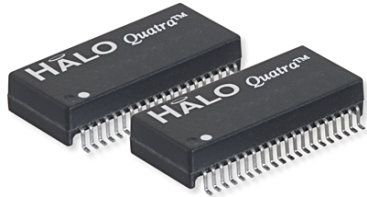


# Quatra™ 10BASE-T Transformer

SMD Quad Port 10BASE-T Transformer



## Product Features:

- Four Port 10BASE-T
- IEEE802.3i Compliant
- UL/EN60950 Recognized
- 100% Compliance Testing
- 1500Vrms Hi-Pot
- Patented Open Frame Construction

Part Number	Turns Ratio $\pm 3\%$ TX	RX	PRI OCL TX/RX ( $\mu\text{H}$ typ)	Cw/w TX/RX (pF max)	PRI LL TX/RX ( $\mu\text{H}$ max)	PRI DCR TX/RX ( $\Omega$ max)	Optional CMR Choke	RoHS <sup>1</sup>
TG44-1406NXLF	1CT:1.41	1:1	140	12	0.4	0.4	N/A	Pb-Free
TG44-1406NXRL	1CT:1.41	1:1	140	12	0.4	0.4	N/A	RoHS (7a)
TG45-1406NXLF	1CT:1.41CT	1:1	140	12	0.4	0.4	TX	Pb-Free
TG45-1406NXRL	1CT:1.41CT	1:1	140	12	0.4	0.4	TX	RoHS (7a)
TG46-1406NXLF	1CT:1.41CT	1:1	140	12	0.4	0.4	TX/RX	Pb-Free
TG46-1406NXRL	1CT:1.41CT	1:1	140	12	0.4	0.4	TX/RX	RoHS (7a)
TG57-1006NXLF	1CT:1	1:1	100	12	0.3	0.3	N/A	Pb-Free
TG57-1006NXRL	1CT:1	1:1	100	12	0.3	0.3	N/A	RoHS (7a)
TG58-1006NXLF	1CT:1CT	1:1	100	12	0.3	0.3	TX	Pb-Free
TG58-1006NXRL	1CT:1CT	1:1	100	12	0.3	0.3	TX	RoHS (7a)
TG59-1006NXLF	1CT:1CT	1:1	100	12	0.3	0.3	TX/RX	Pb-Free
TG59-1006NXRL	1CT:1CT	1:1	100	12	0.3	0.3	TX/RX	RoHS (7a)
TG62-1006NXLF	2CT:1	1:1	150	10	0.6 / 0.3	0.35	N/A	Pb-Free
TG62-1006NXRL	2CT:1	1:1	150	10	0.6 / 0.3	0.35	N/A	RoHS (7a)
TG66-1006NXLF	2CT:1CT	1:1	150	10	0.9 / 0.3	0.35	TX	Pb-Free
TG66-1006NXRL	2CT:1CT	1:1	150	10	0.9 / 0.3	0.35	TX	RoHS (7a)
TG87-2006NXLF	1CT:2	1:1	50 / 200	10 / 15	0.15 / 0.2	0.35 / 0.5	N/A	Pb-Free
TG87-2006NXRL	1CT:2	1:1	50 / 200	10 / 15	0.15 / 0.2	0.35 / 0.5	N/A	RoHS (7a)
TG88-2006NXLF	1CT:2CT	1:1	50 / 200	9 / 11	0.2 / 0.15	0.35 / 0.5	TX	Pb-Free
TG88-2006NXRL	1CT:2CT	1:1	50 / 200	9 / 11	0.2 / 0.15	0.35 / 0.5	TX	RoHS (7a)
TG89-2006NXLF	1CT:2CT	1:1	50 / 200	9 / 11	0.2 / 0.3	0.35 / 0.5	TX/RX	Pb-Free
TG89-2006NXRL	1CT:2CT	1:1	50 / 200	9 / 11	0.2 / 0.3	0.35 / 0.5	TX/RX	RoHS (7a)

