## XN1000~, XN2000~

# 2-Element Compound Transistor (MINI Type Package (5-pin))

#### ■ Features

- •Automatic soldering possible in both flow and re-flow directions
- •Reduction in mounting area of 50% per device
- •Packaging specifications (8mm taping, horizontal magazine) available, can be handled by automatic mounting machines
- •Terminal width changed to 0.3mm from 0.4mm to prevent solder bridges

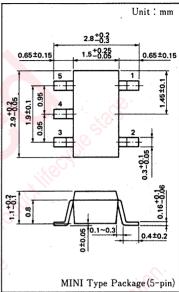
#### ■ Standard Package criteria

Allowable Soldering Part Temperature	Stroage Temperature	Power Dissipation			
150°C	-55~+150°C	300mW*			

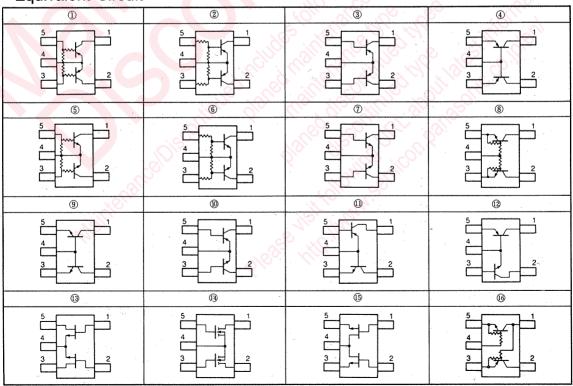
Note: A certain types are different from standard types, please check specifications for confirmation.

\*: Ta=25℃

## Package Dimensions



### **■** Equivalent Circuit



■ Main Characteristics List (Ta=25°C) (cont.)

