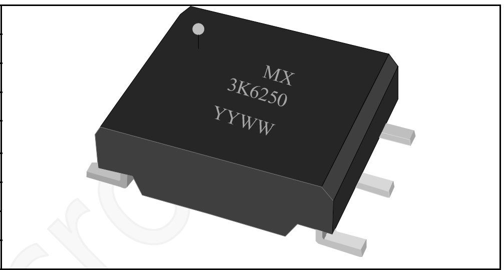
Generation description

MXPP6-3K6250 is a push-pull transformer which matching push-pull controller MX6501T from Maxin Micro-electronics. Suitable for 5V to 12V applications without LDO. It can be widely used in tools、 photovoltaic、vehicles、BMS 、communication and other application fields.

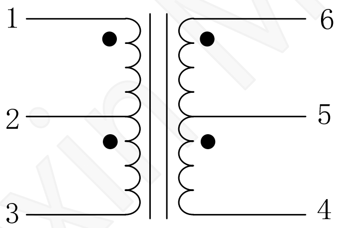
General information

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

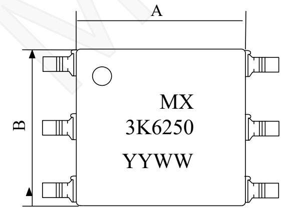
Electronical properties

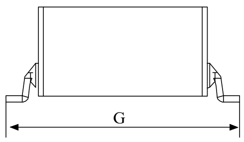
Properties	Test conditions	Value	unit	
Inductance	1-3 10kHz 0.1V	475 Min	μH	
Leakage inductance	1-3 10kHz 0.1V (others short)	1 Max	μH	
Turns ratio	1-3:6-4	1:2.00 Typ		
Coupling capacitance	1-6 （100kHz 0.01V）	17.5 Typ	pF	
Voltage Time	Bipolar waveform	11 Min	Vμs	
DC resistance	1-3	350 Max	mΩ	
	6-4	700 Max	mΩ	
Insulation voltage	1-2-3: 4-5-6 DC/1s	3	kV	

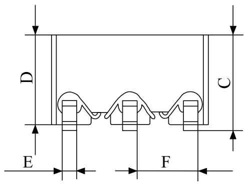
Schematic

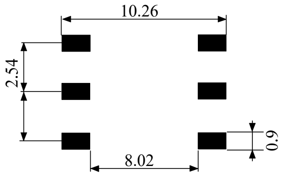


Package Dimensions (unit in mm)