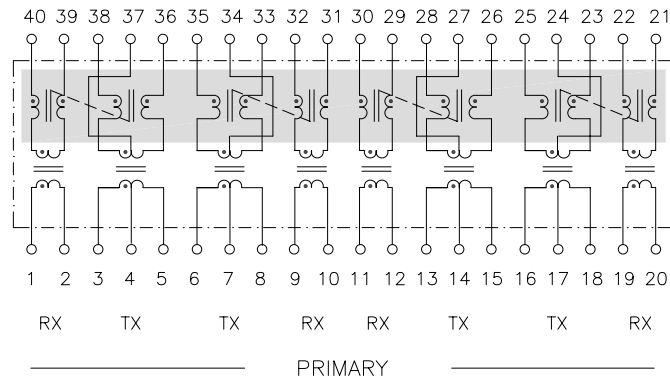
### Notes:

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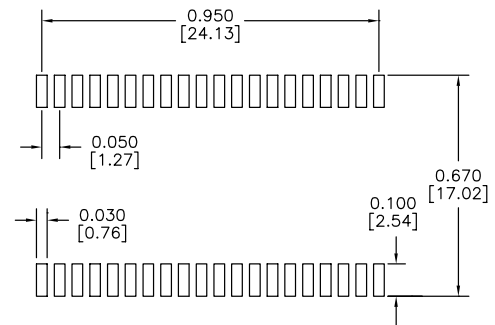
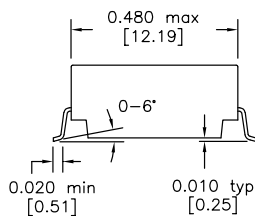
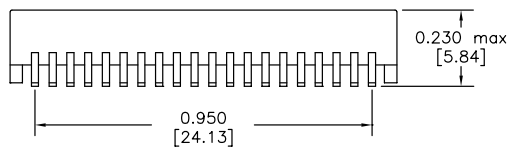
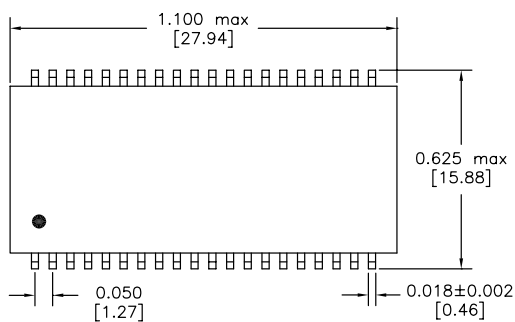
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# HALO Quatra 10BASE-T Transformers

## Circuit Diagram



## Mechanical



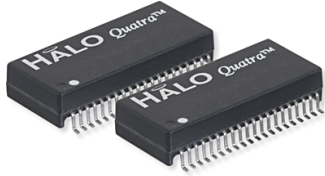
Recommended Solder Pad Layout  
 Dimensions: inch [mm]  
 Co-Planarity: 0.004 [0.10]

