

## Generation description

MXPP8-30-1103 is a push-pull transformer which matching push-pull controller MX6501T from Maxin Micro-electronics. Suitable for 12V to 12V、5V to 5V and 3.3V to 3.3V applications. It can be widely used in photovoltaic、vehicles、BMS、communication and other application fields.

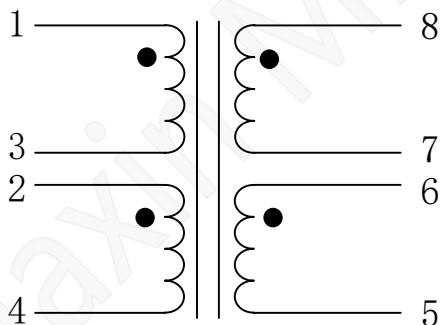
## General information

Operating temperature	-40~125°C	Temperature rise included
Storage conditions	-40~80°C	Original package
Storage conditions	-40~80°C	Single part
Moisture sensitive level	MSL3	

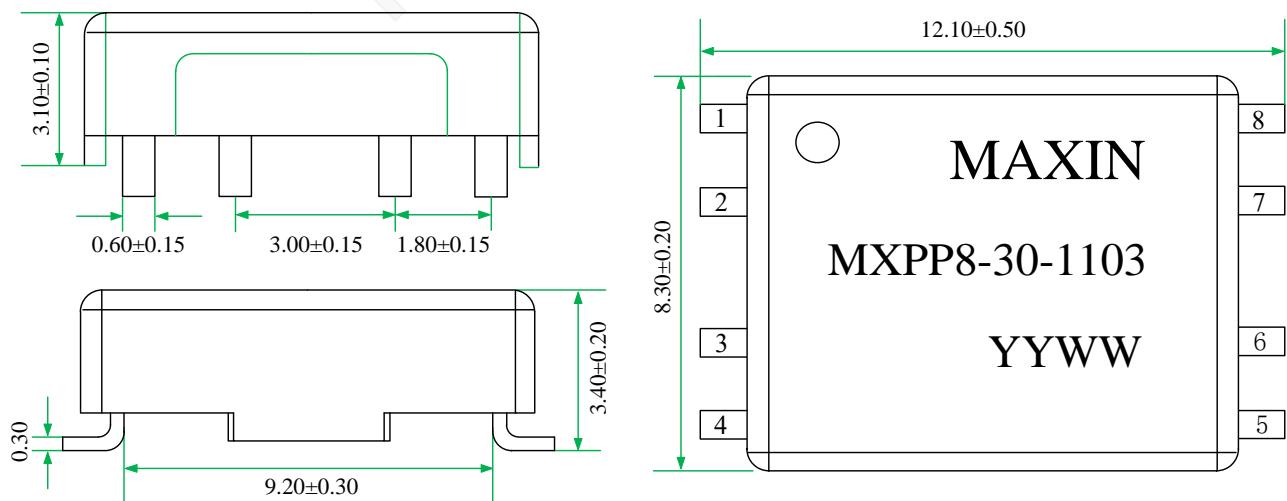
## Electronical properties

Properties	Test conditions	Value	unit	
Inductance	1-4 10kHz 0.1V (2-3 short)	2000 Min	μH	
Leakage inductance	1-4 10kHz 0.1V (others short)	2 Max	μH	
Turns ratio	1-4 : 5-8 (2-3 6-7short)	1:1.03 Typ		
Coupling capacitance	1-8 (100kHz 0.01V)	21 Typ	pF	
Voltage Time	Bipolar waveform	30 Min	Vμs	
DC resistance	1-3	400 Max	mΩ	
	7-8	450 Max	mΩ	
Insulation voltage	1-2-3-4 : 5-6-7-8 DC/1s	3000	V	

