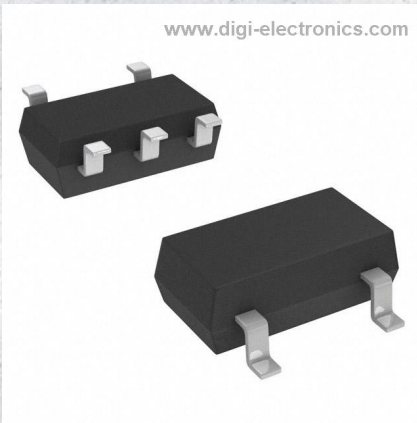


# XN0111F00L Datasheet



DiGi Electronics Part Number	XN0111F00L-DG
Manufacturer	<a href="#">Panasonic Electronic Components</a>
Manufacturer Product Number	XN0111F00L
Description	TRANS PREBIAS DUAL PNP MINI5
Detailed Description	Pre-Biased Bipolar Transistor (BJT) 2 PNP - Pre-Biased (Dual) 50V 100mA 80MHz 300mW Surface Mount Mini5-G1



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

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## Purchase and inquiry

Manufacturer Product Number:

XN0111F00L

Series:

-

Transistor Type:

2 PNP - Pre-Biased (Dual)

Voltage - Collector Emitter Breakdown (Max):

50V

Resistor - Emitter Base (R2):

10kOhms

Vce Saturation (Max) @ Ib, Ic:

250mV @ 300µA, 10mA

Frequency - Transition:

80MHz

Mounting Type:

Surface Mount

Supplier Device Package:

Mini5-G1

Manufacturer:

Panasonic Electronic Components

Product Status:

Obsolete

Current - Collector (Ic) (Max):

100mA

Resistor - Base (R1):

4.7kOhms

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

30 @ 5mA, 10V

Current - Collector Cutoff (Max):

500nA

Power - Max:

300mW

Package / Case:

SC-74A, SOT-753

Base Product Number:

XN0111

## Environmental & Export classification

RoHS Status:

RoHS non-compliant

ECCN:

EAR99

Moisture Sensitivity Level (MSL):

1 (Unlimited)

HTSUS:

8541.21.0095

# XN0111F (XN111F)

## Silicon PNP epitaxial planar type

For switching/digital circuits

### ■ Features

- Two elements incorporated into one package  
(Emitter-coupled transistors with built-in resistor)
- Reduction of the mounting area and assembly cost by one half

### ■ Basic Part Number

- UNR211F (UN211F) × 2

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	$V_{\text{CBO}}$	-50	V
Collector-emitter voltage (Base open)	$V_{\text{CEO}}$	-50	V
Collector current	$I_{\text{C}}$	-100	mA
Total power dissipation	$P_{\text{T}}$	300	mW
Junction temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$

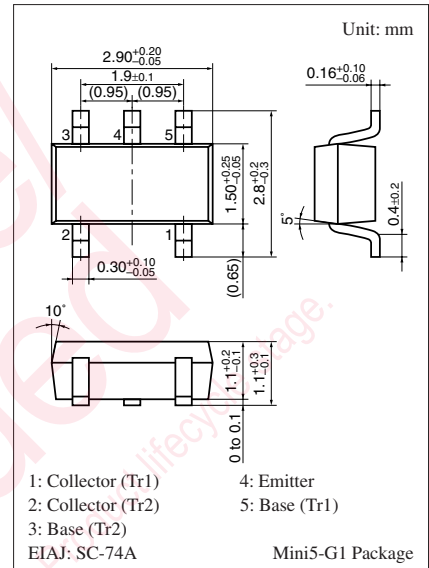
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	$V_{\text{CBO}}$	$I_{\text{C}} = -10 \mu\text{A}, I_{\text{E}} = 0$	-50			V
Collector-emitter voltage (Base open)	$V_{\text{CEO}}$	$I_{\text{C}} = -2 \text{ mA}, I_{\text{B}} = 0$	-50			V
Collector-base cutoff current (Emitter open)	$I_{\text{CBO}}$	$V_{\text{CB}} = -50 \text{ V}, I_{\text{E}} = 0$			-0.1	$\mu\text{A}$
Collector-emitter cutoff current (Base open)	$I_{\text{CEO}}$	$V_{\text{CE}} = -50 \text{ V}, I_{\text{B}} = 0$			-0.5	$\mu\text{A}$
Emitter-base cutoff current (Collector open)	$I_{\text{EBO}}$	$V_{\text{EB}} = -6 \text{ V}, I_{\text{C}} = 0$			-1.0	mA
Forward current transfer ratio	$h_{\text{FE}}$	$V_{\text{CE}} = -10 \text{ V}, I_{\text{C}} = -5 \text{ mA}$	30			—
$h_{\text{FE}}$ Ratio *	$h_{\text{FE}}(\text{Small}/\text{Large})$	$V_{\text{CE}} = -10 \text{ V}, I_{\text{C}} = -5 \text{ mA}$	0.50	0.99		—
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}} = -10 \text{ mA}, I_{\text{B}} = -0.3 \text{ mA}$			-0.25	V
Output voltage high-level	$V_{\text{OH}}$	$V_{\text{CC}} = -5 \text{ V}, V_{\text{B}} = -0.5 \text{ V}, R_{\text{L}} = 1 \text{ k}\Omega$	-4.9			V
Output voltage low-level	$V_{\text{OL}}$	$V_{\text{CC}} = -5 \text{ V}, V_{\text{B}} = -2.5 \text{ V}, R_{\text{L}} = 1 \text{ k}\Omega$			-0.2	V
Input resistance	$R_{\text{I}}$		-30%	4.7	+30%	$\text{k}\Omega$
Resistance ratio	$R_{\text{I}} / R_{\text{2}}$			0.47		—
Transition frequency	$f_{\text{T}}$	$V_{\text{CB}} = -10 \text{ V}, I_{\text{E}} = 1 \text{ mA}, f = 200 \text{ MHz}$		80		MHz

