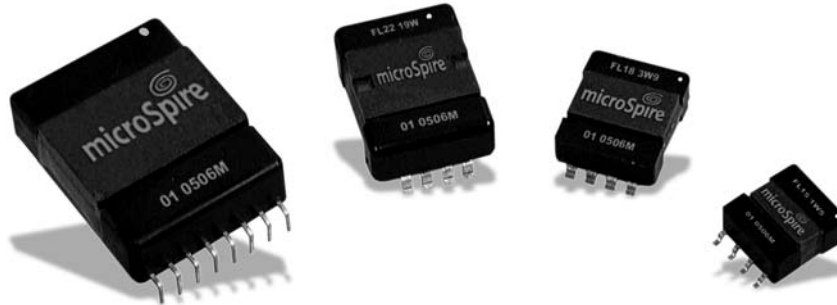


# Flyback Transformers for DC/DC Embedded Applications FLYT Series



Package	Indicative Max Output Power at 100KHz (W)	Max Dimensions (LxWxH in mm)	Number of Pins	Weight (grams)	Permitted Losses* for 25°C heating above 100°C (W)
FLYT15	5	22 x 16 x 8	2 x 4 SMD	5	0.6
FLYT15.1***	5	22 x 16 x 8	2 x 6 SMD	5	0.6
FLYT18	15	26 x 20 x 8,9	2 x 4 SMD	10	0.8
FLYT18.1***	15	36 x 20 x 8,9	2 x 9 SMD	12	0.8
FLYT22	30	37 x 24 x 11,9	2 x 4 SMD	26	1.1
FLYT22.1***	30	39 x 24 x 11,9	2 x 8 SMD	26	1.1
FLYT32***	65	49 x 34 x 13,7	2 x 8 PTH**	56	1.7

\* Values without heatsink ; these values can be increased with appropriate cooling device

\*\* Through-hole terminations only

\*\*\* See Micromag N°1 for more information

- Microspire's «SESI Technology» planar solution for DC/DC flyback converters
- Seven standard packages in a qualified technology for extreme working conditions
- Compliant with MIL-STD-202, ECSS-Q-70-02 (aerospace) and DO-160 (avionics) standards
- Already evaluated by the CNES for space applications (ESCC Capability Approval in process)
- Low profile and light, highly efficient and reliable
- Extended operating temperature range from -55°C to +125°C
- SMD versions suited for IR and vapor reflow soldering
- Packaging in Tape&Reel upon request for SMD versions

Shielded versions with thin six-face tinned copper box upon request (3 times less EMI radiation)





# Flyback Transformers for DC/DC converters - FLYT 18 Series



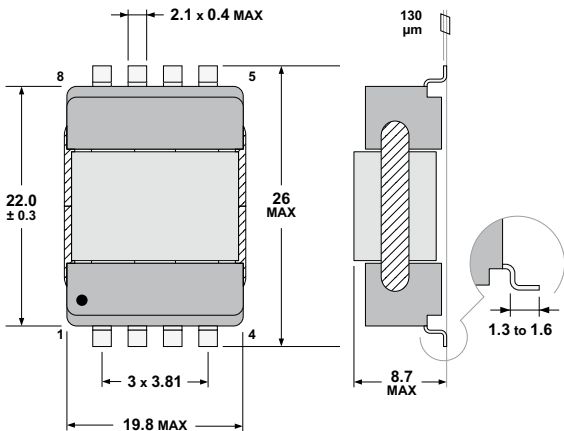
- Based on Microspire's « SESI18 Planar Technology »
- Low-profile SMD package (2x4 pins)
- Applied standards: MIL-STD-202, ECSS-Q-70-02, DO-160D
- Up to 15W at 100kHz in standard heating conditions
- Dielectric strength up to 1500V (50Hz-1min)
- Materials meet UL94-V0 rating
- Thermal index according to IEC85: H (180°C)
- Operating/storage temperature range: -55°C to +125°C
- Approx weight: 10grams

## Electrical Data

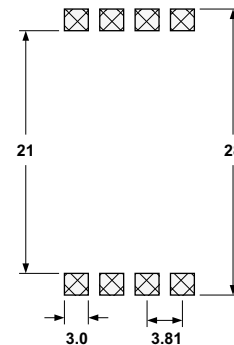
ID Code	DC Input Voltage Range (Vdc)	Output Power (W)	Designed Outputs	Working Frequency	Primary Inductance	Insulation > 100MΩ
FLYT18 3W9 01	23 - 37V (2° - 1)	3.85	3,55V / 1A (7/8° - 5/6) BIAS (3° - 4)	100kHz	152.5μH	500Vdc
FLYT18 4W6 01	23 - 37V (2° - 1)	4.56	-15,25V / 300mA (8° - 7) 15,25V / 50mA (6° - 5) BIAS (3° - 4)	100kHz	126μH	500Vdc
FLYT18 5W3 01	23 - 37V (2° - 1)	5.25	5,25V / 1A (7/8° - 5/6) BIAS (3° - 4)	100kHz	113.7μH	500Vdc
FLYT18 9W5 01	23 - 37V (2° - 1)	9.45	5,25V / 1,8A (7/8° - 5/6) BIAS (3° - 4)	100kHz	61.7μH	1500Vdc

