BC183LC Datasheet

https://www.DiGi-Electronics.com

DiGi Electronics Part Number	BC183LC-DG
Manufacturer	onsemi
Manufacturer Product Number	BC183LC
Description	TRANS NPN 30V 0.1A TO92-3
Detailed Description	Bipolar (BJT) Transistor NPN 30 V 100 mA 150MHz 350 mW Through Hole TO-92-3

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
BC183LC	onsemi
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
NPN	100 mA
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
30 V	600mV @ 5mA, 100mA
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
15nA (ICBO)	40 @ 10µA, 5V
Power - Max:	Frequency - Transition:
350 mW	150MHz
Operating Temperature:	Mounting Type:
-55°C ~ 150°C (TJ)	Through Hole
Package / Case:	Supplier Device Package:
TO-226-3, TO-92-3 (TO-226AA)	TO-92-3
Base Product Number:	
BC183	

Environmental & Export classification

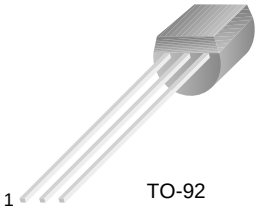
Moisture Sensitivity Level (MSL):	REACH Status:
1 (Unlimited)	REACH Unaffected
ECCN:	HTSUS:
EAR99	8541.21.0075

FAIRCHILD SEMICONDUCTOR®

June 2007

BC183

NPN General Purpose Amplifer



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TO-92

1. Collector 2. Base 3. Emitter

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	45	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current (DC)	100	mA
P_C	Collector Dissipation (T_a=25°C)	350	mW
T_{STG} , T_J	Storage Junction Temperature Range	- 55 ~ 150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max	Units
BV_{CBO}	Collector-Base Voltage	I_C = 10μA	45		V
BV_{CEO}	Collector-Emitter Voltage	I_C = 2mA	30		V
BV_{EBO}	Emitter-Base Voltage	I_E = 10μA	5		V
I_{CBO}	Collector Cut-off Current	V_{CB} = 30V		15	nA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 4.0V		15	nA
h_{FE}	DC Current Gain	V_{CE} = 5V, I_C = 10μA V_{CE} = 5V, I_C = 100mA	40 80		
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 10mA, I_B = 0.5mA I_C = 100mA, I_B = 5.0mA		0.25 0.6	V
V_{BE}(sat)	Base-Emitter Saturation Voltage	I_C = 100mA, I_B = 5mA		1.2	V
V_{BE}(on)	Base-Emitter On Voltage	V_{CE} = 5V, I_C = 2mA	0.55	0.7	V
C_{OB}	Output Capacitance	V_{CE} = 10V, f = 1.0MHz		5	pF
f_T	Current gain Bandwidth Product	V_{CE} = 5V, I_C = 10mA, f = 100MHz	150		MHz
h_{fe}	Small Signal Current Gain	V_{CE} = 5V, I_C = 2mA f = 1KHz	125	900	
NF	Noise Figure	V_{CE} = 5V, I_C = 200mA R_G = 2KΩ, f = 1KHz		10	dB

Typical Characteristics

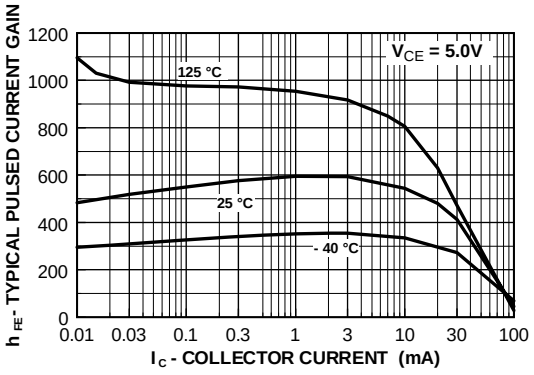

Figure 1. Typical Pulsed Current Gain vs Collector Current

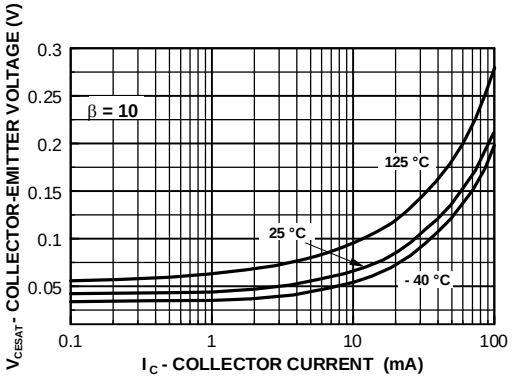

Figure 2. Collector-Emitter Saturation Voltage vs Collector Current

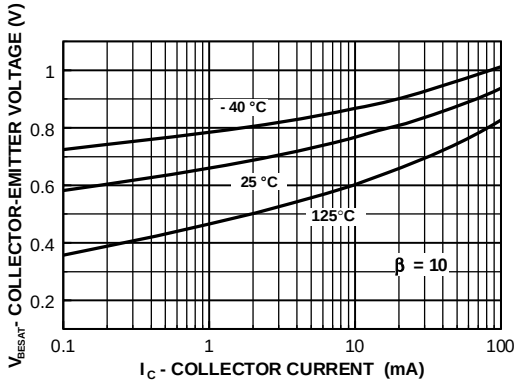

Figure 3. Base-Emitter Saturation Voltage vs Collector Curent

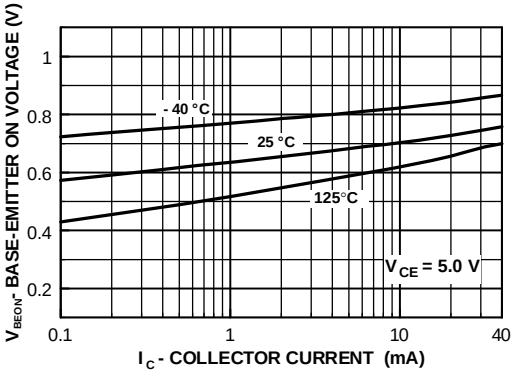

Figure 4. Base-Emitter ON Voltage vs Collector Current

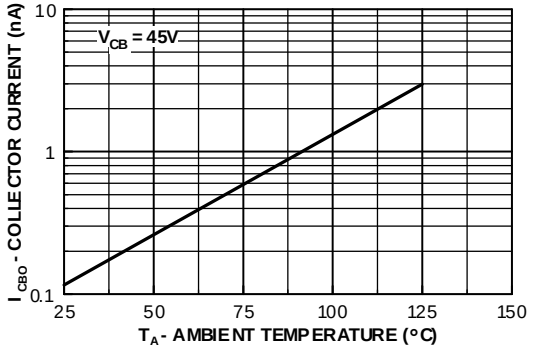

Figure 5. Collector-Cutoff Current vs Ambient Temperature

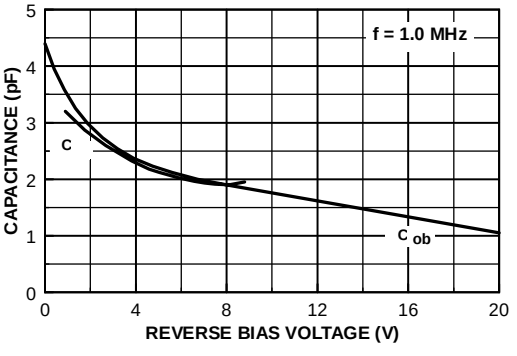

Figure 6. Input and Output Capacitance vs Reverse Bias Voltage

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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.
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