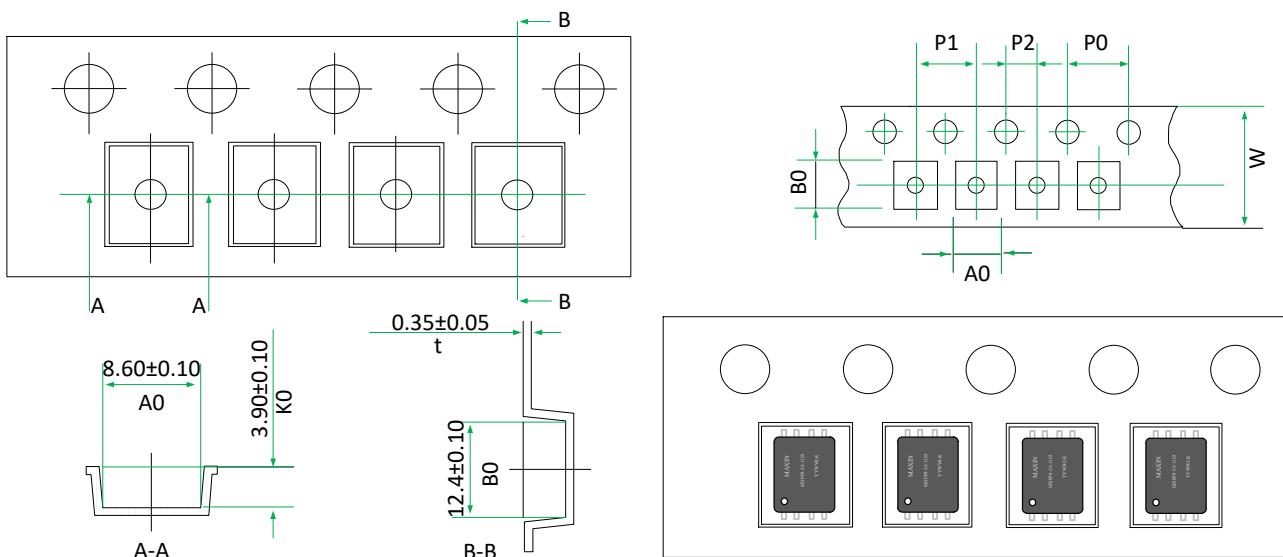
## Schematic



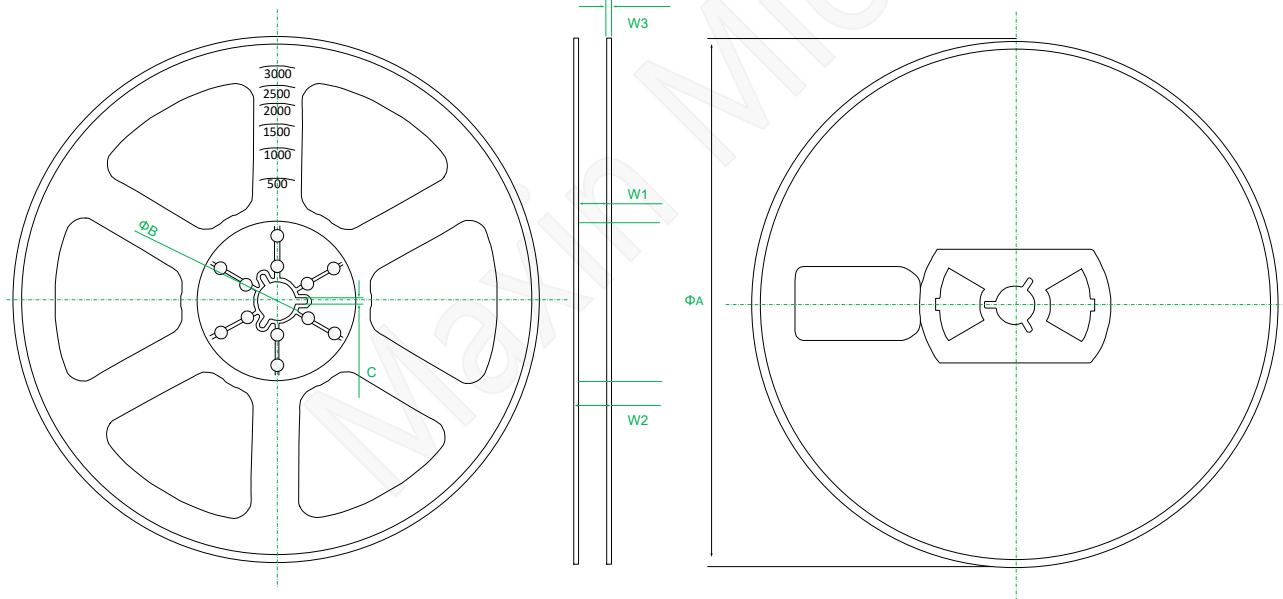
## Package Dimensions (unit in mm)



