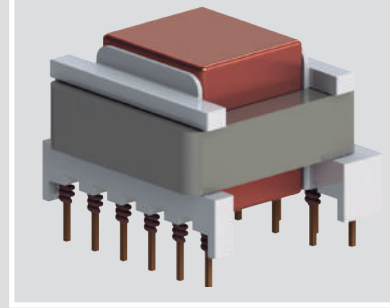


New

FLYT-003

Flyback Tr. 5W/100kHz 7:5:7:5:5

INDUCTIVE COMPONENTS / FLYBACK TRANSFORMER



APPLICATIONS

- › Automotive EV/PHV AC/DC onboard 3-phase battery chargers

01 FEATURES

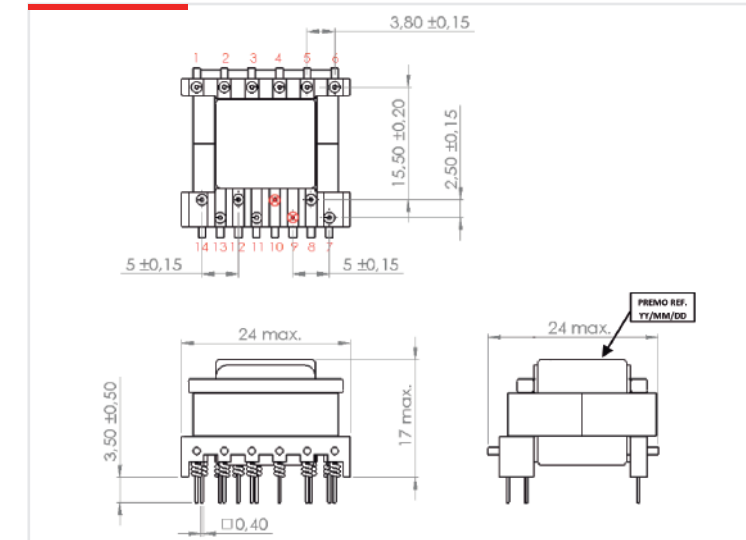
- › Flyback Transformer for 11kW battery chargers
- › 3 outputs +3,3V (PA / PB / PC) with reinforced insulation (cr >5mm)
- › Switching frequency 100kHz
- › Insulation according to EN 60664-1
- › UL94 and RoHS materials (F/155°C)
- › Design based on AEC-Q200
- › Weight : approx 25g.

02 OPERATION

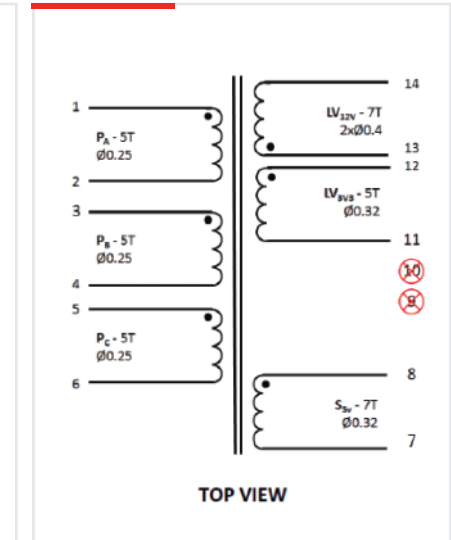
- › Operating temperature -40/+125°C
- › $V_{in} = 6V \text{ MIN} / V_{out} = 3 \times 3,3V/0,1A \quad 5V/0,4A \quad 3,3V/0,4A$
- › Max duty cycle : = 0,55
- › Primary current : $I_{rms} = 2A_{rms} \text{ MAX} @ V_{in} = 6V (I_{pk} \approx 3,8A_{pk})$
- › Estimated losses @ $V_{in} = 6V / 100^\circ\text{C}$: Copper = 0,3W / Iron = 0,05W

03 SPECIFICATIONS

DIMENSIONS



ELECTRICAL DIAGRAM



ELECTRICAL SPECIFICATIONS

MAG. INDUCTANCE at 25°C

LLV12V = L_p (100kHz/0,1Vac)	12µH ±12%
--------------------------------	-----------

LEAKAGE INDUCTANCE

LfLV 12V (100kHz/1Vac)	350nH MAX
------------------------	-----------

DC RESISTANCE at 25°C

RLV12V	20mΩ TYP (25mΩ MAX)
RLV3V3	45mΩ TYP (55mΩ MAX)
RS5V	60mΩ TYP (80mΩ MAX)
RPA = PPB = PPC	84mΩ TYP (95mΩ MAX)

DIELECTRIC STRENGTH

{LV12V + LV3V3}/{S5V}/{PA+PB+PC}	4,5kVac/50Hz/3mA/1min*
Between other wdgs and with core	1,5kVac/50Hz/3mA/1min*

TURN RATIO (10kHz/1Vac)

LV:3,3V:5V:PA:PB:PC	7:5:7:5:5
---------------------	-----------