US Patent Numbers:  
 5,656,985 6,297,721 B1  
 6,297,720 B1 6,320,489 B1  
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Part Number	Turns Ratio ±3% TX	RX	PRI OCL TX/RX (μH typ)	Cw/w TX/RX (pF max)	PRI LL TX/RX (μH max)	PRI DCR TX/RX (Ω max)	Optional CMR Choke	RoHS <sup>1</sup>
TG41-S010NXLF	1CT:2.5CT	1:1	35 / 200	15	0.1 / 0.4	0.3 / 0.5	TX/RX	Pb-Free
TG41-S010NXRL	1CT:2.5CT	1:1	35 / 200	15	0.1 / 0.4	0.3 / 0.5	TX/RX	RoHS (7a)
TG44-S010NXLF	1CT:1.41	1:1	140	12	0.4	0.4	N/A	Pb-Free
TG44-S010NXRL	1CT:1.41	1:1	140	12	0.4	0.4	N/A	RoHS (7a)
TG45-S010NXLF	1CT:1.41CT	1:1	140	12	0.4	0.4	TX	Pb-Free
TG45-S010NXRL	1CT:1.41CT	1:1	140	12	0.4	0.4	TX	RoHS (7a)
TG46-S010NXLF	1CT:1.41CT	1:1	140	12	0.4	0.4	TX/RX	Pb-Free
TG46-S010NXRL	1CT:1.41CT	1:1	140	12	0.4	0.4	TX/RX	RoHS (7a)
TG57-S010NXLF	1CT:1CT	1:1	100	12	0.3	0.3	N/A	Pb-Free
TG57-S010NXRL	1CT:1CT	1:1	100	12	0.3	0.3	N/A	RoHS (7a)
TG58-S010NXLF	1CT:1CT	1:1	100	12	0.3	0.3	TX	Pb-Free
TG58-S010NXRL	1CT:1CT	1:1	100	12	0.3	0.3	TX	RoHS (7a)
TG59-S010NXLF	1CT:1CT	1:1	100	12	0.3	0.3	TX/RX	Pb-Free
TG59-S010NXRL	1CT:1CT	1:1	100	12	0.3	0.3	TX/RX	RoHS (7a)
TG62-S010NXLF	2CT:1	1:1	150	10	0.6 / 0.3	0.35	N/A	Pb-Free
TG62-S010NXRL	2CT:1	1:1	150	10	0.6 / 0.3	0.35	N/A	RoHS (7a)
TG66-S010NXLF	2CT:1CT	1:1	150	10	0.9 / 0.3	0.35	TX/RX	Pb-Free
TG66-S010NXRL	2CT:1CT	1:1	150	10	0.9 / 0.3	0.35	TX/RX	RoHS (7a)
TG87-S010NXLF	1CT:2	1:1	50 / 200	9 / 11	0.75 / 0.15	0.35 / 0.5	N/A	Pb-Free
TG87-S010NXRL	1CT:2	1:1	50 / 200	9 / 11	0.75 / 0.15	0.35 / 0.5	N/A	RoHS (7a)
TG88-S010NXLF	1CT:2CT	1:1	50 / 200	9 / 11	0.2 / 0.15	0.35 / 0.5	TX	Pb-Free
TG88-S010NXRL	1CT:2CT	1:1	50 / 200	9 / 11	0.2 / 0.15	0.35 / 0.5	TX	RoHS (7a)
TG89-S010NXLF	1CT:2CT	1:1	50 / 200	9 / 14	0.2 / 0.3	0.2 / 0.3	TX/RX	Pb-Free
TG89-S010NXRL	1CT:2CT	1:1	50 / 200	9 / 14	0.2 / 0.3	0.2 / 0.3	TX/RX	RoHS (7a)

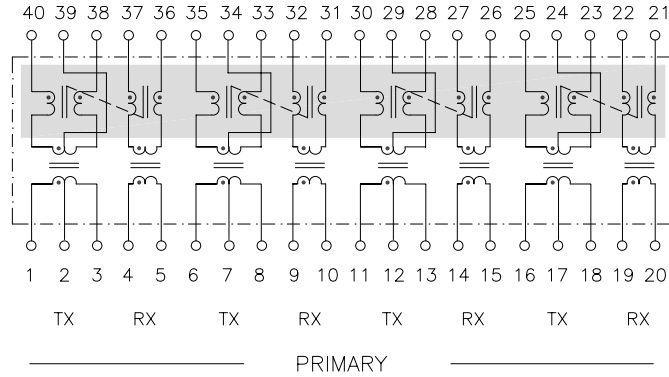
### Notes:

