Champs-Tech PQI-2050 Power Inductors

- **Inductance Range: 900nH to 500µH**
- **Current Rating: to 52A**
- **High Efficiency PQI Structure**
- **Low DCR || RoHS Compliant**
- **Various Mech. Options & Height**
- **Typical Use: Output Filter Inductors**

Part #	Induct +/-10% @0Adc (µH)	Induct Min @Irated (µH)	Irated Adc	DCR mΩ		Saturation Current		Heat I (A)
				Nom	Max	25ºC	100ºC	
PQI-2050-0R9-LTC	0.90	0.82	45	0.50	0.70	50	45	54
PQI-2050-0R9-HX	0.90	0.82	45	0.60	0.75	50	45	54
PQI-2050-1R5-LTC	1.50	1.35	40	0.80	1.00	45	42	45
PQI-2050-1R5-HX	1.50	1.35	40	0.90	1.15	45	42	44
PQI-2050-2R0-LTC	2.00	1.80	40	1.00	1.20	45	42	43
PQI-2050-2R0-HX	2.00	1.80	40	1.15	1.35	45	42	42
PQI-2050-2R5-LTC	2.50	2.20	30	1.90	2.18	36	34	38
PQI-2050-2R5-HX	2.50	2.20	30	1.20	1.45	36	34	41
PQI-2050-3R3-LTC	3.30	2.90	28	2.35	2.75	33	31	31
PQI-2050-3R3-HX	3.30	2.90	28	1.50	1.80	33	31	37
PQI-2050-4R7-LTC	4.70	4.20	24	2.83	3.34	28	25	28
PQI-2050-4R7-HX	4.70	4.20	24	1.80	2.10	28	25	34
PQI-2050-5R8-LTC	5.80	5.20	18	2.83	3.34	22	20	28
PQI-2050-5R8-HX	5.80	5.20	18	1.80	2.10	22	20	34
PQI-2050-6R8-LTC	6.80	6.10	16	2.80	3.34	19	17	28
PQI-2050-6R8-HX	6.80	6.10	16	1.80	2.10	19	17	34
PQI-2050-08-LTC	8.00	7.20	20	4.80	5.50	22	20	21
PQI-2050-08-HX	8.00	7.20	20	4.20	5.00	22	20	22

Notes:
1. Saturation current is that current which causes Inductance value to drop 15% at stated operating ambient temperature.
2. Heating current is that DC current which causes temp rise ~45 ºC from ambient at 25 ºC
3. Dielectric Withstand Voltage Minmum 500 Vdc

Add –LTC, -HX or –HX2 to PN to complete Part No.

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Part #	Induct +/-10% @0Adc (μH)	Induct Min @Irated (μH)	Irated Adc	DCR mΩ		Saturation Current		Heat I (A)
				Nom	Max	25°C	100°C	
PQI-2050-10-LTC	10.0	9.0	14.5	4.80	5.50	17	15	21
PQI-2050-10-HX	10.0	9.0	14.5	4.20	5.00	17	15	22
PQI-2050-16-LTC	16.0	14.0	12.8	6.30	7.10	14	12.8	18
PQI-2050-16-HX	16.0	14.0	12.8	5.20	6.00	14	12.8	18
PQI-2050-20-LTC	20.0	18.0	11.0	8.70	9.60	13	11.8	16
PQI-2050-23-LTC	23.0	20.7	10.0	8.70	9.60	11	10.0	16
PQI-2050-27-LTC	27.0	24.5	8.0	8.70	9.60	9.8	8.8	15
PQI-2050-27b-LTC	27.0	24.5	9.6	15.9	18.5	11	10.0	11.5
PQI-2050-33-LTC	33.0	31.0	7.5	14.0	17.0	9.0	8.0	10.0
PQI-2050-36-LTC	36.0	33.1	7.0	14.0	17.0	8.5	7.5	10.0
PQI-2050-39-LTC	39.0	36.0	6.5	14.0	17.0	7.5	7.0	10.0
PQI-2050-46-LTC	46.0	41.4	6.5	26.0	30.0	7.5	7.0	8.0
PQI-2050-57-LTC	57.0	52.0	5.8	34.5	39.0	6.5	5.8	6.5
PQI-2050-75-LTC	75.0	67.0	5.0	41.0	46.0	5.7	5.2	6.0
PQI-2050-100-LTC	100.0	90.0	4.8	56.0	63.0	5.8	5.0	5.8
PQI-2050-200-LTC	200.0	185.0	2.5	58.0	64.0	3.0	2.75	5.0
PQI-2050-240-LTC	240.0	220.0	2.3	61.0	68.0	2.8	2.3	4.2
PQI-2050-300-LTC	300.0	270.0	2.10	90.0	110	2.8	2.4	3.3
PQI-2050-350-LTC	350.0	330.0	2.0	133	155	2.5	2.2	3.0
PQI-2050-400-LTC	400.0	365.0	1.5	190	210	1.85	1.60	2.5
PQI-2050-500-LTC	500.0	460	1.5	246	275	2.0	1.7	2.0