Main Characteristics List (Ia=25°C) (cont.)												
			ent	o u	Absolute Maximum Ratings		. 5. (	f <sub>T</sub>	V <sub>CE</sub> (sat)		Name of Device Used	
	Type No.	Details	Equivalent Circuit	Mode No. Indication Number	V <sub>CEO</sub>	lc	h <sub>FE</sub>	$I_{C}$	typ.	typ.	Ic	(MINI 3 Devices)
			짚길	MAN	(V)	(mA)		(mA)	(MHz)	(V)	(mA)	(//////////////////////////////////////
•	XN1101	1.14	1	AH	-40	-30	80~	<b>-5</b> ,	80	-0.1	-10	UN5101 $R_B=10k\Omega$ , $R_{BE}=500k\Omega$
-	XN1111		2	98	<b>-50</b>	-100	35~	-5	80	-0.07	-10	UN2111 $R_B=10k\Omega$ , $R_{BE}=10k\Omega$
	XN1112		2	7K	-50	-100	60~	-5	80	-0.07	-10	UN2112 $R_B = 22k\Omega$ , $R_{BE} = 22k\Omega$
-	XN1113		2	7L	-50	-100	80~	-5	80	-0.07	-10	UN2113 $R_B=47k\Omega$ , $R_{BE}=47k\Omega$
	XN1114		2	7Q	-50	-100	80~	-5	80	-0.07	-10	UN2114 $R_B = 10k\Omega$ , $R_{BE} = 47k\Omega$
-	XN1115	-	2	7M	-50	-100	160~460	5	80	-0.07	-10	UN2115 $R_B = 10 k \Omega$ , $R_{BE} = \infty$
	XN1116	PNP ×	2	7N	-50	-100	160~460	-5	80	-0.07	-10	UN2116 $R_B=4.7k\Omega$ , $R_{BE}=\infty$
-	XN1119	2 PNPs	2	7P	-50	-100	30~	-5	80	-0.07	-10	UN2119 $R_B = 1k\Omega$ , $R_{BE} = 10k\Omega$
•	XN1110		2	AD	-50	-100	60~	-5	80	-0.07	-10	UN2110 $R_B=47k\Omega$ , $R_{BE}=\infty$
•	XN111F	-	2	70	-50	-100	30~	-5	- 80	-0.07	-10	UN211F $R_B=4.7k\Omega$ , $R_{BE}=10k\Omega$
•	XN111H		2	9X	-50	-100	30~	-5	80	-0.07	-10	UN211H $R_B=2.2k\Omega$ , $R_{BE}=10k\Omega$
	XN1401		3	5V	-50	-100	160~460	-2	80	-0.3	-100	2SB709A
•	XN2401		4	7R	-50	-100	160~460	-2	80	-0.3	-100	2SB709A
- 2	XN1201	2.7	(5)	AI	40	30	80~	5	150	0.1	10	UN5201 $R_B = 10 k \Omega$ , $R_{BE} = 500 k \Omega$
	XN1210	-	6	AC	50	100	160~	5	150	0.07	10	UN2210 $R_B=47k\Omega$ , $R_{BE}=\infty$
•	XN1211		6	9T	50	100	35~	5_	150	0.07	10	UN2211 $R_B = 10 k \Omega$ , $R_{BE} = 10 k \Omega$
	XN1212		6	9K	50	100	60~	5	150	0.07	10	UN2212 $R_B = 22k\Omega$ , $R_{BE} = 22k\Omega$
	XN1213		6	9L	50	100	80~	5	150	0.07		UN2213 $R_B=47k\Omega$ , $R_{BE}=47k\Omega$
	XN1214		6	9Н	50	100	80~	5	150	0.07	10	UN2214 $R_B = 10k\Omega$ , $R_{BE} = 47k\Omega$
	XN1215		6	9М	50	100	160~460	5	150	0.07	10	UN2215 $R_B = 10 k \Omega$ , $R_{BE} = \infty$
	XN1216		6	9N	50	100	160~460	5.	150	0.07	10	UN2216 $R_B=4.7k\Omega$ , $R_{BE}=\infty$
	XN1217		6	9P	50	100	160~460	5	150	0.07	10	UN2217 $R_B = 22k\Omega$ , $R_{BE} = \infty$
	XN1501	NPN ×	7	5R	50	100	160~460	2	150	0.3	100	2SD601A
	XN1504	2 PNPs	7	5S	20	300	500~2500	4	80	0.18	300	2SD1938
	XN1507		7	40	150	50	90~450	10	150	max.1.0	30	2SD814
	XN1531		7	9F	10	50	75~400	5	1900	max.0.5	20	2SC3130
	XN2210		8	9Q	5	100	160~460	5	150	0.07	10	UN2210 $R_B=47k\Omega$ , $R_{BE}=\infty$
	XN2211	1	8	90	50	100	35~	5	150	0.07	10	UN2211 $R_B = 10k\Omega$ , $R_{BE} = 10k\Omega$
	XN2215		8	9R	5	100	160~460	5	150	0.07	. 10	UN2215 $R_B = 10k\Omega$ , $R_{BE} = \infty$
	XN2501	1811	9	5W	50	100	160~460	2	150	0.3	100	2SD601A
	XN2531	A.	9	91	10	50	75~400	5	1900	max.0.5	20	2SC3130
	XN1601		100	7S	-50/50	-100/100	160~460	-2/2	80/150	-0.3/0.3	-10/10	2SB709A+2SD601A
	XN1A312	PNP+NPN	16	4P	-50/50	-100/100	60~	-5/5	80/150	-0.07/0.07	10/10	$\begin{array}{c} \text{UN2212:} \; Tr_1 + \text{UN2112:} \; Tr_2 \\ Tr_1 \;  R_B = 22k\Omega \; Tr_2 \;  R_B = 22k\Omega \\ R_{BE} = 22k\Omega \; Tr_2 \;  R_{BE} = 22k\Omega \end{array}$
	XN1B301		(1)	4Q	-50/50	-100/100	160~460	-2/2	80/150	-0.3/0.3	-10/10	2SB709A + 2SD601A
	XN1C301	1.	12	4R	-50/50	-100/100	160~460	-2/2	80/150	-0.3/0.3	-10/10	2SB709A+2SD601A
	XN1871	N-ch	(13)	5T	V <sub>DS</sub> 30	I <sub>D</sub> 20 -	gm:4~(mS)	1 <sub>D</sub> :0.5		_	_	2SK198
	XN1872	×	(14)	5U	V <sub>DS</sub> 20	I <sub>D</sub> 100	gm:20~(mS)	1 <sub>D</sub> :20	-	-	_	2SK621
	XN1D873	2 PNPs	(15)	0C	V <sub>GDS</sub> -65	I <sub>D</sub> 20 -	gm:1.8~(mS)	1 <sub>D</sub> :1.0	_	_		2SK1103

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