

POWER TRANSFORMER Forward Transformer for PoE Plus

For Texas Instruments TPS23754 PD Controller



Forward Converter transformers designed for PoE Plus (IEEE802.3at) powered devices with up to 30 Watts



Designed for 250kHz switching frequency with input of 33 - 57V



🔁 Low Leakage Inductance



Hipot voltage: 1500Vrms



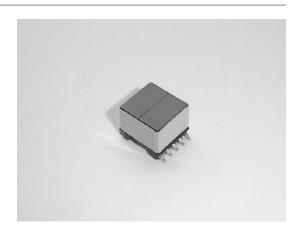
Operating temperature -40 C to +85 C.



RoHS compliant version is available



Custom design is also available



ELECTRICAL SPECIFICATION @ 25 C										
RoHS Part Number	Turns Ratio		Inductance, Pri at 0A	Inductance, Pri at lpk	Leakage Inductance	DCR (mOhm Max)			lpk	Secondary
	Pri : Sec	Pri : Aux	(uH 10%)	(uH Min)	(uH Max)	Pri	Sec	Sec	(A)	Output
835-01064F / 835-01064FC	1.8 : 1	1.8 : 1	100	80	0.875	210	35	580	1.3	Vout=12V/2.5A

Notes:

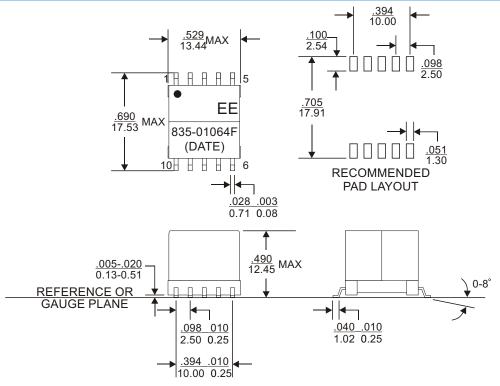
- 1. Inductance is measured at 100kHz, 0.24Vrms, 0Adc.
- 2. Peak primary current, lpk, is drawn at minimum input voltage.
- 3. DCR for the secondary is per winding.
- 4. Leakage Inductance measured between pins 1 and 2 with all other secondary pins shorted.
- 5. Turns ratio is with the secondary windings connected in parallel.
- 6. Output of the secondary is with the windings connected in parallel.
- 7. Operating temperature range: -40 C to +85 C. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- 8.835-01064F and 835-01064FC have the same design but 835-01064FC is specified in Texas Instruments□ reference designs.



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MECHANICAL DIMENSIONS



Notes:

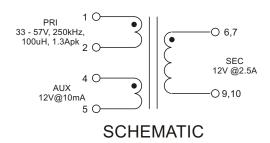
8. All dimensions are specified in $\frac{\text{inches}}{\text{mm}}$ with higher precedence in mm.

9. Unless otherwise specified, all tolerances are $\frac{.010}{0.25}$.

10. Coplanarity: $\frac{.004}{0.10}$ max.

Weight (in gram) : 6.6 typ.
Tape & Reel : 160 / reel

SCHEMATICS



FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER

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