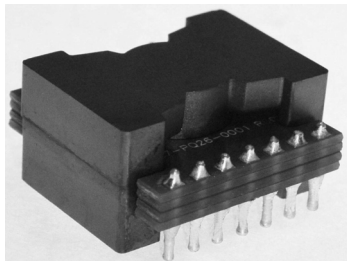


Low Profile Wide Vin & Offline Active Clamp Forward : 19-420Vin to 12Vout 120W



- Footprint: 27 wide x 31.5 mm length x 11 mm Height -- Low Profile
- Meets UL and IEC 60950-1 Clearance/Creepage Class II, Reinforced Insulation, Peak Working Voltage 1400Vpk
- Meets IEC 61180-1 Peak Impulse Withstand Voltage 6KV.
- Derived from customer verification in Analog / Linear Ref Design using LT3752 & LT8311 ICs.
- Optimized for Active Clamp Forward Topology & Wide Input Range.
- Typical Efficiency 93-94%. Typical Temperature Rise 45C above ambient
- Available with Thermal Pad and Heat Sink affording lower Temperature Rise.
- Lowest achievable volume for AC offline applications including lowest achievable Leakage Inductance.
- Multilayer PCB optimization for lowest AC resistance & Proximity Loss Effect. Repeatability by design.
- Wide variety of PNs, Designs and Turns Ratios in stock. If not listed, Contact Us.
- Surface Mount, Thru-Hole, Pad-to-Pad, Embedded Planar Windings as Options.

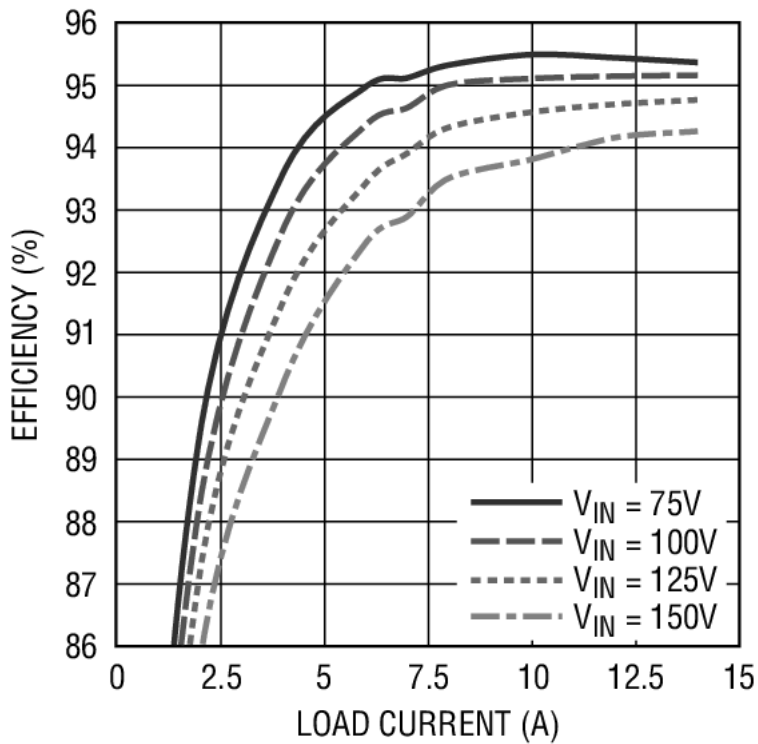
Champs-Tech P26R26LF-AC_Offline Catalog

Table I: P26R26LF-AC_Offline Series 38-430 Vin -- Rated to 120W Output.

Champs PN	Vin (Min)	Vin (Max)	Vout	Iout (A _{dc})	Pout (Watts)	Freq (KHz)	Output Inductor PN
P26R26LF-AC-0303	19	72	12	10.0	120	136	PQI2050-21-11p5-LTC2
P26R26LF-AC-0603	38	180	12	10.0	120	136	PQI2050-21-11p5-LTC2
P26R26LF-AC-3203-2M2	270	420	12	10.0	120	130	PQI2050-21-11p5-LTC2