## Tape and Reel Information (unit in mm)

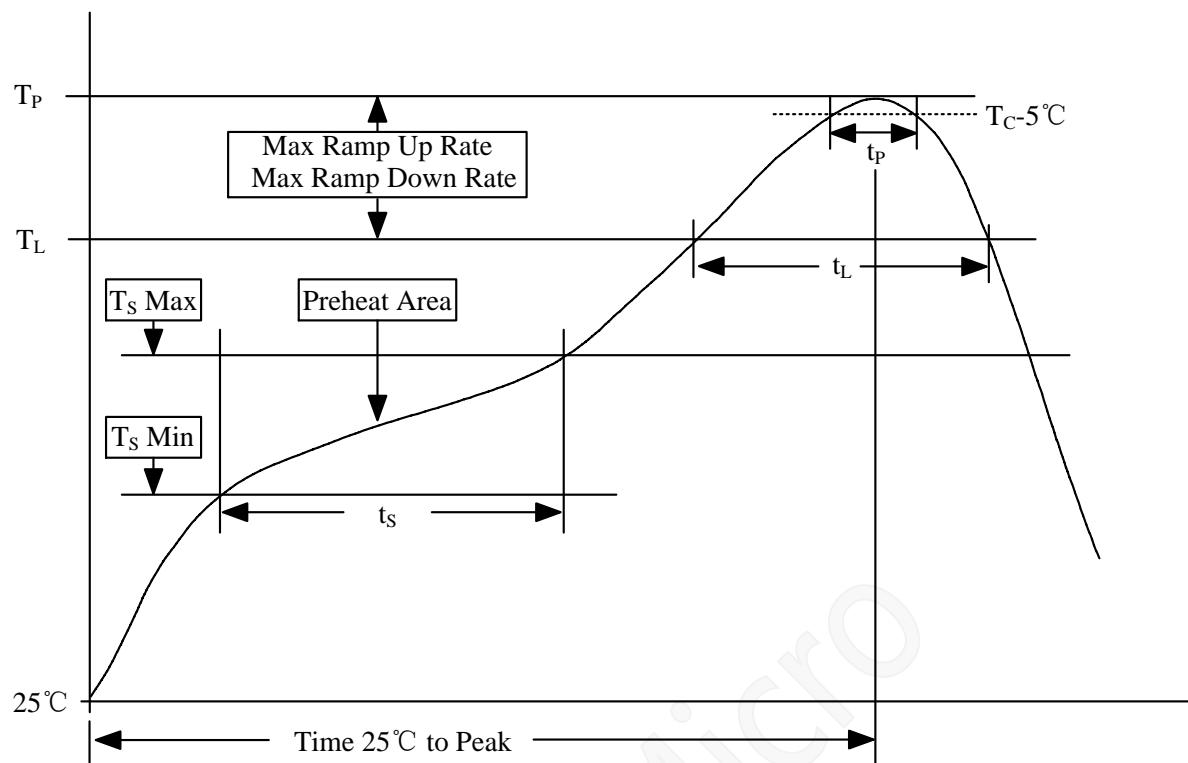


Symbol	W	P0	P1	P2	A0	B0	K0	t
MAX	24.30	4.10	16.10	2.10	8.80	13.50	4.00	0.40
MIN	23.70	3.90	15.90	1.90	8.60	13.30	3.80	0.30



Symbol	ΦA	ΦB	C	W1	W2	W3
MAX	330	13.5	2.50	24.3	28.3	2.3
MIN	320	13.0	1.90	23.7	27.7	1.7

## Classification Reflow Profile for SMT components



## Classification Reflow Soldering Profile

Profile feature		Value
Preheat temperature Min	T <sub>s</sub> min	150°C
Preheat temperature Max	T <sub>s</sub> max	200°C
Preheat time t <sub>s</sub> from T <sub>s</sub> min to T <sub>s</sub> max	t <sub>s</sub>	60-120 seconds
Ramp up rate (T <sub>L</sub> to T <sub>P</sub> )		3°C / second max
Liquidous temperature	T <sub>L</sub>	217°C
Time t <sub>L</sub> maintained above T <sub>L</sub>	t <sub>L</sub>	60-150 seconds
Peak package body temperature	T <sub>P</sub>	T <sub>P</sub> ≤ T <sub>C</sub> see table below
Time within 5°C of actual peak temperature	t <sub>P</sub>	20-30 seconds
Ramp down rate (T <sub>P</sub> to T <sub>L</sub> )		6°C / second max
Time 25°C to peak temperature		8minutes max

## Package Classification Reflow Temperature (T<sub>C</sub>)

Properties	Volume mm <sup>3</sup> <350	Volume mm <sup>3</sup> 350-2000	Volume mm <sup>3</sup> > 2000
PB-Free assembly   Package thickness <1.6 mm	260°C	260°C	260°C
PB-Free assembly   Package thickness 1.6-2.5 mm	260°C	250°C	245°C
PB-Free assembly   Package thickness >2.5 mm	250°C	240°C	245°C

## Restrictions on Product Use

- ◆ MAXIN micro is continually working to improve the quality and reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing MAXIN products, to comply with the standards of safety in making a safe design for the entire system, and to avoid situations in which a malfunction or failure of such MAXIN products could cause loss of human life, bodily injury or damage to property.
- ◆ In developing your designs, please ensure that MAXIN products are used within specified operating ranges as set forth in the most recent MAXIN products specifications.
- ◆ The information contained herein is subject to change without notice.

Version update record:

V11 The released version