Each Flyback Transformer shall be the result of a common definition after technical agreement between both engineering teams

## Typical Dimensions (mm, top view)

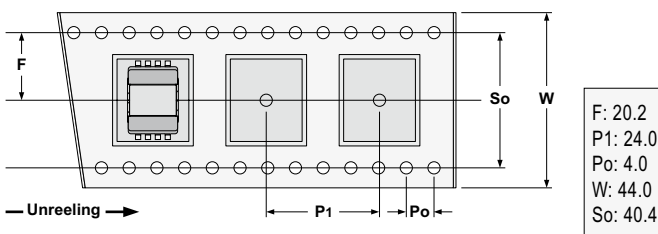


## PCB Layout (suggested)

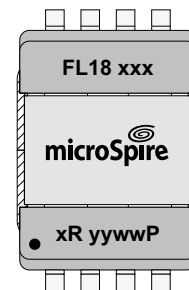


## Packaging

Tape and Reel:  
300 pieces per reel of diameter 330 mm



## Marking



yyww :  
Date code

High Grade Technologies  
Power Magnetics  
Flyback Transformers



# Flyback Transformers for DC/DC converters - FLYT 22 Series



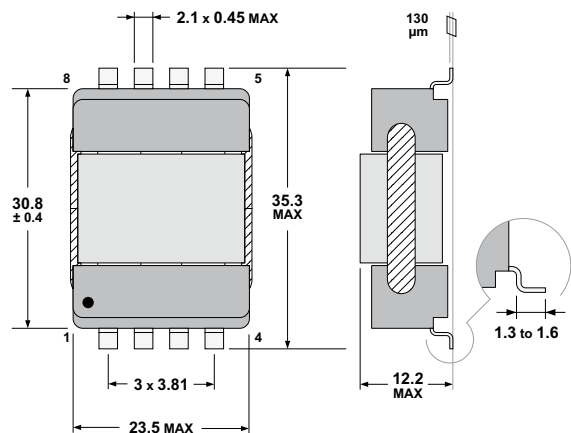
- Based on Microspire's « SESI22 Planar Technology »
- Low-profile SMD package (2x4 pins)
- Applied standards : MIL-STD-202, ECSS-Q-70-02, DO-160D
- Up to 30W at 100kHz in standard heating conditions
- Dielectric strength up to 1500V (50Hz-1min)
- Materials meet UL94-V0 rating
- Thermal index according to IEC85: H (180°C)
- Operating/storage temperature range: -55°C to +125°C
- Approx weight: 26grams

## Electrical Data

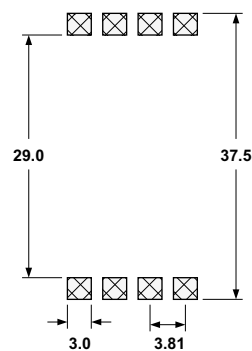
ID Code	DC Input Voltage Range (Vdc)	Output Power (W)	Designed Outputs	Working Frequency	Primary Inductance	Insulation > 100MΩ
FLYT22 19W 01	12 - 20.5V (2° - 1)	18.5	5V / 450mA (8° - 7) 22V / 600mA (6° - 5)	90 - 130kHz	13μH	500Vdc
FLYT22 20W 01	12 - 20.5V (3° - 4)	19.5	5V / 340mA (6° - 5) 12V / 1.2mA (8° - 7)	90 - 130kHz	13μH	500Vdc

Each Flyback Transformer shall be the result of a common definition after technical agreement between both engineering teams

## Typical Dimensions (mm, top view)

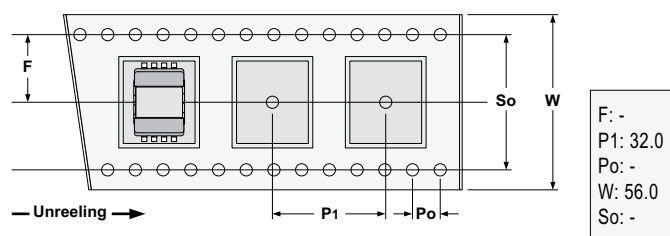


## PCB Layout (suggested)



## Packaging

Tape and Reel:  
100 units per reel of diameter 330 mm



## Marking