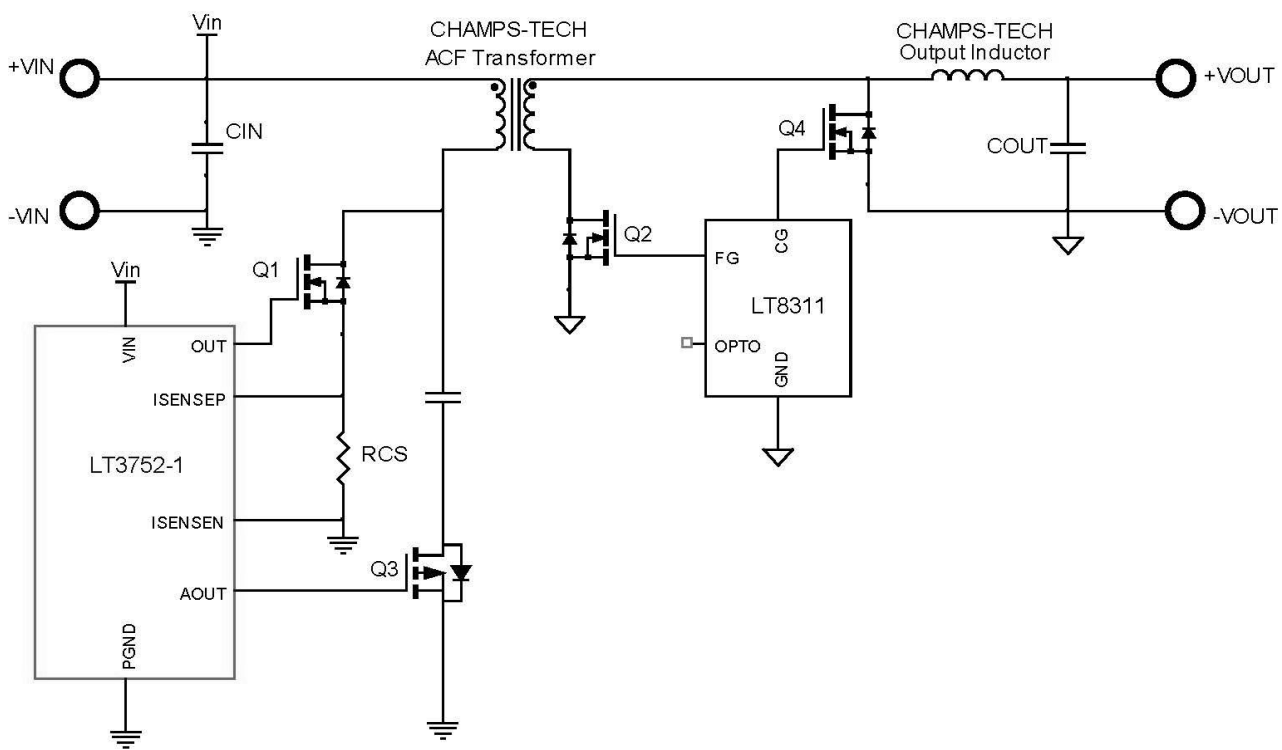
Baseline Reference Design:

<https://www.analog.com/en/design-center/reference-designs/circuit-collections/lt3752-75v-to-150v-24v-14a-340w-no-opto-active-clamp-isolated-forward-converter.html#cc-overview>



