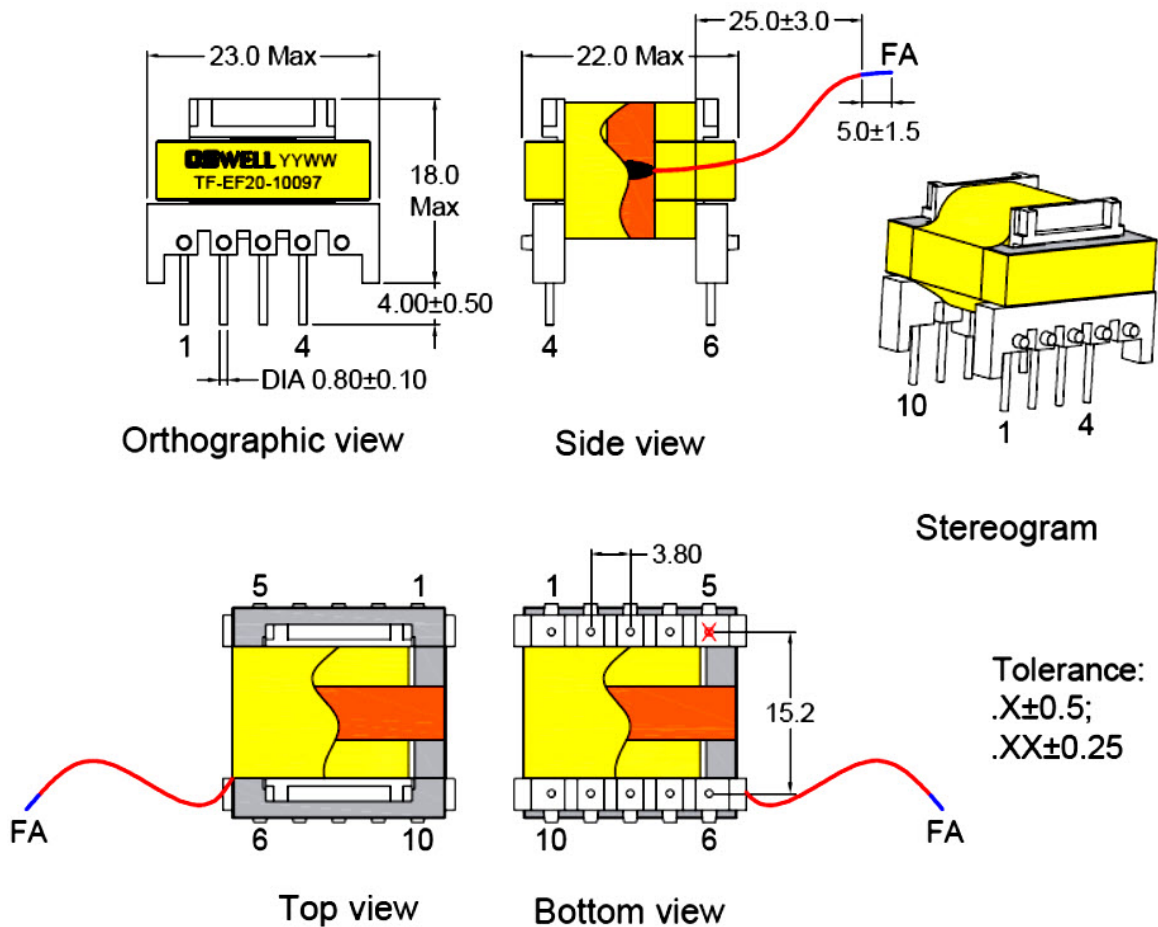


Datasheet for Transformer

Model: TF-EF20-10097

V1.0 2025-01-07

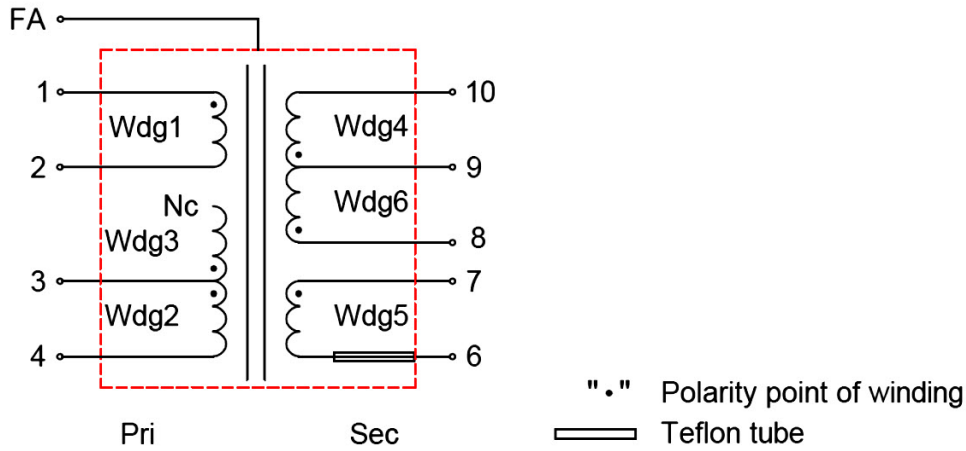
1. Outline Dimensions



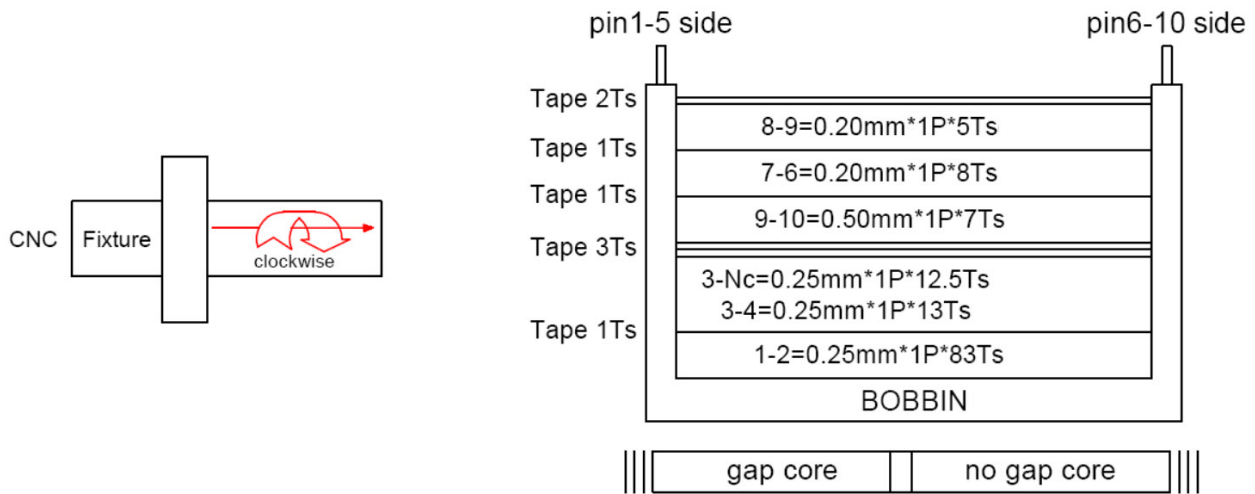
Remark:

1. The core air gap is placed on the pin1-5 side and fixed with 3Ts tape.
2. After assembling the core, wrap 1.1TS self-adhesive copper foil (T0.05 * 7.5mm) along the winding direction, weld the head and end to the Pin1-10 side, weld the FA flying wire to the Pin5-6 side with 0.3mm TIW wire, and wrap the outer layer with 13mm wide tape 3Ts.
3. Remove pin 5. (no need to remove)
4. The product needs to be vacuum sealed.

2. Layout Diagram



3. Cross Section Diagram



V 4. Winding step (Please change the wire diameter of winding 4 (terminals 9-10) to 0.6mm.)

No.	Terminal	Wire Gauge	Turns	Tape	Remark
Wdg 1	1 - 2	0.25mm*1P 1UEW-F	83	1	Clockwise wind close
Wdg 2	3 - 4	0.25mm*1P 1UEW-F	13	3	Clockwise wind spaced Two strands winding together
Wdg 3	3 - NC	0.25mm*1P 1UEW-F	12.5		
Wdg 4	9 - 10	0.60mm*1P TIW-B	7	1	Clockwise wind spaced
Wdg 5	7 - 6	0.20mm*1P TIW-B	8	1	Clockwise wind spaced
Wdg 6	8 - 9	0.20mm*1P TIW-B	5	2	Clockwise wind spaced

5. Electrical Characteristics

NO.	Item	Pin No.	Characteristics	Measuring Conditions
1	Inductance	L1-2	1.905H±5%	@1kHz 0.25V
2	Leakage Inductance	Lkg1-2	59.99μH Max	@100kHz 0.25V
3	D.C. Resistance	1-2	1.140Ω Max	25°C
		3-4	0.200Ω Max	
		7-6	0.240Ω Max	
		8-9	0.170Ω Max	
		9-10	0.034Ω Max	
