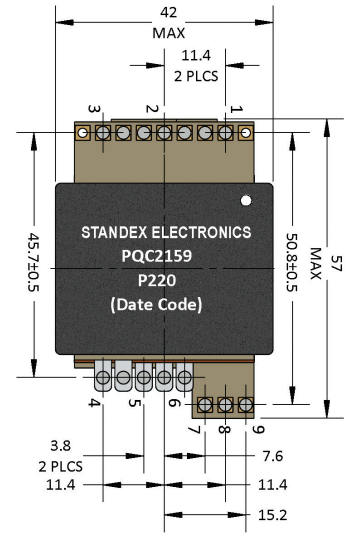
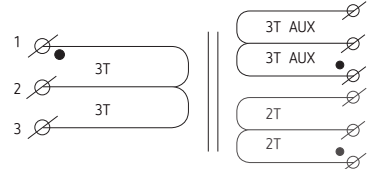
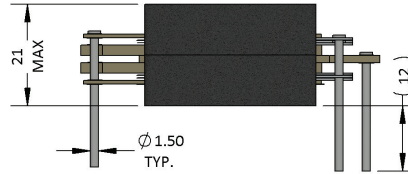
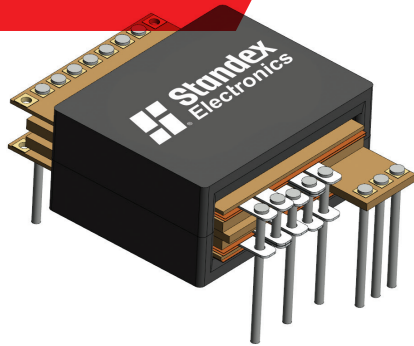


SIZE 220
1kW-3kW

DESIGN EXAMPLE



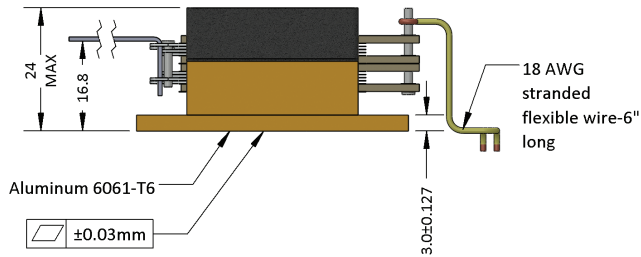
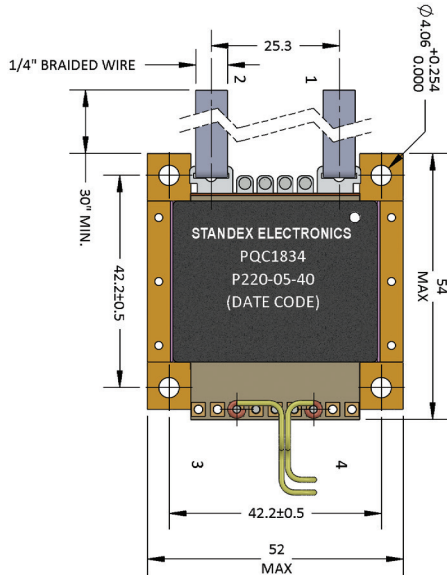
TRANSFORMER DESIGN | EXAMPLE - PQC2159

ELECTRICAL SPECIFICATIONS

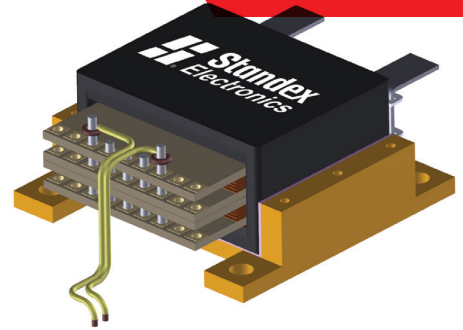
Topology	Push Pull	Temp. Rise Hot Spot External Heatsink, Max.	+30°C
Input Voltage	23-125VDC	Minimum Isolation Voltage	
Output Power (Output Voltage/Current After Rectification)		Primary To Core, Secondary Ns1 And Naux1	1500VAC
Ns1+Ns2 (320W Nom. Power)	13VDC/24.6A	Secondary Ns1 To Core	500VDC
Naux1+Naux2	16VDC/0.04A	Naux To Core	1500VAC
Turns Ratio - Np1/Np2/Ns1/Ns2/Naux1/Naux2	3T/3T/2T/2T/3T/3T	Primary Inductance, Np1 And Np2, Min.	45µH
Switching Frequency	70kHz	Primary Resistance, Rdc, Np1 And Np2, Max.	2.5mOhm
Duty Cycle, Max. Vin=23VDC	88.0%	Secondary Resistance, Rdc, Np1 And Np2, Max.	1.2mOhm
Efficiency At Full Power (Calc.)	99% (3.2W losses)	Leakage Inductance Np1+Np2/Ns1+Ns2 Shorted, Typ.	150nH
Mounted On Heatsink With Max. Temp.	+90°C	Weight Range	100-250grams