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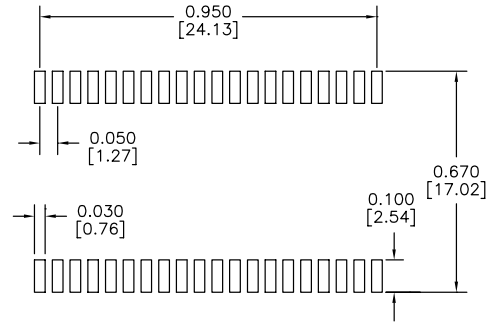
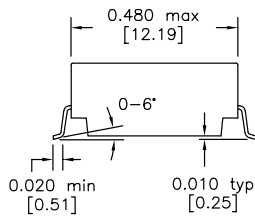
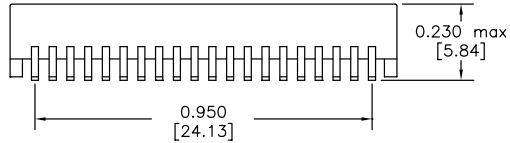
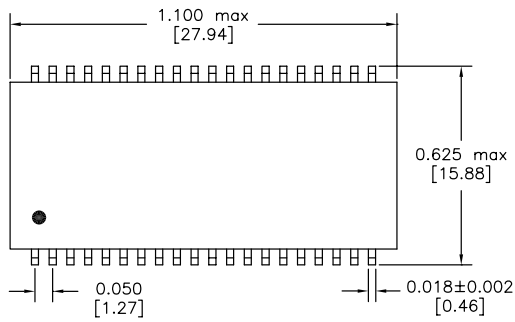
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# HALO Quatra 10BASE-T Transformers

## Circuit Diagram



## Mechanical



Recommended Solder Pad Layout  
 Dimensions: inch [mm]  
 Co-Planarity: 0.004 [0.10]

US Patent Numbers:  
 5,656,985 6,297,721 B1  
 6,297,720 B1 6,320,489 B1  
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TG44-S020NXLF	1CT:1.41	1:1	140	12	0.4	0.4	N/A	Pb-Free
TG44-S020NXRL	1CT:1.41	1:1	140	12	0.4	0.4	N/A	RoHS (7a)
TG45-S020NXLF	1CT:1.41CT	1:1	140	12	0.4	0.4	TX	Pb-Free
TG45-S020NXRL	1CT:1.41CT	1:1	140	12	0.4	0.4	TX	RoHS (7a)
TG46-S020NXLF	1CT:1.41CT	1:1	140	12	0.4	0.4	TX/RX	Pb-Free
TG46-S020NXRL	1CT:1.41CT	1:1	140	12	0.4	0.4	TX/RX	RoHS (7a)
TG57-S020NXLF	1CT:1	1:1	100	12	0.3	0.3	N/A	Pb-Free
TG57-S020NXRL	1CT:1	1:1	100	12	0.3	0.3	N/A	RoHS (7a)
TG58-S020NXLF	1CT:1CT	1:1	100	12	0.3	0.3	TX	Pb-Free
TG58-S020NXRL	1CT:1CT	1:1	100	12	0.3	0.3	TX	RoHS (7a)
TG59-S020NXLF	1CT:1CT	1:1	100	12	0.3	0.3	TX/RX	Pb-Free
TG59-S020NXRL	1CT:1CT	1:1	100	12	0.3	0.3	TX/RX	RoHS (7a)
TG62-S020NXLF	2CT:1	1:1	150	10	0.6 / 0.3	0.35	N/A	Pb-Free
TG62-S020NXRL	2CT:1	1:1	150	10	0.6 / 0.3	0.35	N/A	RoHS (7a)
TG66-S020NXLF	2CT:1CT	1:1	150	10	0.9 / 0.3	0.35	TX/RX	Pb-Free
TG66-S020NXRL	2CT:1CT	1:1	150	10	0.9 / 0.3	0.35	TX/RX	RoHS (7a)
TG87-S020NXLF	1CT:2	1:1	50 / 200	9 / 11	0.075 / 0.15	0.35 / 0.5	N/A	Pb-Free
TG87-S020NXRL	1CT:2	1:1	50 / 200	9 / 11	0.075 / 0.15	0.35 / 0.5	N/A	RoHS (7a)
TG88-S020NXLF	1CT:2CT	1:1	50 / 200	9 / 11	0.2 / 0.15	0.35 / 0.5	TX	Pb-Free
TG88-S020NXRL	1CT:2CT	1:1	50 / 200	9 / 11	0.2 / 0.15	0.35 / 0.5	TX	RoHS (7a)
TG89-S020NXLF	1CT:2CT	1:1	50 / 200	9 / 11	0.2 / 0.3	0.35 / 0.5	TX/RX	Pb-Free
TG89-S020NXRL	1CT:2CT	1:1	50 / 200	9 / 11	0.2 / 0.3	0.35 / 0.5	TX/RX	RoHS (7a)