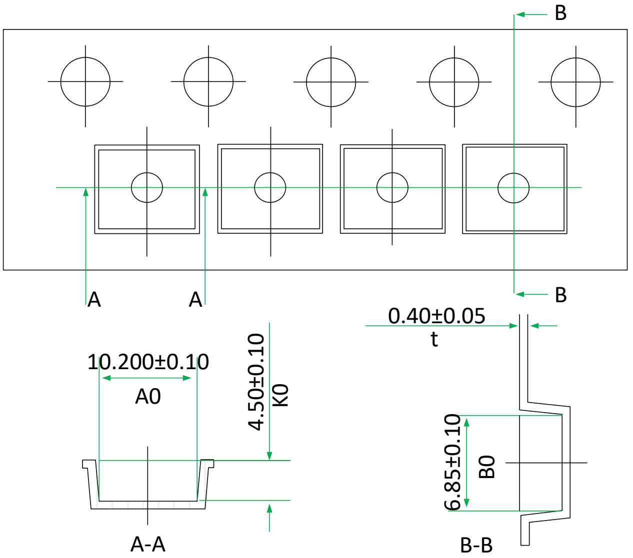


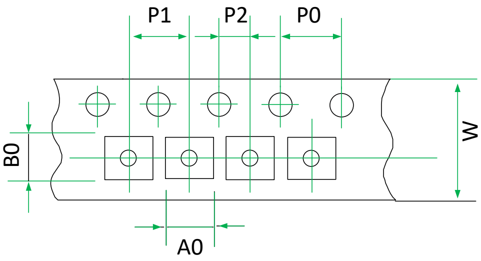


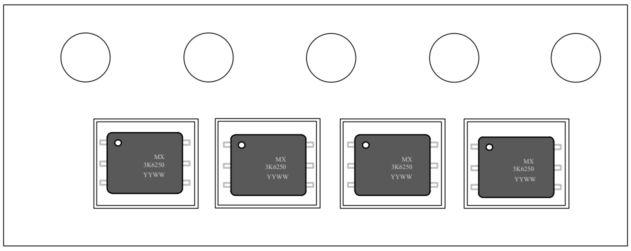


A	B	C	D	E	F	G
7.10±0.2	6.55±0.2	4.2Max	3.75±0.2	0.60	2.54	10.2Max

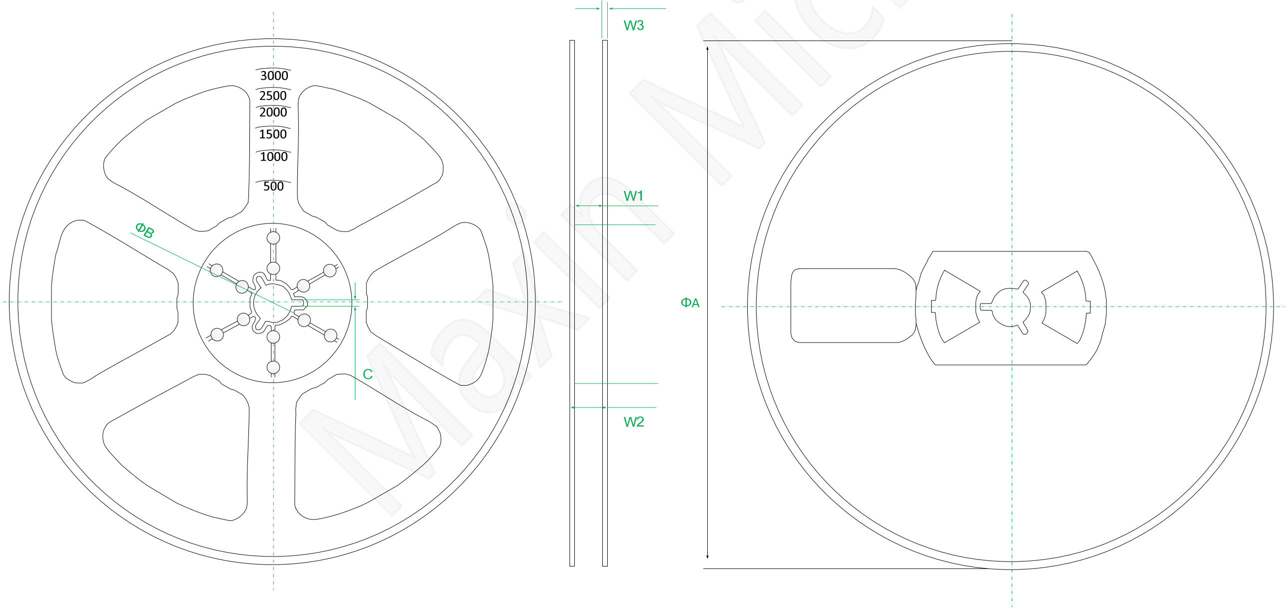
Tape and Reel Information (unit in mm)





