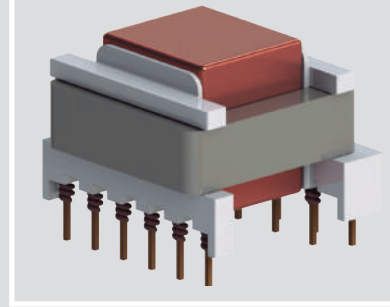


New

FLYT-002

Flyback Tr. 16W/100kHz 5:9:9:9

INDUCTIVE COMPONENTS / FLYBACK TRANSFORMER



APPLICATIONS

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

01 FEATURES

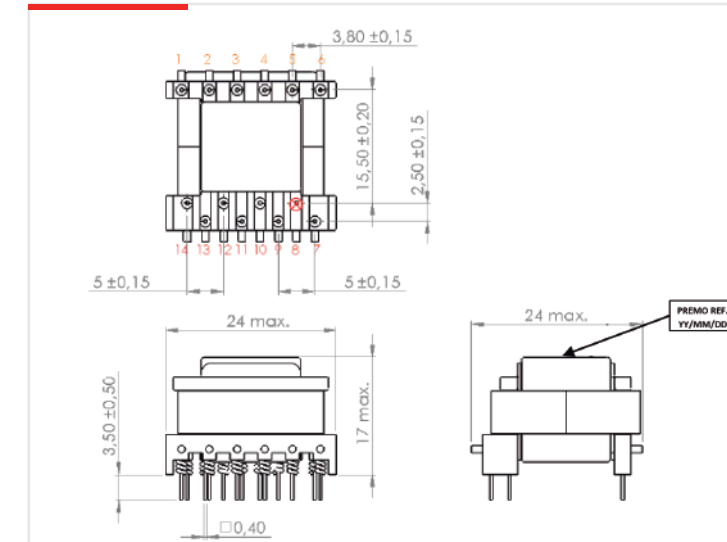
- › Flyback Transformer for 11kW battery chargers
- › 3 outputs +12V (PA / PB / PC) with reinforced insulation (cr >5mm)
- › Switching frequency 100kHz
- › Insulation according to EN 60664-1
- › UL94 and RoHS materials (F/155°C)
- › Design based on AEC-Q200
- › Weight : approx 25g.

02 OPERATION

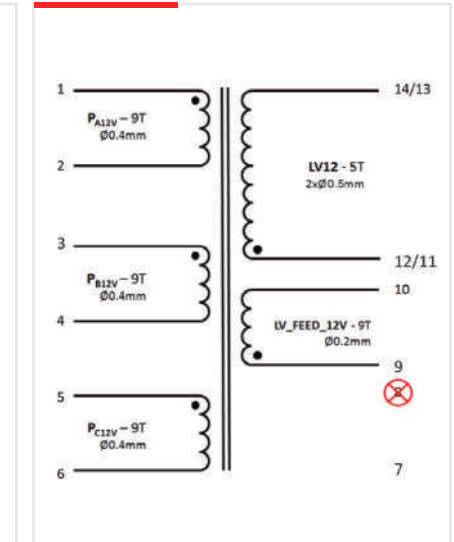
- › Operating temperature -40/+125°C
- › $V_{in} = 7V \text{ MIN} / V_{out} = 3 \times 12V / 0,4A$
- › Max duty cycle : = 0,55
- › Primary current : $I_{rms} = 4,5Arms \text{ MAX} @ V_{in} = 7V (I_{pk} \approx 9Apk)$
- › Estimated losses @ $V_{in} = 7V / 100^\circ C$: Copper = 0,3W / Iron = 0,1W

03 SPECIFICATIONS

DIMENSIONS



ELECTRICAL DIAGRAM



ELECTRICAL SPECIFICATIONS

MAG. INDUCTANCE at 25°C

LLV12V = L_p (100kHz/0,1Vac) | 5 μ H \pm 10%

LEAKAGE INDUCTANCE

LfLV 12V (100kHz/1Vac) | 250nH MAX

DC RESISTANCE at 25°C

RLV12V | 9m Ω TYP (11m Ω MAX)
 RLVFEED12V | 200 m Ω TYP (240m Ω MAX)
 RPA12V / RPB12V / RPC12V | 53m Ω TYP (60m Ω MAX)

DIELECTRIC STRENGTH

{LV12V + LVFEED12V}/{PC12V + PB12V + PA12V} | 4,5kVac/50Hz/3mA/1min*
 Between other wdgs and with Core | 1,5kVac/50Hz/3mA/1min*

TURN RATIO (10kHz/1Vac)

LV:FEED:PA:PB:PC | 5:9:9:9:9