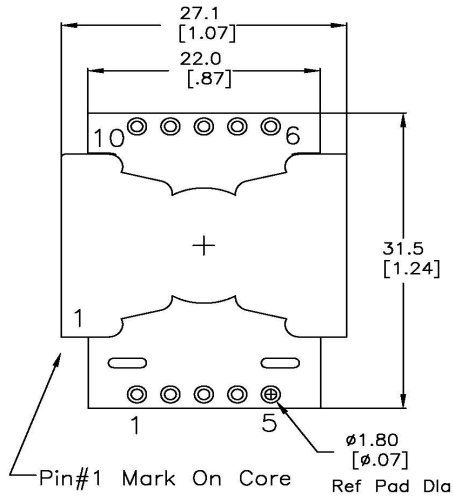
3752 TA08b

Typical Efficiency Curve

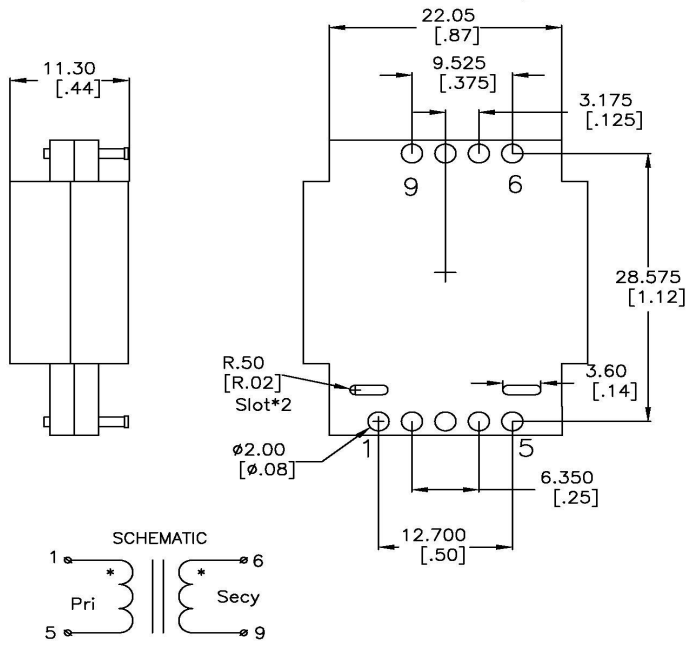


Basic Active Clamp Forward Schematic

MECHANICAL DIMENSIONS [TOP VIEW]

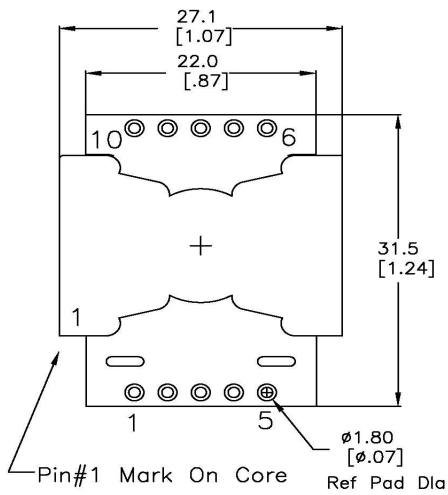


SUGGESTED PAD LAYOUT [PCB TOP VIEW]

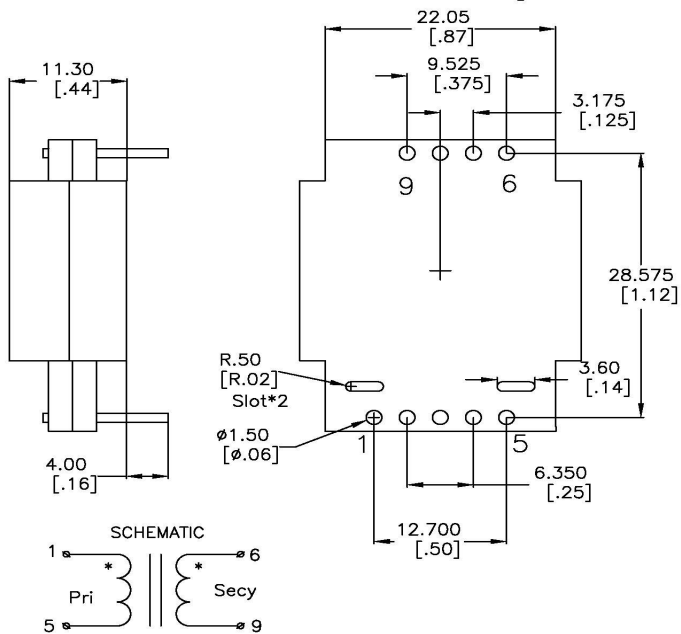


Mechanical Dimensions Drawing P26R26LF-AC Surface Mount

MECHANICAL DIMENSIONS [TOP VIEW]

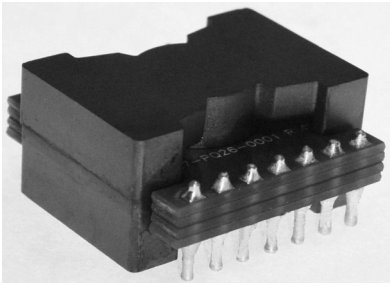


SUGGESTED PAD LAYOUT [PCB TOP VIEW]



Mechanical Dimensions Drawing P26R26LF-AC Thru-Hole

Wide Input Range & Offline Active Clamp Forward : 38-400Vin to 12V, 24V, 28V, 48V, 80 Vout & 140-196W