NOTES:

- 1) FOR OPTIMAL PERFORMANCE A THERMALLY CONDUCTIVE SUBSTRATE BETWEEN FERRITE AND HEATSINK SHOULD BE UTILIZED
- 2) PATENTED TERMINALS AVAILABLE FOR SHIELDING ON HIGH CURRENT WINDING



SIZE 220
1kW-3kW
 DESIGN EXAMPLE



TRANSFORMER DESIGN | EXAMPLE - PQC1834

ELECTRICAL SPECIFICATIONS

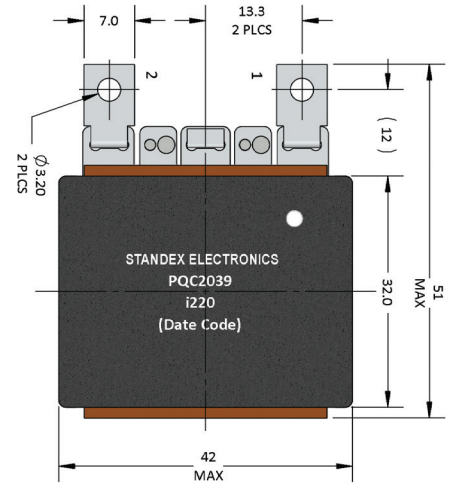
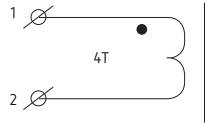
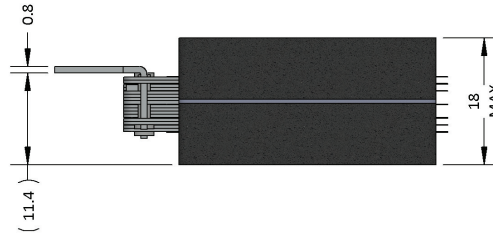
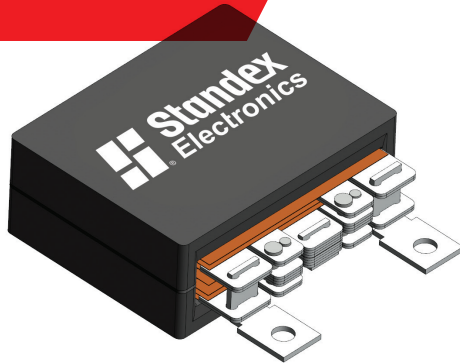
Topology	Full Bridge ZVS	Minimum Isolation Voltage	
Input Voltage	350-450VDC	Primary To Secondary And Core	1000VAC
Output Power (Output Voltage/Current After Rectification)	800W (320VDC/2.5ADC)	Primary To Core	500VAC
Turns Ratio - Np/Ns	5T/40T	Primary Inductance, Np, Min.	150µH
Switching Frequency	100kHz	Primary Resistance, Np, Max.	2mOhm
Duty Cycle, Max. 2.5A Operation	88%	Secondary Resistance, Max.	200mOhm
Efficiency At Full Output 2.5A Operation (Calc.)	99.25% (6W losses)	Leakage Inductance 3-4/1-2 Shorted, Typ.	8.0µH
External Heatsink Temperature Max.	+90°C	Leakage Inductance 1-2/3-4 Shorted, Typ.	125nH
Temp. Rise Hot Spot External Heatsink, Max.	+20°C (2.5A operation)	Weight Range	100-250grams
Transformer Clamped To Heatsink			

NOTES:

- 1) FOR OPTIMAL PERFORMANCE A THERMALLY CONDUCTIVE SUBSTRATE BETWEEN FERRITE AND HEATSINK SHOULD BE UTILIZED
- 2) PATENTED TERMINALS AVAILABLE FOR SHIELDING ON HIGH CURRENT WINDING

SIZE 220
1kW-3kW

DESIGN EXAMPLE



INDUCTOR DESIGN | EXAMPLE - PQC2039

ELECTRICAL SPECIFICATIONS

Inductance At Rated Current	2.4 μ H \pm 3%	Temp. Rise Hot Spot External Heatsink, Max.	+40°C
Rated Current	100A	Heatsink Temperature Max.	+65°C
Ripple Frequency	150kHz	Resistance Max.	1mOhm
Minimum Isolation Voltage (Winding To Core)	2000VDC	Total Losses	10W

NOTES:

- 1) FOR OPTIMAL PERFORMANCE A THERMALLY CONDUCTIVE SUBSTRATE BETWEEN FERRITE AND HEATSINK SHOULD BE UTILIZED
- 2) PATENTED TERMINALS AVAILABLE FOR SPLITTING HIGH CURRENT WINDING