Notes:
1. Saturation current is that current which causes Inductance value to drop 15% at stated operating ambient temperature.
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3. Dielectric Withstand Voltage Minmum 500 Vdc

Add –LTC, -HX or –HX2 to PN to complete Part No.

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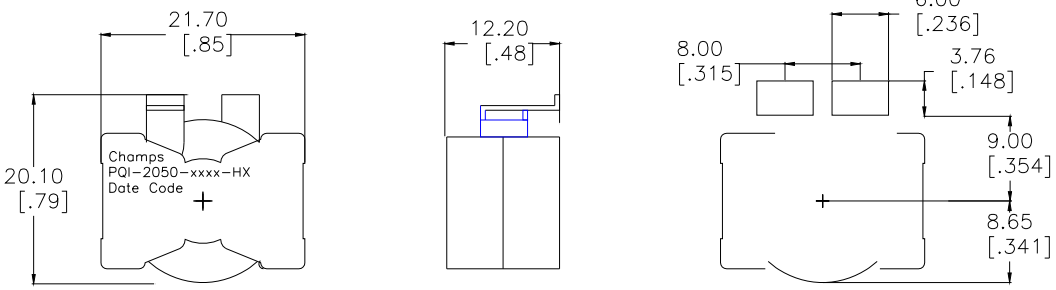
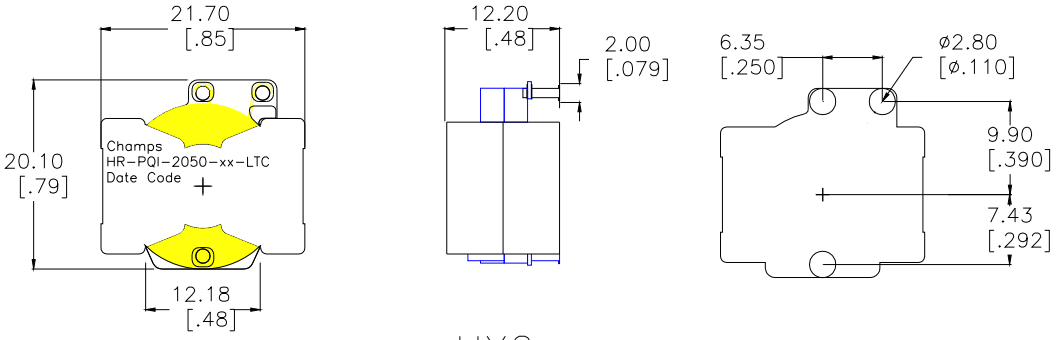
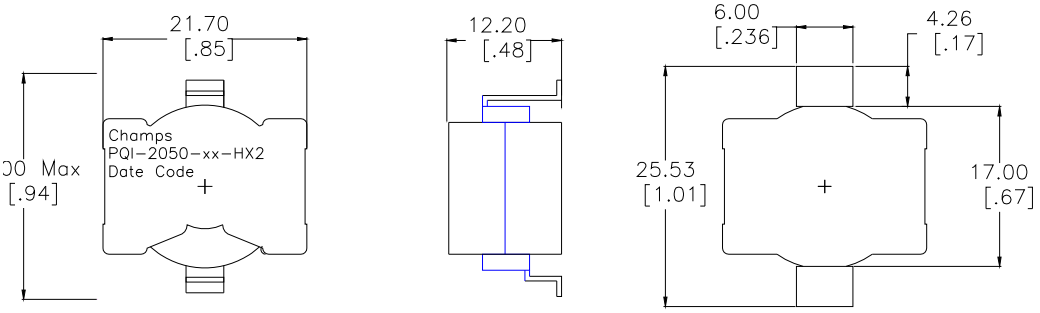
–HX