- Footprint: 27 wide x 32.7 mm length x 15 mm Height
- Meets UL and IEC 60950-1 Clearance/Creepage Class II, Reinforced Insulation, Peak Working Voltage 1400Vpk
- Meets IEC 61180-1 Peak Impulse Withstand Voltage 8KV.
- Derived from customer verification in Analog / Linear Ref Design using LT3752 & LT8311 ICs.
- Optimized for Active Clamp Forward Topology & Wide Input Range.
- Typical Efficiency 94-95%. Typical Temperature Rise 45-65C above ambient
- Available with Thermal Pad and Heat Sink affording lower Temperature Rise.
- Lowest achievable volume for AC offline applications including lowest achievable Leakage Inductance.
- Multilayer PCB optimization for lowest AC resistance & Proximity Loss Effect. Repeatability by design.
- Wide variety of PNs, Designs and Turns Ratios in stock. If not listed, Contact Us.
- Surface Mount, Thru-Hole, Pad-to-Pad, Embedded Planar Windings as Options.

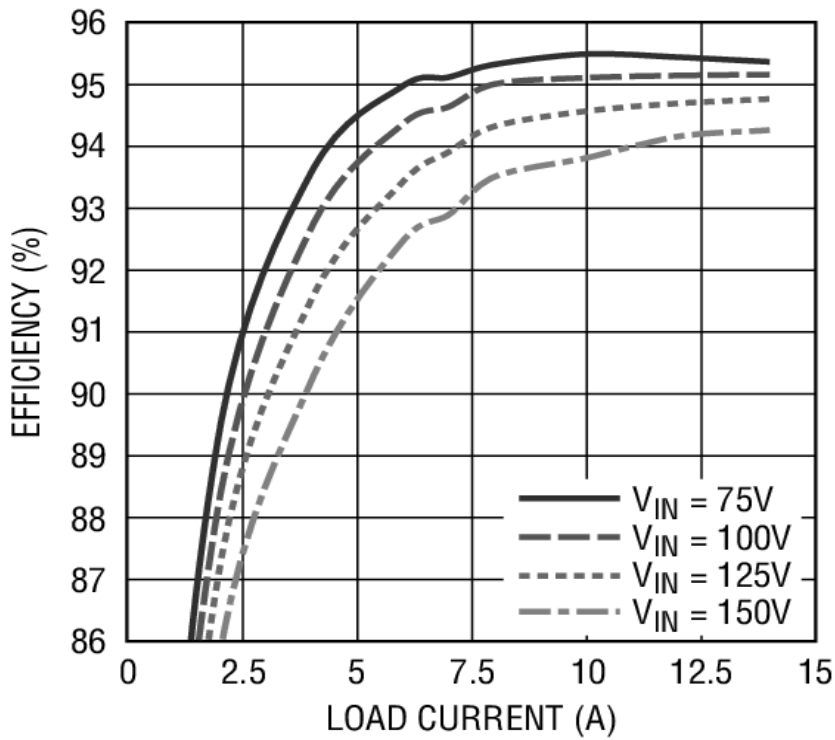
Champs-Tech P26R6-AC_Offline Catalog

Table I: P26R6-AC_Offline Series 38-430 Vin -- Rated to 140-196W Output.

