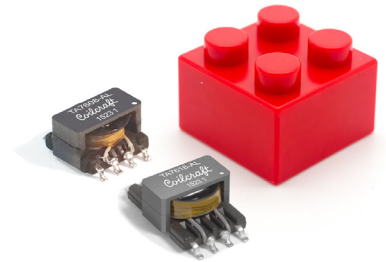


Miniature Transformers for Digital Isolators



Coilcraft

Coilcraft specializes in transformers specifically designed for digital isolator ICs with integrated DC-DC power converters being offered by a variety of semiconductor suppliers. With high isolation voltages ranging from 1500 to 5000 Vrms, these transformers meet the basic or reinforced isolation requirements of

industrial and medical applications and offer different topologies such as Flyback, Forward, or Push-pull, etc.

We will continue to expand our line of standard isolation transformers, and can also provide custom designs to meet your specific transformer requirements.

Isolation Transformers for Silicon Labs Si88xx/Si828x Digital Isolators

Features

- Ultra low profile, only 5.97 mm tall
- 2500 Vrms and 5000 Vrms, one minute primary to secondary isolation voltage
- Designed to meet basic and reinforced insulation requirements
- Qualified AEC-Q200 Grade 1 requirements (-40°C to +125°C ambient)



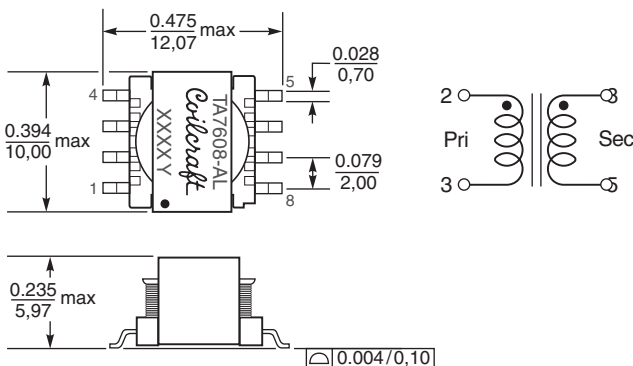
Applications

- Industrial automation systems
- Medical electronics and equipment
- Solar power inverters
- Hybrid electric vehicles
- Home appliance motor controls

TA7608 / TA7618 / UA7902 for Silicon Labs Si88xx 2.5/5.0 kV Isolated DC-DC Converters

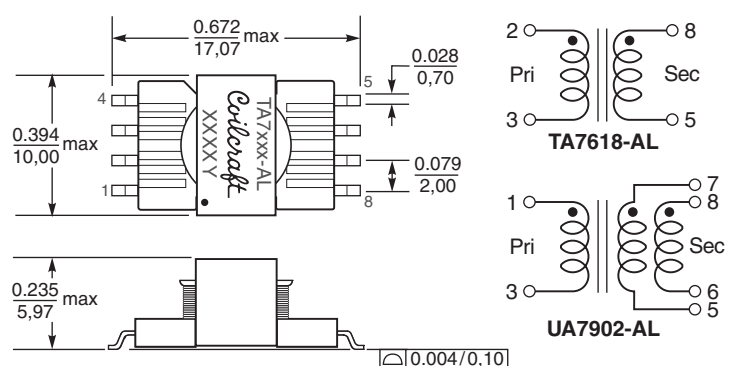
Part Number	Input	Output	Primary Inductance $\pm 5\%$	Leakage Inductance	Turns ratio pri : sec	Isat (A)	Isolation (Vrms)
TA7608-AL	3 – 5.5 Vdc	5 V, 0.4 A	2.0 μH	0.060 μH	1:4	4.25	2500
TA7618-AL	3 – 5.5 Vdc	5 V, 0.4 A	2.0 μH	0.064 μH	1:4	4.80	5000
UA7902-AL	7 – 24 Vdc	5 V, 0.4 A	25 μH	0.971 μH	3:1	1.30	5000