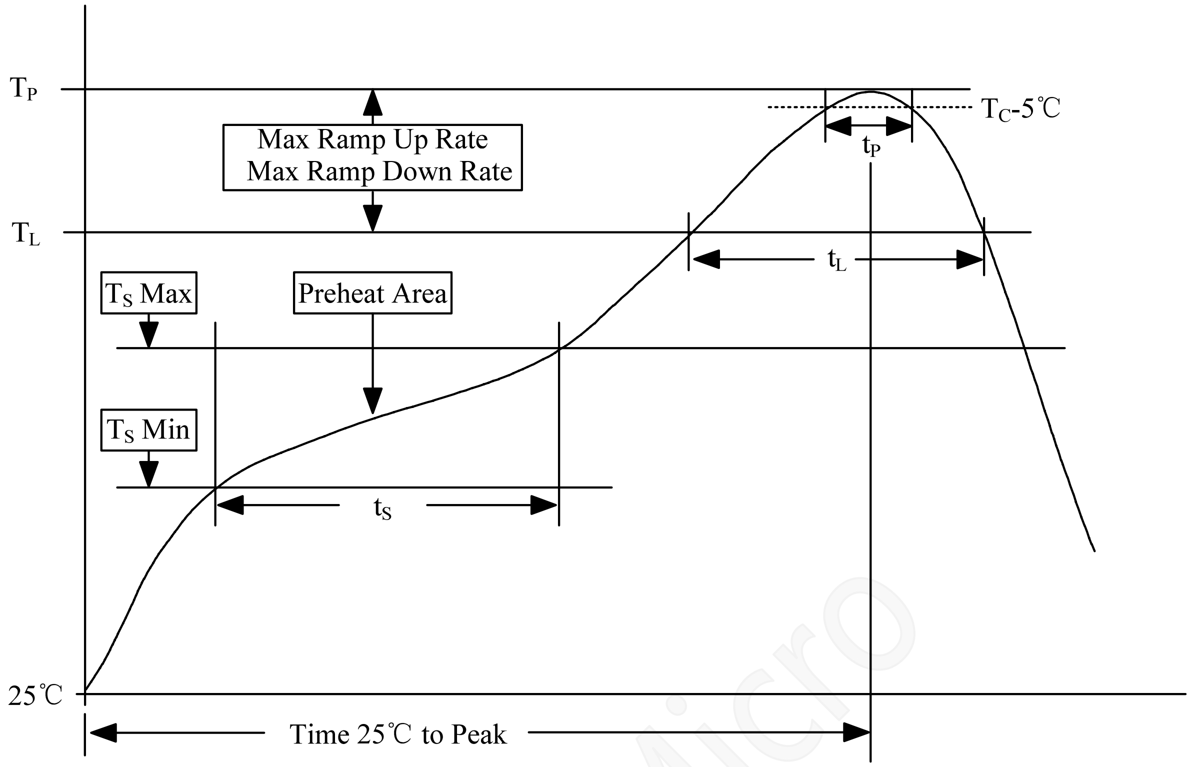


Symbol	W	P0	P1	P2	A0	B0	K0	t
MAX	16.30	4.10	16.10	2.15	10.30	6.95	4.60	0.45
MIN	15.70	3.90	15.90	1.85	10.10	6.75	4.40	0.35



Symbol	ΦA	ΦB	C	W1	W2	W3
MAX	330	13.5	2.50	17.1	20.8	2.3
MIN	320	13.0	1.90	16.5	20.2	1.7

Classification Reflow Profile for SMT components



Classification Reflow Soldering Profile

Profile feature		Value
Preheat temperature Min	T_S min	150°C
Preheat temperature Max	T_S max	200°C
Preheat time t_S from T_S min to T_S max	t_S	60-120 seconds
Ramp up rate (T_L to T_P)		3°C / second max
Liquidous temperature	T_L	217°C
Time t_L maintained above T_L	t_L	60-150 seconds
Peak package body temperature	T_P	$T_P \leqslant T_C$ see table below
Time within 5°C of actual peak temperature	t_P	20-30 seconds
Ramp down rate (T_P to T_L)		6°C / second max
Time 25°C to peak temperature		8minutes max

Package Classification Reflow Temperature (T_C)

Properties	Volume mm^3 <350	Volume mm^3 350-2000	Volume mm^3 > 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:

V10 The released version

V11 Tape and Reel information