Champs PN	Vin (Min)	Vin (Max)	Vout	Iout (A dc)	Pout (Watts)	Freq (KHz)	Output Inductor PN
P26R6-AC-0603-130R	38	180	12	13.4	160	136	PQI2050-17-14-LTC
P26R6-AC-0606-130R	38	180	24	6.0	144	136	PQA2050-75-7-LTC
P26R6-AC-0607-130R	38	180	28	5.0	140	136	PQA2050-90-LTC
P26R6-AC-0612-130R	38	180	48	3.0	144	136	PQI26-330-LTC
P26R6-AC-0803-200R	50	160	12	12	144	136	PQI2050-17-14-LTC
P26R6-AC-0806-200R	50	160	24	6.0	144	136	PQA2050-75-7-LTC
P26R6-AC-0807-200R	50	160	28	5.0	140	136	PQA2050-90-LTC
P26R6-AC-0812-200R	50	160	48	3.0	144	136	PQI26-330-LTC
P26R6-AC-2004-1M	88	400	12	12	144	100	PQI26-25R-18-HX
P26R6-AC-2006-1M	88	400	18	8.0	144	100	PQI26-58R-10-LTC
P26R6-AC-2008-1M	88	400	24	6.0	144	100	PQI26-130-LTC
P26R6-AC-2010-1M	88	400	28	5.0	140	100	PQI26-155-LTC
P26R6-AC-2016-1M	88	400	48	3.0	144	100	PQI26-330-LTC
P26R6-AC-2604-1M2	150	400	12	15	180	100	PQI26-18R-16-HX
P26R6-AC-2608-1M2	150	400	24	7.5	180	100	PQI26-78R-LTC
P26R6-AC-2610-1M2	150	400	28	5.0	140	100	PQI26-155-LTC
P26R6-AC-2616-1M2	150	400	48	3.5	168	100	PQI26-330-LTC
P26R6-AC-3203-2M	270	400	12	15	180	130	PQI26-15R-17-HX
P26R6-AC-3206-2M	270	400	24	8.0	192	130	PQI26-54R-11-LTC
P26R6-AC-3207-2M	270	400	28	7.0	196	130	PQI26-68R-LTC
P26R6-AC-3212-2M	270	400	48	4.0	192	130	PQI26-220-LTC

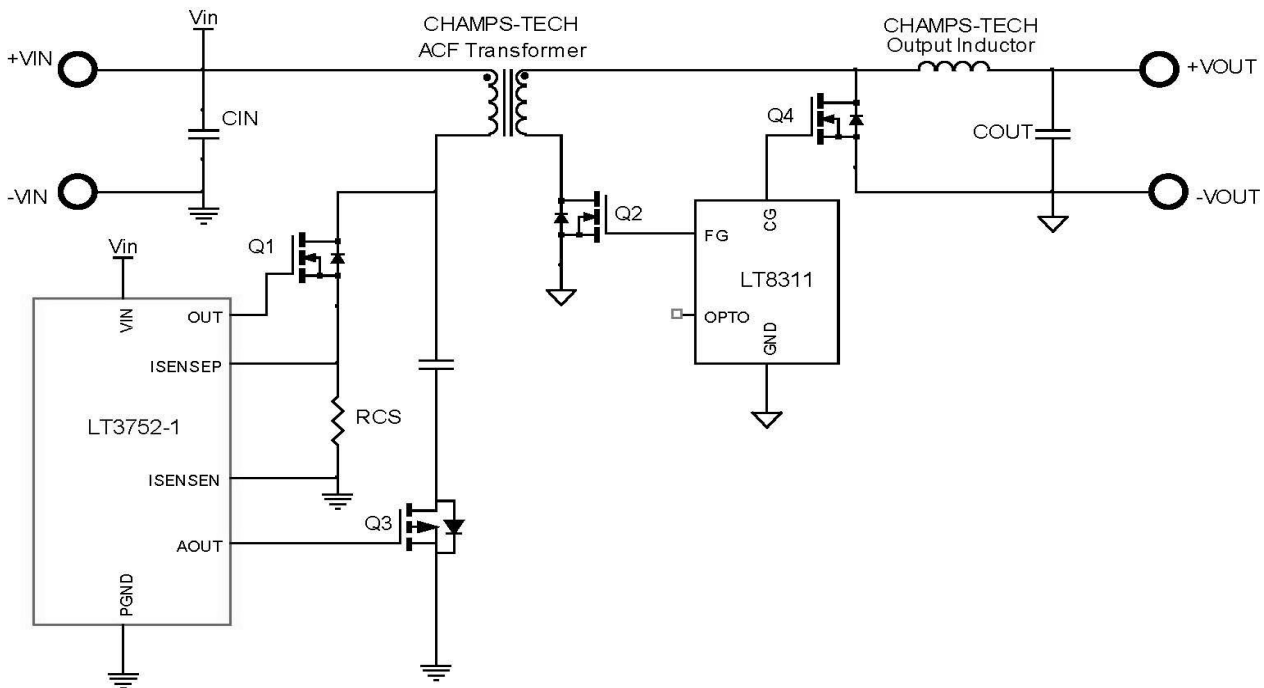
Baseline Reference Design:

<https://www.analog.com/en/design-center/reference-designs/circuit-collections/lt3752-75v-to-150v-24v-14a-340w-no-opto-active-clamp-isolated-forward-converter.html#cc-overview>



