

Flyback and Forward Transformers For PoE

- Power Range: Up to 36W (Flyback Topology)
- Designed to operate in continuous mode at 200 kHz with an input of 33 – 57 Vdc. (UT38A52S,UT38A53S,UT38A54S)
- Designed to operate in continuous mode at 200 kHz with an input of 9 – 57 Vdc. (UT38A55S,UT38A56S,UT38938S)
- 2250 Vdc isolation from primary and auxiliary to secondary.
- Operating Temperature: -40°C to +125 °C.
- Storage Temperature: -40°C to +85 °C.

ELECTRICAL SPECIFICATIONS @25°C

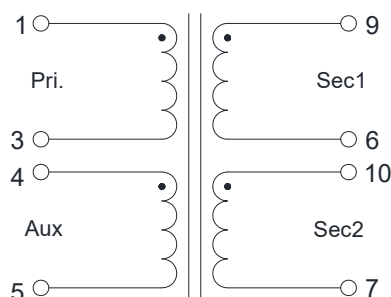
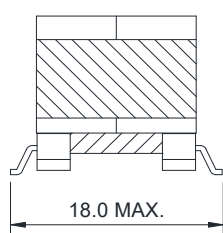
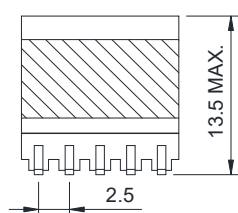
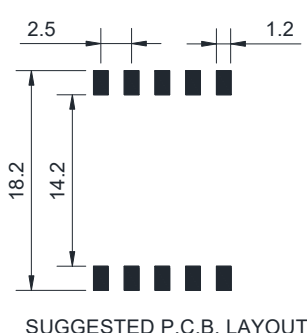
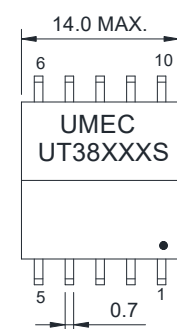
Model No.	POWER (W)	Inductance at 0 Adc ¹ ±10% (uH)	DCR max (mOhms)				Leakage Inductance max (uH) ²	Turns ratio	Output ³
			Pri	Aux	Sec1	Sec2		Pri:Sec1:Sec2:Aux	
UT38A52S	23	54	62	120	6.5	6.5	0.67	8:1:1:3	3.3 V, 3.5A
UT38A53S	30	48	62	120	10	10	0.67	5.33:1:1:2	5.0 V, 3.0 A
UT38A54S	36	41	62	120	20	23	0.67	2.67:1:1:1	12 V, 1.5 A
UT38A55S	21	21	31	180	10	10	0.30	4.33:1:1:3	3.3V, 3.2A
UT38A56S	22	21	31	180	14	14	0.30	3:1:1:2.25	5.0V, 2.2A
UT38938S	24	21	31	180	58	58	0.30	1.33:1:1:0.89	12V, 1.0A

1. Inductance is for the primary, measured at 200kHz, 0.1 Vrms, 0 Adc.
2. Leakage inductance measured between pins 1 and 3 with all other pins shorted.
3. Output is for each secondary. auxiliary winding output is 10 V, 50 mA.

Note: For RoHS compliant products:

- a.) Ordering code (Manufacturer Part Number): EX. **TG-UT38A52S**
- b.) Solder: Sn/Ag/Cu
- c.) Date Code suffix to "G".

MECHANICAL & SCHEMATIC:



DATA SHEET 02-38 DEC./20
1 OF 2



UNIVERSAL MICROELECTRONICS CO.,LTD.
TEL:886-4-23590096 FAX:886-4-23590129
<http://www.umec.com.tw> E-mail:business@umec.com.tw

3,27TH RD.,TAICHUNG INDUSTRIAL PARK,
TAICHUNG,TAIWAN,R.O.C

Flyback and Forward Transformers For PoE

- Power Range: Up to 72W (Forawrd Topology)
- Designed to operate in continuous mode at 200 kHz with an input of 33 – 57 Vdc. (UT38A57S,UT38941S,UT38874S)
- Designed to operate in continuous mode at 200 kHz with an input of 9 – 57 Vdc. (UT38A58S,UT38A59S,UT38A60S)
- 2250 Vdc isolation from primary and auxiliary to secondary.
- Operating Temperature: -40°C to +125 °C.
- Storage Temperature: -40°C to +85 °C.

ELECTRICAL SPECIFICATIONS @25°C

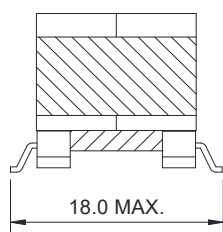
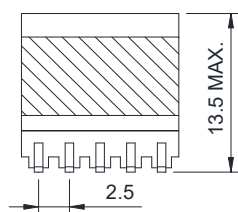
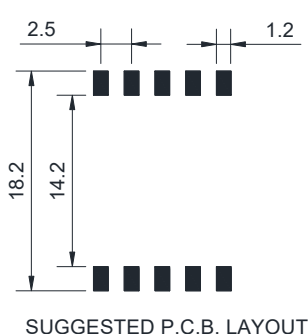
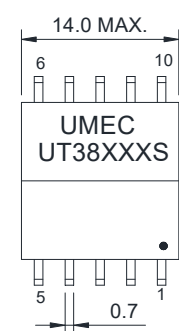
Model No.	POWER (W)	Inductance at 0 Adc ¹	DCR max (mOhms)				Leakage Inductance max (uH) ²	Turns ratio	Output ³
			Pri	Aux	Sec1	Sec2		Pri:Sec1:Sec2:Aux	
UT38A57S	53	100 ±15%	36	120	6.5	6.5	0.40	6:1:1:3	3.3 V, 8A
UT38941S	70	100 ±15%	36	120	10	10	0.40	4:1:1:2	5.0 V, 7 A
UT38874S	72	100 ±15%	36	120	31.6	36	0.40	1.71:1:1:0.86	12 V, 3A
UT38A58S	33	128 ±25%	17.6	410	14.4	17	0.15	1.6:1:1:1.2	3.3V, 5A
UT38A59S	35	128 ±15%	17.6	410	31.6	36	0.15	1.14:1:1:2	5.0V, 3.5A
UT38A60S	38	128 ±15%	17.6	426	105.6	122	0.15	0.47:1:1:0.82	12V, 1.6A

1. Inductance is for the primary, measured at 200kHz, 0.1 Vrms, 0 Adc.
2. Leakage inductance measured between pins 1 and 3 with all other pins shorted.
3. Output is for each secondary. auxiliary winding output is 10 V, 50 mA.

Note: For RoHS compliant products:

- a.) Ordering code (Manufacturer Part Number): EX. **TG-UT38A57S**
- b.) Solder: Sn/Ag/Cu
- c.) Date Code suffix to "G".

MECHANICAL & SCHEMATIC:



DATA SHEET 02-38 DEC./20
2 OF 2



UNIVERSAL MICROELECTRONICS CO.,LTD.
TEL:886-4-23590096 FAX:886-4-23590129
<http://www.umec.com.tw> E-mail:business@umec.com.tw

3,27TH RD.,TAICHUNG INDUSTRIAL PARK,
TAICHUNG,TAIWAN,R.O.C