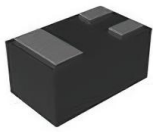


BC856BL3-TP Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	BC856BL3-TP-DG
Manufacturer	Micro Commercial Co
Manufacturer Product Number	BC856BL3-TP
Description	TRANS PNP 65V 0.1A DFN1006-3
Detailed Description	Bipolar (BJT) Transistor PNP 65 V 100 mA 150 mW S urface Mount DFN1006-3



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

BC856BL3-TP

Series:

-

Transistor Type:

PNP

Voltage - Collector Emitter Breakdown (Max):

65 V

Current - Collector Cutoff (Max):

-

Power - Max:

150 mW

Operating Temperature:

-

Package / Case:

SC-101, SOT-883

Base Product Number:

BC856

Manufacturer:

Micro Commercial Co

Product Status:

Active

Current - Collector (Ic) (Max):

100 mA

Vce Saturation (Max) @ Ib, Ic:

-

DC Current Gain (hFE) (Min) @ Ic, Vce:

-

Frequency - Transition:

-

Mounting Type:

Surface Mount

Supplier Device Package:

DFN1006-3

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.21.0095

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

Features

- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings @ 25°C Unless Otherwise Specified

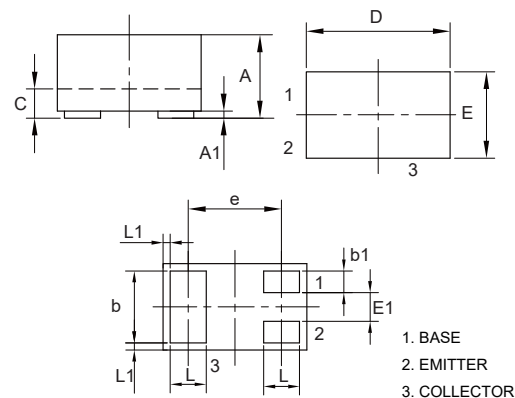
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 833°C/W Junction to Ambient

Parameter	Symbol	Rating	Unit
Collector-Base Voltage BC856AL3-BC856BL3 BC857AL3-BC857CL3 BC858AL3-BC858CL3	V_{CBO}	-80 -50 -30	V
Collector-Emitter Voltage BC856AL3-BC856BL3 BC857AL3-BC857CL3 BC858AL3-BC858CL3	V_{CEO}	-65 -45 -30	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-100	mA
Collector Power Dissipation	P_C	150	mW

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds

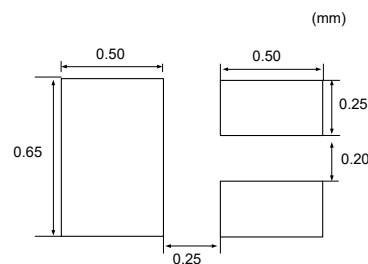
PNP Plastic-Encapsulate Transistors

DFN1006-3

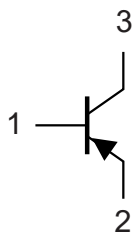


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.45	0.55	
A1	0.000	0.002	0.00	0.05	
b	0.018	0.022	0.45	0.55	
b1	0.004	0.008	0.10	0.20	
c	0.005	0.007	0.12	0.18	
D	0.037	0.042	0.95	1.075	
E	0.022	0.026	0.55	0.675	
E1	0.006	0.010	0.15	0.25	
e	0.026		0.65		TYP.
L	0.008	0.012	0.20	0.30	
L1	0.0002		0.05		TYP.

Suggested Solder Pad Layout

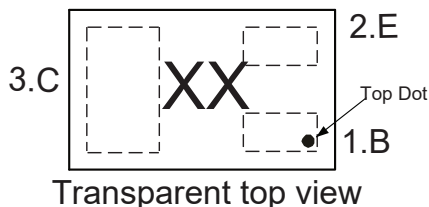


Internal Structure



1.BASE
2.EMITTER
3.COLLECTOR

Marking Code



Part NO.	BC856AL3	BC856BL3	BC857AL3	BC857BL3	BC857CL3	BC858AL3	BC858BL3	BC858CL3
Marking code	3A	3B	3E	3F	3G	3J	3K	3L