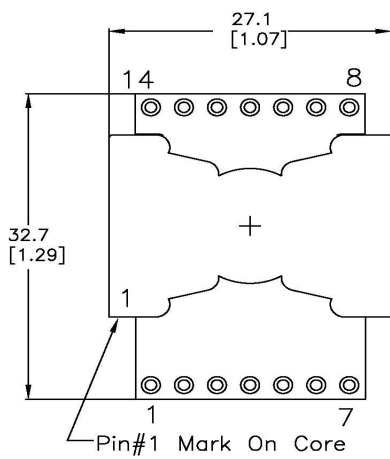
3752 TA08b

Typical Efficiency Curve

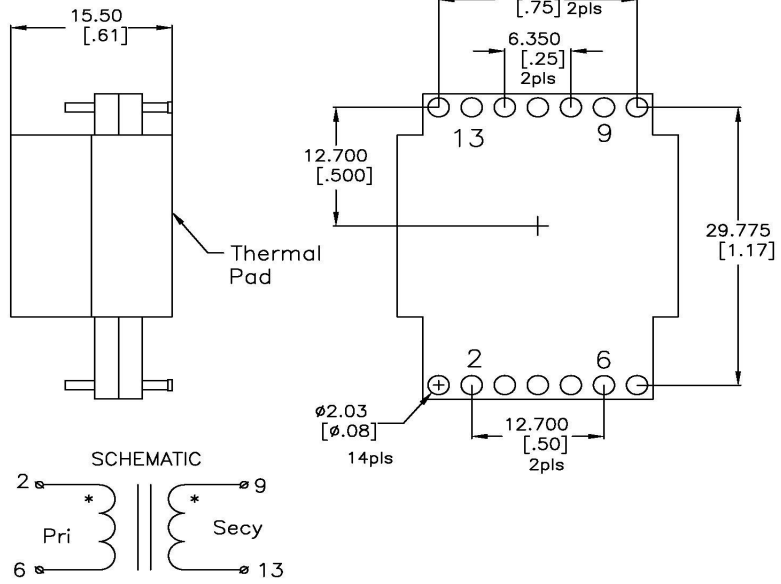


Basic Active Clamp Forward Schematic

MECHANICAL DIMENSIONS [TOP VIEW]

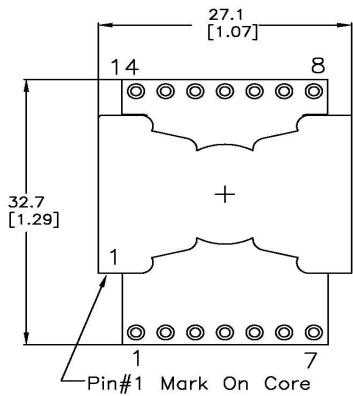


SUGGESTED PAD LAYOUT [PCB TOP VIEW]

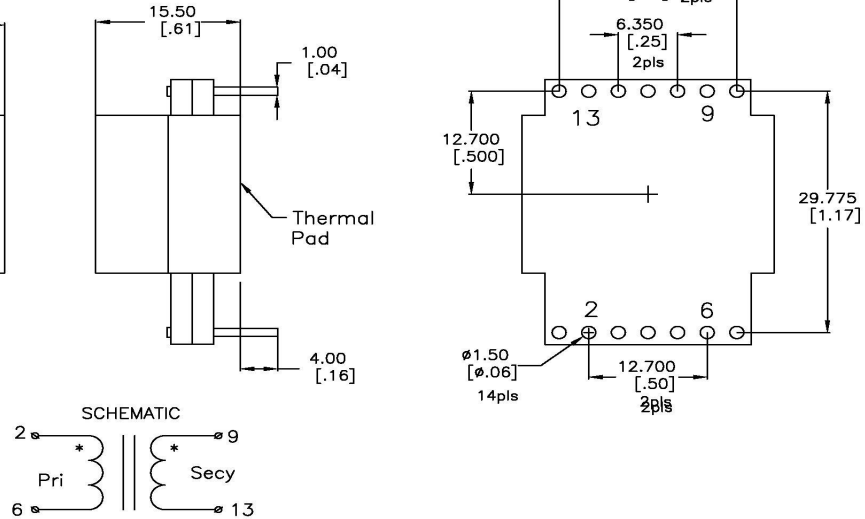


Mechanical Dimensions Drawing P26R6-AC Surface Mount

MECHANICAL DIMENSIONS [TOP VIEW]