4	HI-POT Test	Pri-Sec : 3000VAC/60Hz/3mA /1S		
		Coil-Core : 1000VAC/60Hz/3mA /1S		
5	Turns ratio	Wdg 1: Wdg 2:Wdg 4:Wdg5:Wdg6 = 83:13:7:8:5±2%		
6	Bobbin	EF-2002 , T375HF		
7	Core	EF20/6 , PC44/TP4A		
8	Copper Wire	1UEW / 155°C / MW79-C		
9	Triple insulated wire	0.20mm,0.30mm,0.50mm, TIW-B/130(B)		
10	Tape	0.025mm,JY25- A(b) /130°C(Faint yellow)		
11	Tube	CB-TT-L / CJ-TT-L (150V/200°C)		
12	Copper foil	T0.05*7.5mm, self-adhesive		
13	Varnish	T-4260(a), MW 80-C		
Working Temp.: -40°C~ +85°C				
ROHS Compliance				

Notes of use:

- The best assembly quality guarantee period of product: 12 months (From manufacture date).
Storage condition: seal in packaging, temperature 40, RH 70%.
- If taking out for use, the remaining products should be sealed in plastic bag and preserved in accordance with the above conditions, to avoid the effect of electrode oxidation on soldering status.
- Do not keep products in unsuitable storage conditions, such as areas susceptible to high temperature, high humidity, dust or corrosion, and etc.
- Do not touch electrodes with bare hands directly, as oil secretions may inhibit soldering.
- This product itself does not have any protective function in abnormal conditions, such as overload, high temperature, high voltage and etc.
- Hi-Pot test with higher voltage than spec value might damage insulation material and shorten its life.
- Product should be used promptly, preferably within six months of receipt.