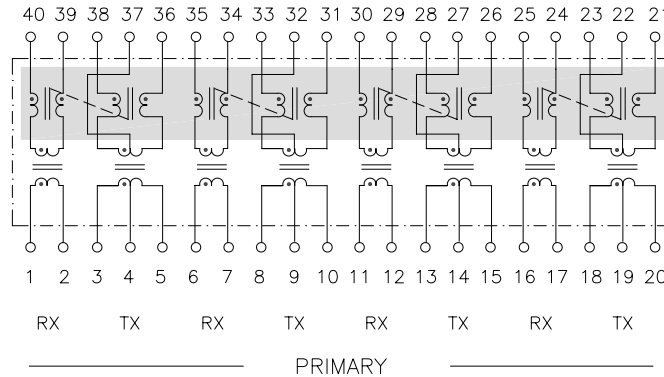
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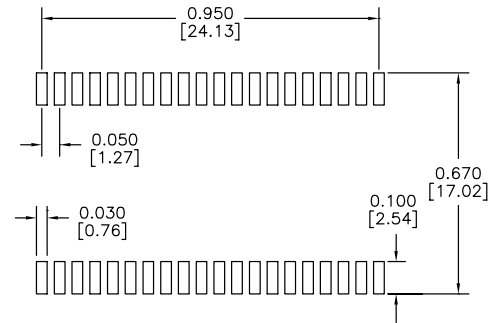
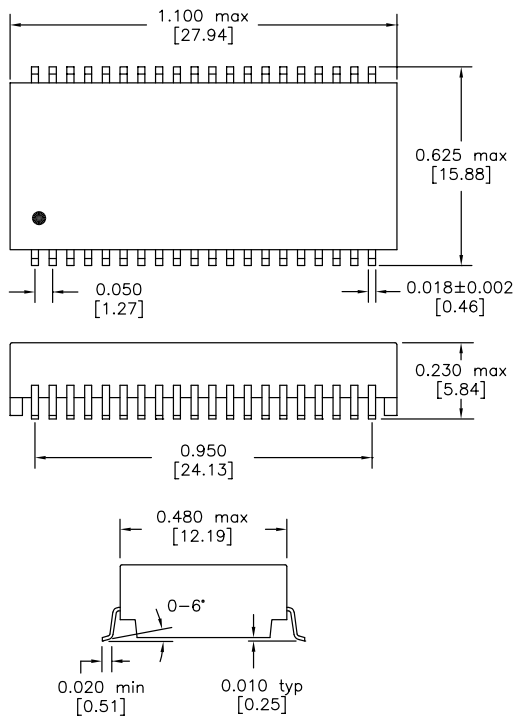
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Recommended Solder Pad Layout  
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HALO® Electronics is a leading supplier of high quality communication magnetics including signal transformers, filters, CMR chokes, PoE power transformers, DC/DC converters, and integrated Ethernet connectors. HALO's leading edge technology solutions are manufactured in ISO9001 and ISO14001 factories offering high quality products at a competitive price.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.