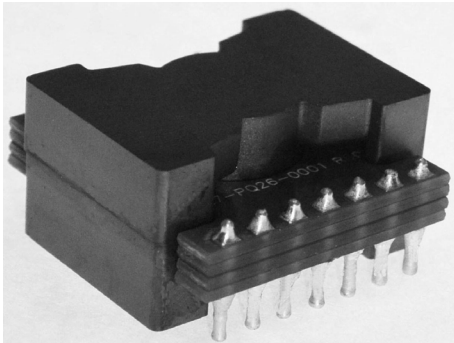


SUGGESTED THRU-HOLE LAYOUT [PCB TOP VIEW]



Mechanical Dimensions Drawing P26R6-AC Thru-Hole

Champs P26F6 Series BCM Planar Flyback Solutions for LT3798



- Optimized for PFC Offline No-Opto Isolated Flyback Converter Design, BCM
- Footprint 28.0 x 28.3 mm x 13.0 mm Ht
- Typical Efficiency 87-92%
- Data shown for rectified DC Input Voltage from 85-265 VAC Input Line
- Aggressive Interleave planar construction -- lowest achievable Leakage Inductance.
- Wide variety of PNs, Designs and Turns Ratios in stock
- Surface Mount, Thru-Hole, Pad-to-Pad, Embedded Planar Windings Available
- Proven in actual PFC Offline AC-DC converter applications using LT3798 IC

Catalog for P26F6 Series Including Data Sheets

1. Input Voltage Range 85-265 VAC 50-60Hz. BCM Flyback.

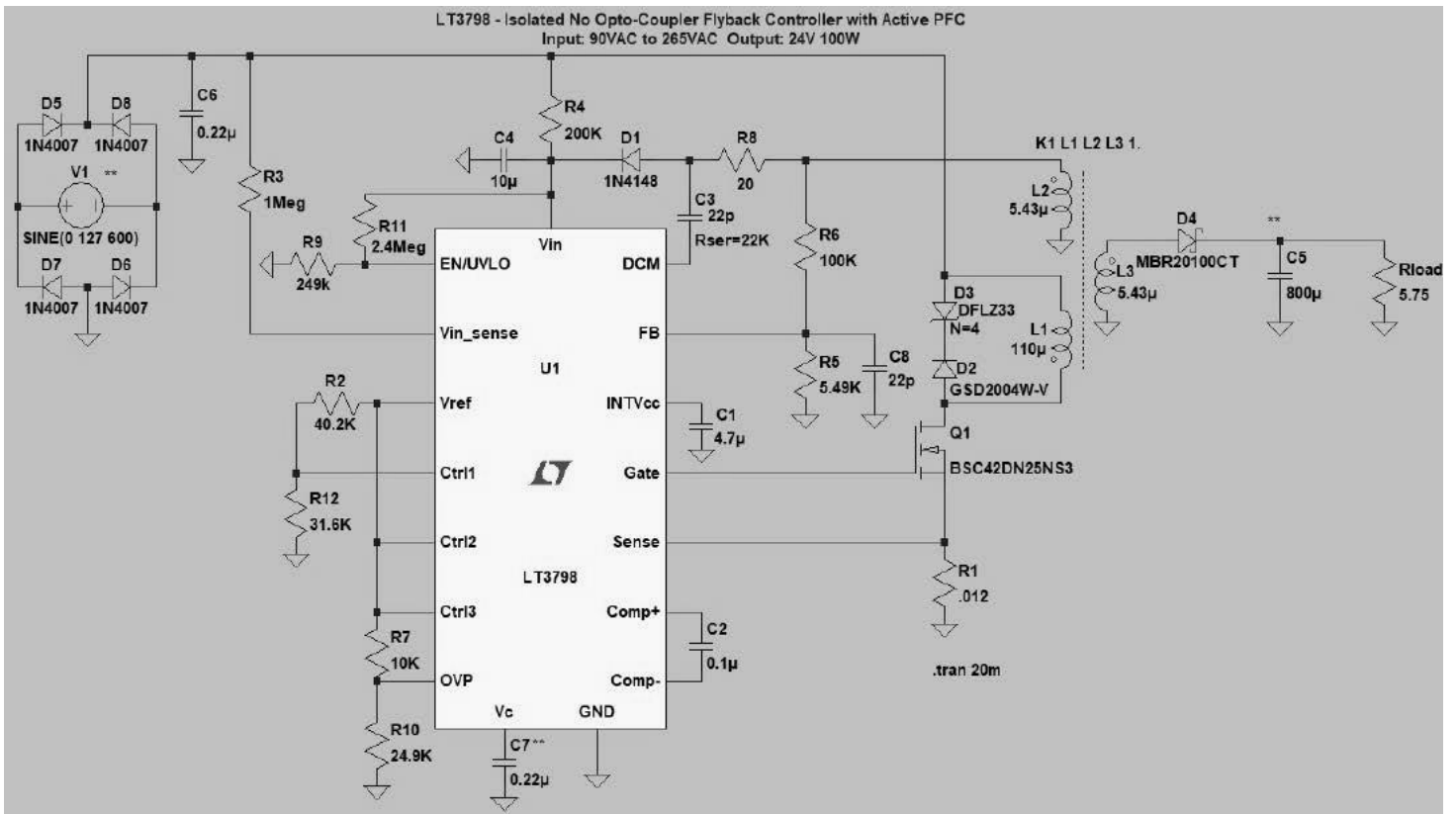
Champs PN	Vin (Min)	Vin (Max)	Vout	Iout (A dc)	Pout (Watts)	Freq (KHz)	Ipk [Rated]	Ipk [Max]	Mode
P26F6-1809-04-88R	98	375	53	2.35	125	88-280	6.3	9.6	BCM
P26F6-1806-03-98R	98	375	48	2.60	125	100-320	5.6	7.3	BCM
P26F6-1809-04-130R	98	375	48	1.56	75.0	88-300	4.0	6.0	BCM
P26F6-1805-04 -88R	98	375	28	4.5	125	88-280	6.4	9.6	BCM
P26F6-1805-04 -140R	98	375	28	2.70	75	88-280	3.9	6.1	BCM
P26F6-1804-04 -88R	98	375	24	5.2	125	85-280	6.4	9.6	BCM
P26F6-1804-04 -150R	98	375	24	3.1	75	88-280	3.7	5.7	BCM
P26F6-1802-04 -88R	98	375	12	10.4	125	85-280	6.5	9.6	BCM
P26F6-1802-04 -150R	98	375	12	6.25	75	85-280	3.8	5.6	BCM

