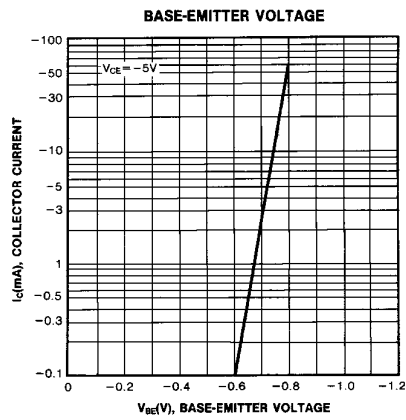
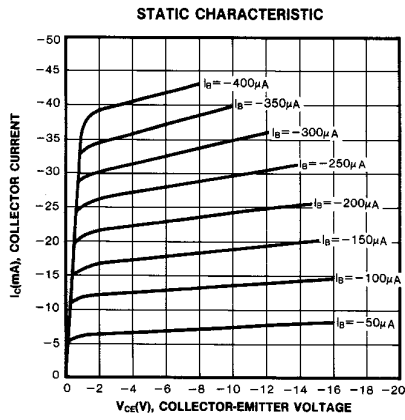
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-off Current	I_{CBO}	$V_{CB} = -30V, I_E = 0$			-15	nA
DC Current Gain	h_{FE}	$V_{CE} = -5V, I_C = 2mA$	110		800	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -10mA, I_B = -0.5mA$ $I_C = -100mA, I_B = -5mA$		-90 -250	-300 -650	mV mV
Collector Base Saturation Voltage	$V_{BE(on)}$	$I_C = -10mA, I_B = -0.5mA$ $I_C = -100mA, I_B = -5mA$		-700 -900		mV mV
Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = -5V, I_C = -2mA$ $V_{CE} = -5V, I_C = -10mA$	-600	-660	-750 -800	mV mV
Current Gain Bandwidth Product	f_T	$V_{CE} = -5V, I_C = -10mA$		150		MHz
Collector Base Capacitance	C_{CBO}	$V_{CB} = -10V, f = 1MHz$			6	pF
Noise Figure	NF	$V_{CE} = -5V, I_C = -200\mu A$ $f = 1KHz, R_G = 2K\Omega$		2 1	10 4	dB dB
	NF	$V_{CE} = -5V, I_C = -200\mu A$ $R_G = 2K\Omega$ $f = 30 \sim 15000MHz$		1.2 1.2	4 2	dB dB

h_{FE} CLASSIFICATION

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

BC556/557/558/559/560

PNP EPITAXIAL SILICON TRANSISTOR



TRADEMARKS

The following are registered and unregistered trademarks Fairchild Semiconductor owns or is authorized to use and is not intended to be an exhaustive list of all such trademarks.

ACEx™	ISOPLANAR™
CoolFET™	MICROWIRE™
CROSSVOLT™	POP™
E ² CMOS™	PowerTrench™
FACT™	QS™
FACT Quiet Series™	Quiet Series™
FAST®	SuperSOT™-3
FASTr™	SuperSOT™-6
GTO™	SuperSOT™-8
HiSeC™	TinyLogic™

DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF FAIRCHILD SEMICONDUCTOR CORPORATION. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, or (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.
2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.

Copyright © Each Manufacturing Company.

All Datasheets cannot be modified without permission.

This datasheet has been download from :

www.AllDataSheet.com

100% Free DataSheet Search Site.

Free Download.

No Register.

Fast Search System.

www.AllDataSheet.com