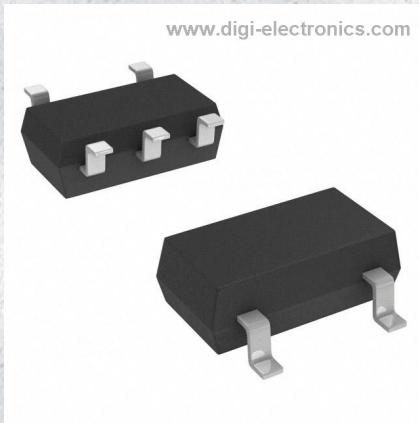


XN0111100L Datasheet



DiGi Electronics Part Number	XN0111100L-DG
Manufacturer	Panasonic Electronic Components
Manufacturer Product Number	XN0111100L
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



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Purchase and inquiry

Manufacturer Product Number:

XN0111100L

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):

10kOhms

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

35 @ 5mA, 10V

Current - Collector Cutoff (Max):

500nA

Power - Max:

300mW

Package / Case:

SC-74A, SOT-753

Base Product Number:

XN0111

Environmental & Export classification

Moisture Sensitivity Level (MSL):

1 (Unlimited)

HTSUS:

8541.21.0095

ECCN:

EAR99

XN01111 (XN1111)

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

- UNR2111 (UN2111) × 2

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

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

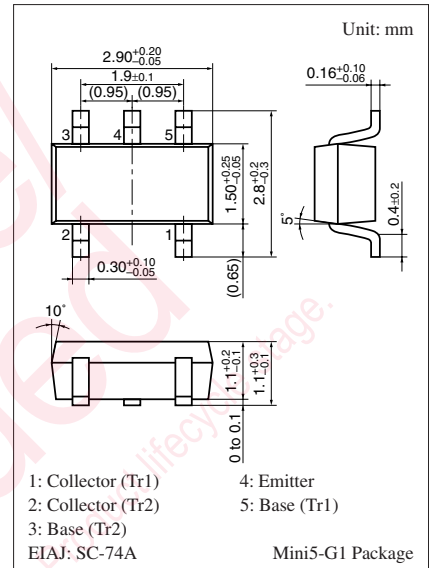
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_{\text{C}} = -10 \mu\text{A}$, $I_{\text{E}} = 0$	-50			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_{\text{C}} = -2 \text{mA}$, $I_{\text{B}} = 0$	-50			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{\text{CB}} = -50 \text{V}$, $I_{\text{E}} = 0$			-0.1	μA
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{\text{CE}} = -50 \text{V}$, $I_{\text{B}} = 0$			-0.5	μA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{\text{EB}} = -6 \text{V}$, $I_{\text{C}} = 0$			-0.5	mA
Forward current transfer ratio	h_{FE}	$V_{\text{CE}} = -10 \text{V}$, $I_{\text{C}} = -5 \text{mA}$	35			—
h_{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_{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_{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_{I}		-30%	10	+30%	$\text{k}\Omega$
Resistance ratio	$R_{\text{I}} / R_{\text{2}}$		0.8	1.0	1.2	—
Transition frequency	f_{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.

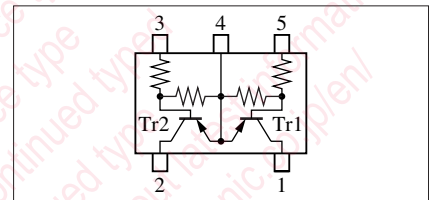
2. *: Ratio between 2 elements

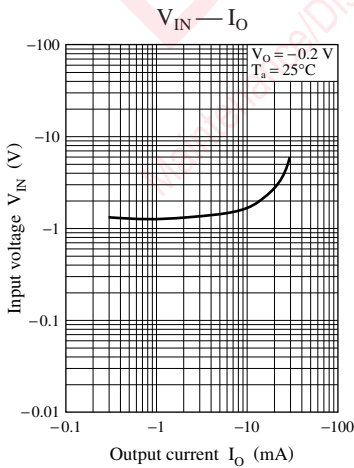
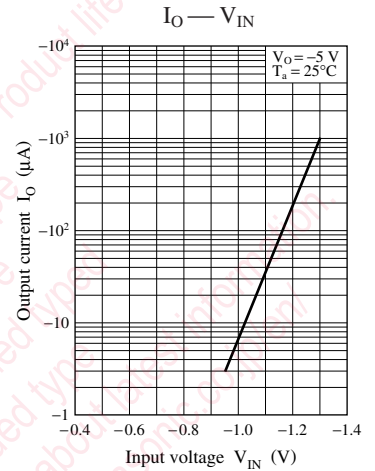
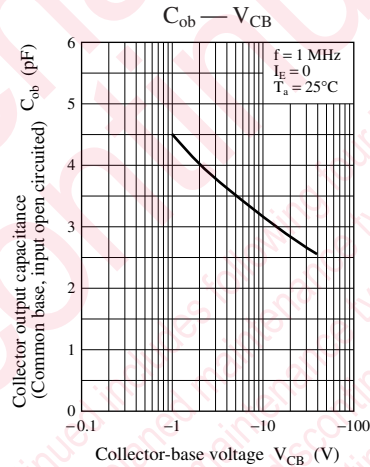
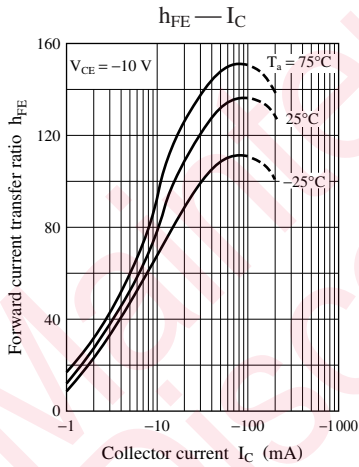
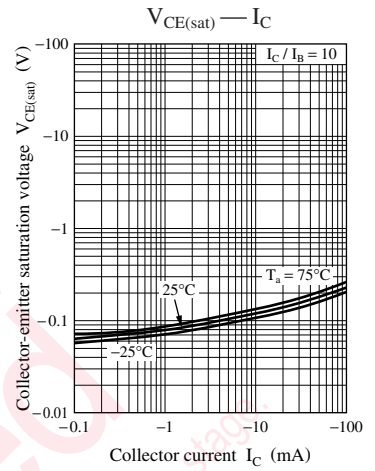
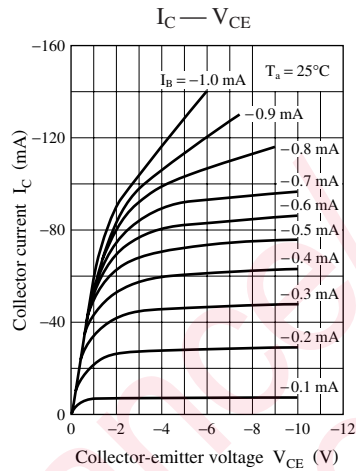
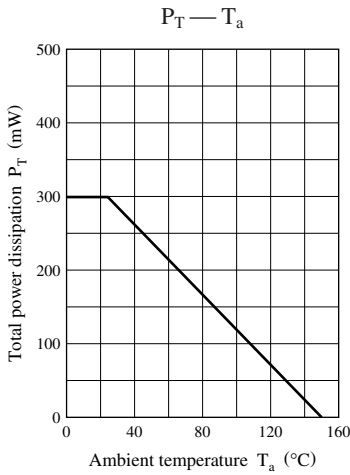
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: 9S

Internal Connection





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