Note:

LT3798 Product Page & DC1817B Ref Design:

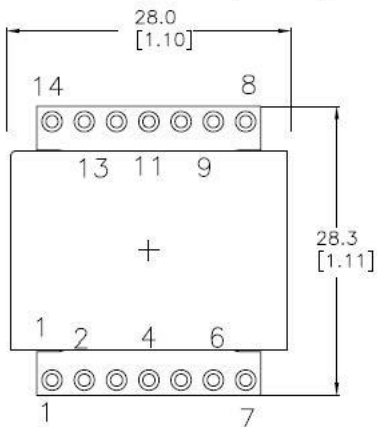
<https://www.analog.com/en/products/lt3798.html>

<https://www.analog.com/media/en/dsp-documentation/evaluation-kit-manuals/DC1817BFA.PDF>

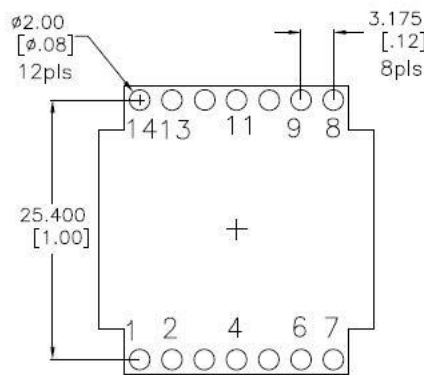


Simulation: P26F6 Series LT3798 Schematic -- 90-265VAC to 24Vout 100W BCM Flyback

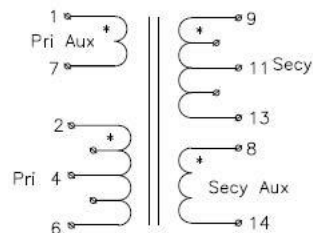
MECHANICAL DIMENSIONS [TOP VIEW]



SUGGESTED PAD LAYOUT [PCB TOP VIEW]



Schematic



Mechanical Design Drawing P26F6 Surface Mount