TA7608-AL



Dimensions are in inches/mm

TA7618-AL / UA7902-AL



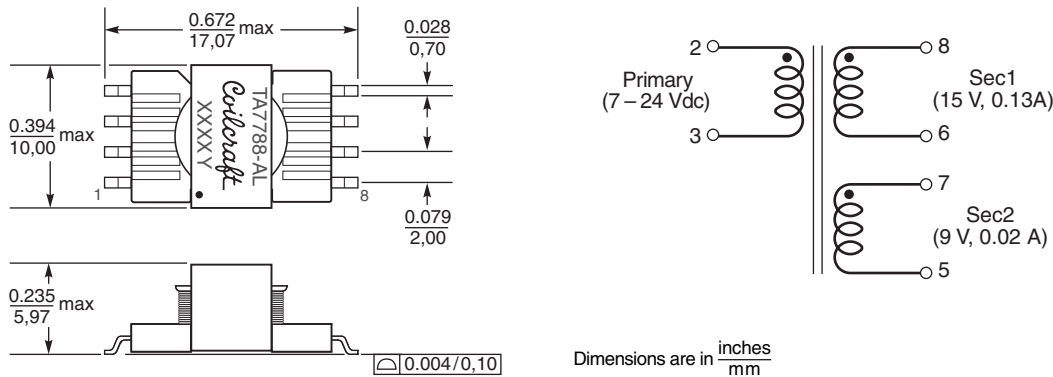
Miniature Transformers for Digital Isolators



TA7788AL for Silicon Labs Si828x 5 kV Isolated DC-DC Converter

Part Number	Input	Output	Primary Inductance $\pm 5\%$	Leakage Inductance	Turns ratio pri : sec1 : sec2	Isat (A)	Isolation (Vrms)
TA7788-AL	7 – 24 Vdc	15 V, 0.13 A 9 V, 0.02A	25 μH	0.554 μH	1 : 1.25 : 1.75	1.4	2500

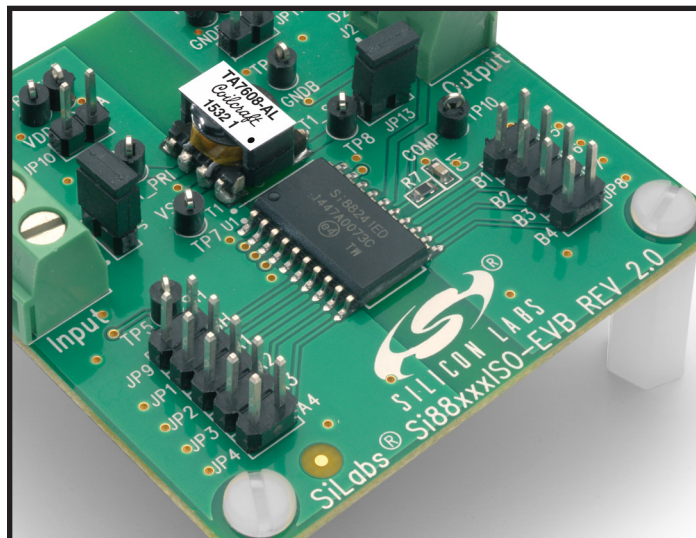
TA7788-AL



Silicon Labs Si88xx Dual/Quad Digital Isolators

Overview

The Si88xx integrates Silicon Labs' proven digital isolator technology with an on-chip isolated dc-dc converter that provides regulated output voltages of 3.3 or 5.0 Volts (or >5 V with external components) at peak output power levels of up to 5 Watts.



Features

- High-speed isolators with integrated dc-dc converter
- DC-DC converter peak efficiency of 83% with external power switch
- Up to 5 W isolated power with external power switch
- Standard Voltage Conversion:
3/5 V to isolated 3/5 V
24 V to isolated 3/5 V supported