–LTC



–HX2



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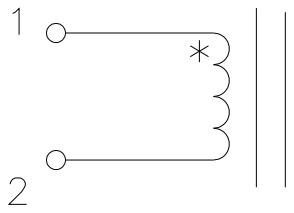

Mechanical Outline Drawing
Pad Layout & Schematic

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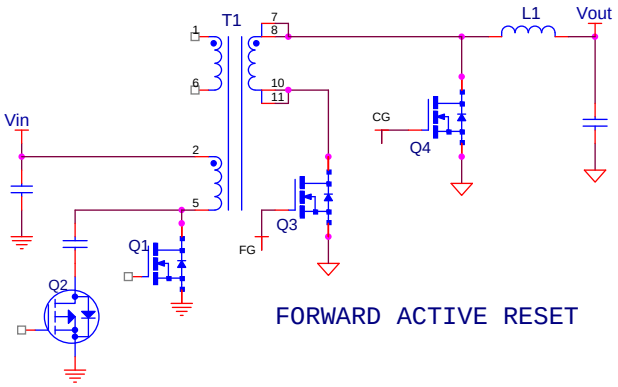

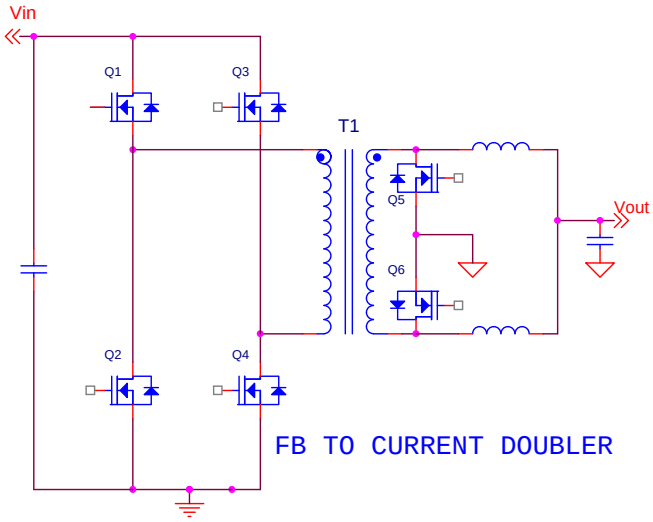

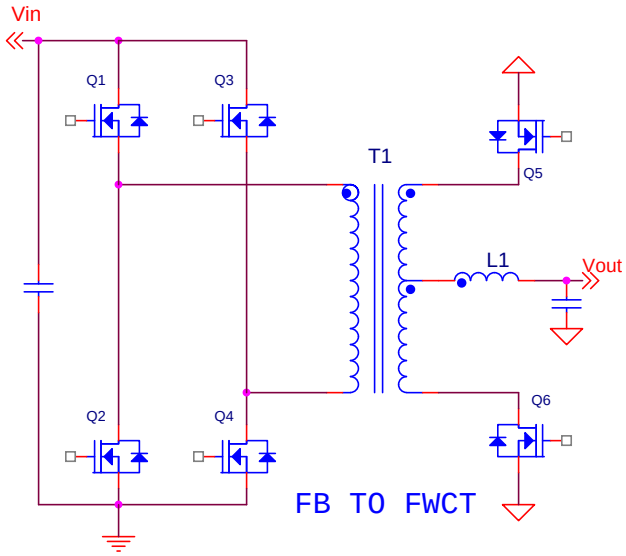

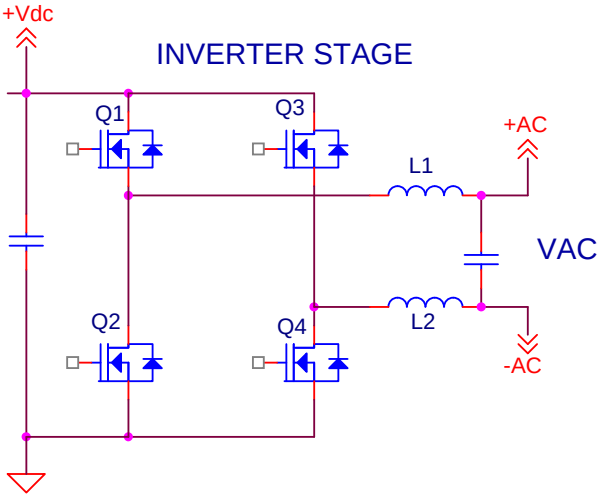

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