Electrical Characteristics @ $T_A=25^\circ\text{C}$ Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage BC856AL3-BC856BL3 BC857AL3-BC857CL3 BC858AL3-BC858CL3	$V_{(BR)CBO}$	-80 -50 -30			V	$I_C=-10\mu\text{A}$, $I_E=0$
Collector-Emitter Breakdown Voltage BC856AL3-BC856BL3 BC857AL3-BC857CL3 BC848AL3-BC848CL3	$V_{(BR)CEO}$	-65 -45 -30			V	$I_C=-10\text{mA}$, $I_B=0$
Emitter-Base Breakdown Voltage BC856AL3-BC856BL3 BC857AL3-BC857CL3 BC858AL3-BC858CL3	$V_{(BR)EBO}$	-5 -5 -5			V	$I_E=-1\mu\text{A}$, $I_C=0$
Collector Cut-off Current	I_{CBO}			-15	nA	$V_{CB}=-30\text{V}$, $I_E=0$
Emitter Cutoff Current	I_{EBO}			-100	nA	$V_{EB}=-5\text{V}$, $I_C=0$
Emitter Cutoff Current	I_{CEO}			-1	mA	$V_{CE}=-30\text{V}$, $I_B=0$
DC Current Gain BC856AL3/BC857AL3/BC858AL3 BC856BL3/BC857BL3/BC858BL3 BC857CL3/BC858CL3	h_{FE}	110 200 420		220 450 800		$V_{CE}=-5\text{V}$, $I_C=-2\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.3 -0.65	V	$I_C=-10\text{mA}$, $I_B=-0.5\text{mA}$ $I_C=-100\text{mA}$, $I_B=-5\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.7 -0.85		V	$I_C=-10\text{mA}$, $I_B=-0.5\text{mA}$ $I_C=-100\text{mA}$, $I_B=-5\text{mA}$
Base-Emitter On Voltage	$V_{BE(on)}$	-0.6	-0.65	-0.75 -0.82	V	$V_{CE}=-5\text{V}$, $I_C=-2\text{mA}$ $V_{CE}=-5\text{V}$, $I_C=-10\text{mA}$
Transition Frequency	f_T	100			MHz	$V_{CE}=-5\text{V}$, $I_C=-10\text{mA}$, $f=100\text{MHz}$