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

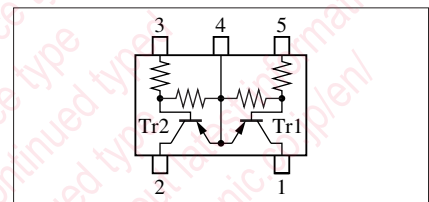
2. \*: Ratio between 2 elements

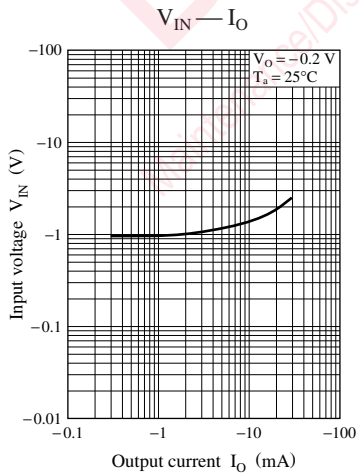
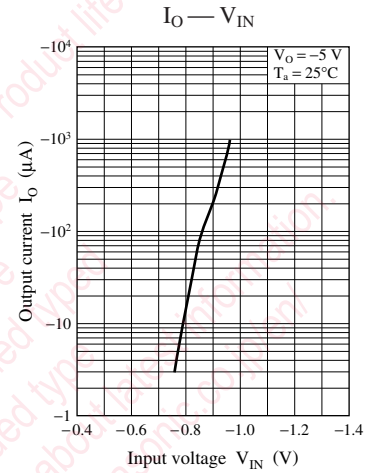
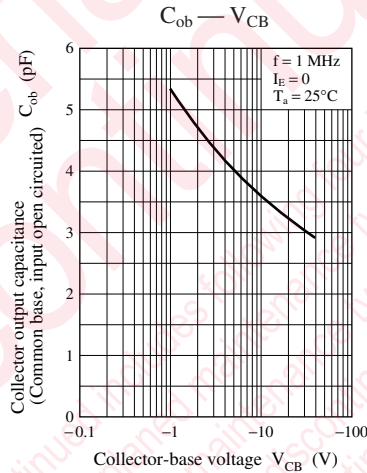
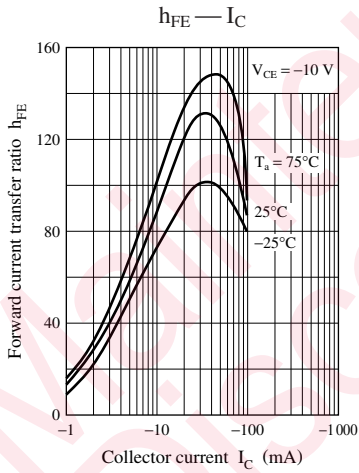
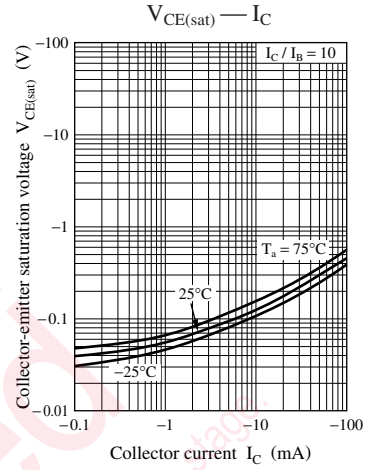
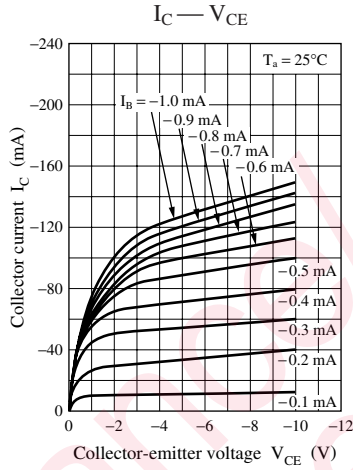
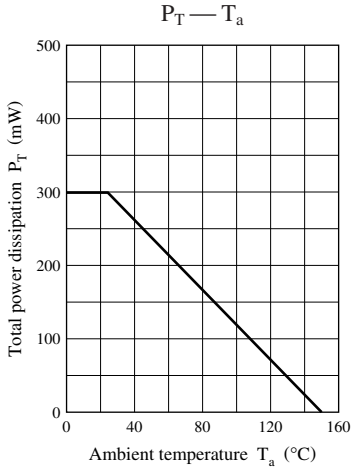
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: 70

Internal Connection





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