

# XN0411400L Datasheet



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DiGi Electronics Part Number XN0411400L-DG

Manufacturer Panasonic Electronic Components

Manufacturer Product Number XN0411400L

Description TRANS PREBIAS DUAL PNP MINI6

Detailed Description Pre-Biased Bipolar Transistor (BJT) 2 PNP - Pre-Bias ed (Dual) 50V 100mA 80MHz 300mW Surface Moun

t MINI6-G1



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# **Purchase and inquiry**

Manufacturer Product Number:	Manufacturer:
XN0411400L	Panasonic Electronic Components
Series:	Product Status:
	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
2 PNP - Pre-Biased (Dual)	100mA
Voltage - Collector Emitter Breakdown (Max):	Resistor - Base (R1):
50V	10kOhms
Resistor - Emitter Base (R2):	DC Current Gain (hFE) (Min) @ Ic, Vce:
47kOhms	80 @ 5mA, 10V
Vce Saturation (Max) @ lb, lc:	Current - Collector Cutoff (Max):
250mV @ 300μA, 10mA	500nA
Frequency - Transition:	Power - Max:
80MHz	300mW
Mounting Type:	Package / Case:
Surface Mount	SOT-23-6
Supplier Device Package:	Base Product Number:
MINI6-G1	XN0411

# **Environmental & Export classification**

Moisture Sensitivity Level (MSL):	ECCN:
1 (Unlimited)	EAR99
HTSUS:	
8541.21.0095	

# **XN04114** (XN4114)

## Silicon PNP epitaxial planar type

### For switching/digital circuits

#### ■ Features

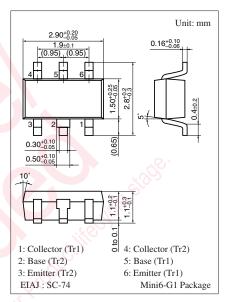
- Two elements incorporated into one package (Transistors with built-in resistor)
- Reduction of the mounting area and assembly cost by one half

#### ■ Basic Part Number

• UNR2114 (UN2114) × 2

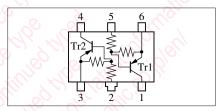
### ■ Absolute Maximum Ratings $T_a = 25$ °C

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



Marking Symbol: BK

#### Internal Connection



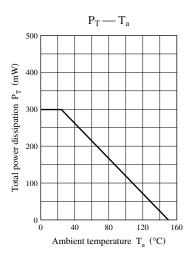
## ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

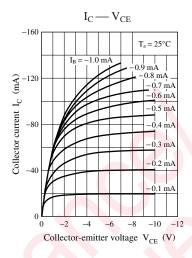
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	$I_C = -10 \mu\text{A}, I_E = 0$	-50			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_C = -2 \text{ mA}, I_B = 0$	-50			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -50 \text{ V}, I_{E} = 0$			- 0.1	μΑ
Collector-emitter cutoff current (Base open)	$I_{CEO}$	$V_{CE} = -50 \text{ V}, I_B = 0$			- 0.5	μΑ
Emitter-base cutoff current (Collector open)	$I_{EBO}$	$V_{EB} = -6 \text{ V}, I_{C} = 0$			- 0.2	mA
Forward current transfer ratio	h <sub>FE</sub>	$V_{CE} = -10 \text{ V}, I_{C} = -5 \text{ mA}$	80			_
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = -10 \text{ mA}, I_B = -0.3 \text{ mA}$			- 0.25	V
Output voltage high-level	V <sub>OH</sub>	$V_{CC} = -5 \text{ V}, V_B = -0.5 \text{ V}, R_L = 1 \text{ k}\Omega$	-4.9			V
Output voltage low-level	V <sub>OL</sub>	$V_{CC} = -5 \text{ V}, V_B = -2.5 \text{ V}, R_L = 1 \text{ k}\Omega$			- 0.2	V
Input resistance	R <sub>1</sub>		-30%	10	+30%	kΩ
Resistance ratio	R <sub>1</sub> / R <sub>2</sub>		0.17	0.21	0.25	_
Transition frequency	$f_T$	$V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}, f = 200 \text{ MHz}$		80		MHz

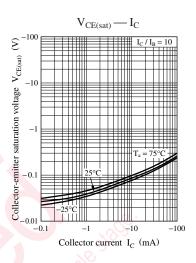
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

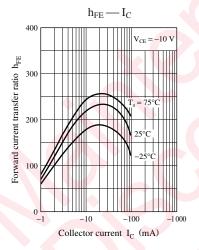
Note) The part number in the parenthesis shows conventional part number.

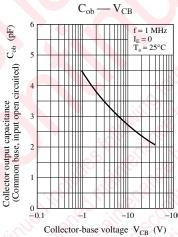
## **Panasonic**

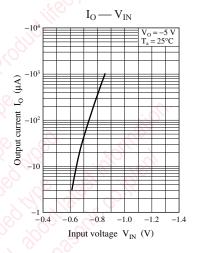


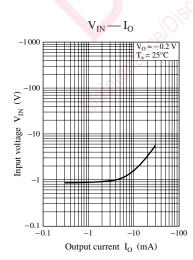












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