Curve Characteristics

Fig. 1 - Static Characteristics

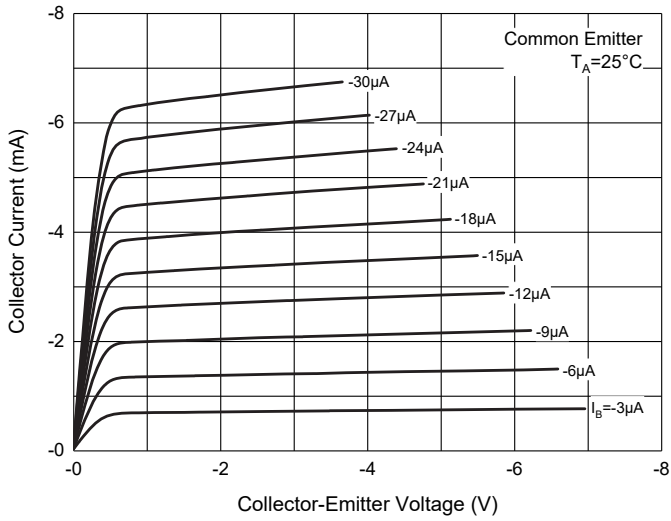


Fig. 2 - DC Current Gain Characteristics

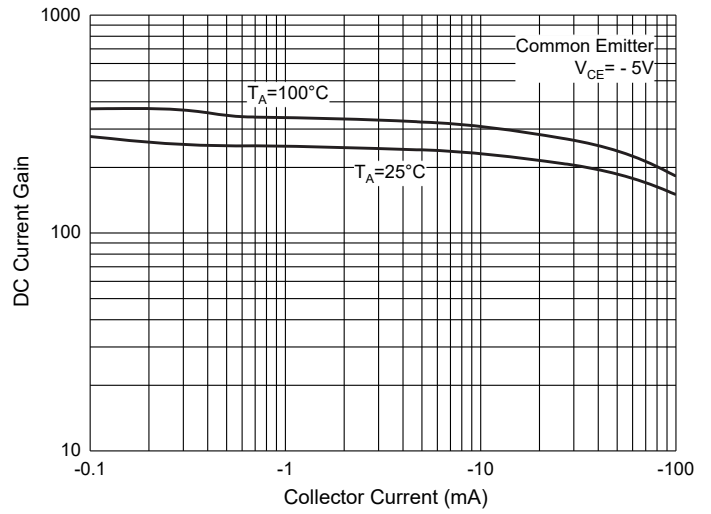


Fig. 3 - Collector-Emitter Saturation Voltage Characteristics

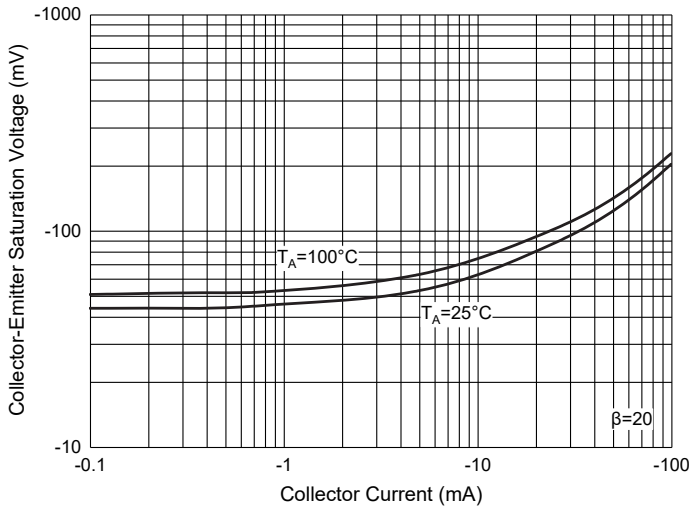


Fig. 4 - Base-Emitter Saturation Voltage Characteristics

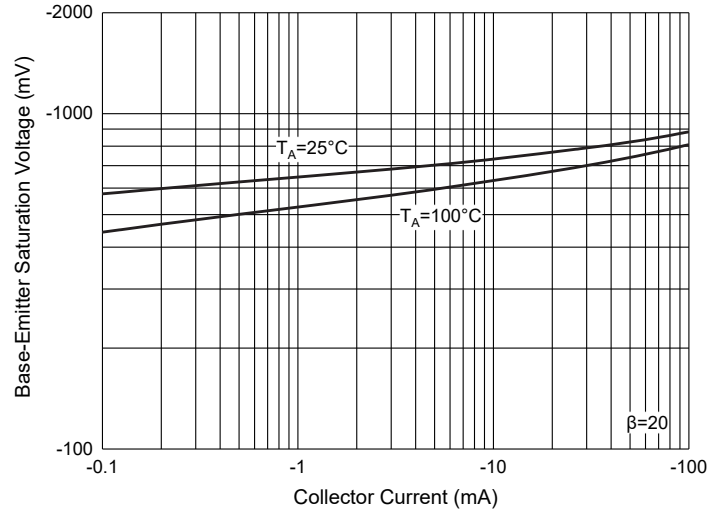


Fig. 5 - Base-Emitter Voltage Characteristics

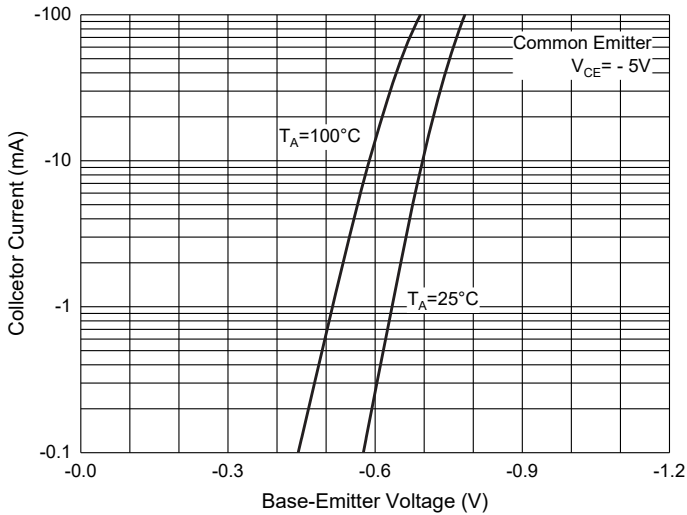
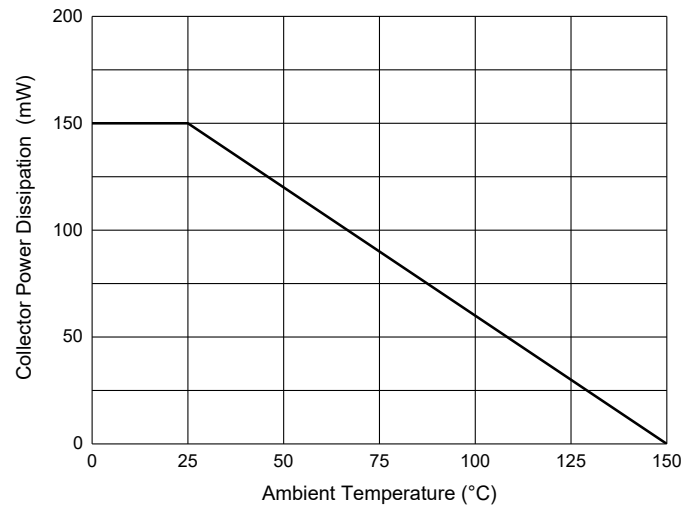


Fig. 6 - Collector Power Derating Curve





Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

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