

T1/E1 Quatra™ Isolation Modules



SMD 4 Port T1/E1 Transformer



Product Features:

- T1/E1/CEPT/ISDN-PRI Quad Port Transformers
- UL/EN60950 Recognized
- DEMKO Recognized
- 100% Electrical Testing
- 1500Vrms Hi-Pot
- Patented Open Frame Construction

| Standard Temp (0 to 70°C) | | Turns Ratio (± 2%) PRI : SEC | | Primary Pins | | | RoHS |
|------------------------------|---------|---------------------------------|--------|-------------------------|----------------------------|-----------|------|
| Part Number | Circuit | TX | RX | TX | RX | | |
| TG05-1205NXLFF | B | 1:2 | 1:2 | See Circuit Diagram | See Circuit Diagram | Pb-Free | |
| TG05-1205NXRL | B | 1:2 | 1:2 | See Circuit Diagram | See Circuit Diagram | RoHS (7a) | |
| TG28-1205NXLFF | F | 1CT:1.36CT | 1:1 | 1-3, 8-10, 11-13, 18-20 | 4-5, 6-7, 14-15, 16-17 | Pb-Free | |
| TG28-1205NXRL | F | 1CT:1.36CT | 1:1 | 1-3, 8-10, 11-13, 18-20 | 4-5, 6-7, 14-15, 16-17 | RoHS (7a) | |
| TG29-1205NXLFF | A | 1:2 | 1:2CT | 1-2, 9-10, 11-12, 19-20 | 38-36, 35-33, 28-26, 25-23 | Pb-Free | |
| TG29-1205NXRL | A | 1:2 | 1:2CT | 1-2, 9-10, 11-12, 19-20 | 38-36, 35-33, 28-26, 25-23 | RoHS (7a) | |
| TG39-1205NXLFF | B | 1:1.15 | 1:1.15 | See Circuit Diagram | See Circuit Diagram | Pb-Free | |
| TG39-1205NXRL | B | 1:1.15 | 1:1.15 | See Circuit Diagram | See Circuit Diagram | RoHS (7a) | |

| Extended Temp (-40 to +85°C) | | Turns Ratio (± 2%) PRI : SEC | | Primary Pins | | | RoHS |
|---------------------------------|---------|---------------------------------|-------------|-------------------------|----------------------------|-----------|------|
| Part Number | Circuit | TX | RX | TX | RX | | |
| TG23-1505NXLFF | B | 1:2.42 | 1:2.42 | See Circuit Diagram | See Circuit Diagram | Pb-Free | |
| TG23-1505NXRL | B | 1:2.42 | 1:2.42 | See Circuit Diagram | See Circuit Diagram | RoHS (7a) | |
| TG27-1505NXLFF | E | 1:1.36 | 1:2CT | 1-2, 6-7, 11-12, 16-17 | 38-36, 33-31, 28-26, 23-21 | Pb-Free | |
| TG27-1505NXRL | E | 1:1.36 | 1:2CT | 1-2, 6-7, 11-12, 16-17 | 38-36, 33-31, 28-26, 23-21 | RoHS (7a) | |
| TG29-1505NXLFF | A | 1:2 | 1:2CT | 1-2, 9-10, 11-12, 19-20 | 38-36, 35-33, 28-26, 25-23 | Pb-Free | |
| TG29-1505NXRL | A | 1:2 | 1:2CT | 1-2, 9-10, 11-12, 19-20 | 38-36, 35-33, 28-26, 25-23 | RoHS (7a) | |
| TG34-1505NXLFF | G | 1:1.14/1.35 | 1:1.14/1.35 | 1-2, 6-7, 11-12, 16-17 | 37-36, 32-31, 27-26, 22-21 | Pb-Free | |
| TG34-1505NXRL | G | 1:1.14/1.35 | 1:1.14/1.35 | 1-2, 6-7, 11-12, 16-17 | 37-36, 32-31, 27-26, 22-21 | RoHS (7a) | |
| TG36-1505NXLFF | C | 1:1.15 | 1:1 | 1-2, 6-7, 11-12, 16-17 | 3-4, 8-9, 13-14, 18-19 | Pb-Free | |
| TG36-1505NXRL | C | 1:1.15 | 1:1 | 1-2, 6-7, 11-12, 16-17 | 3-4, 8-9, 13-14, 18-19 | RoHS (7a) | |

Notes:

1. Pb-Free parts are RoHS 6/6 compliant. RoHS (7a) parts contain lead per exemption 7a.
2. Parts with RL suffix are not recommended for new designs.
3. Please contact the factory or representative for individual datasheets or additional information.

For additional information contact your [local representative](#), or HALO's support staff at (650) 903-3800 or info@haloelectronics.com

T1/E1 Quatra™ Isolation Modules

SMD 4 Port T1/E1 Transformer



| Part Number | Circuit | Turns Ratio ($\pm 2\%$) PRI : SEC | | Primary Pins | | RoHS |
|---------------|---------|--|----------|----------------------------|----------------------------|-----------|
| | | TX | RX | TX | RX | |
| TG37-1505NXLF | B | 1:1.14 | 1:1.14 | See Circuit Diagram | See Circuit Diagram | Pb-Free |
| TG37-1505NXRL | B | 1:1.14 | 1:1.14 | See Circuit Diagram | See Circuit Diagram | RoHS (7a) |
| TG37-5176NXLF | D | 1:1.14CT | 1:1.14CT | 4-5, 9-10, 14-15, 19-20 | 40-39, 35-34, 30-29, 25-24 | Pb-Free |
| TG37-5176NXRL | D | 1:1.14CT | 1:1.14CT | 4-5, 9-10, 14-15, 19-20 | 40-39, 35-34, 30-29, 25-24 | RoHS (7a) |
| TG39-1505NXLF | B | 1:1.15 | 1:1.15 | See Circuit Diagram | See Circuit Diagram | Pb-Free |
| TG39-1505NXRL | B | 1:1.15 | 1:1.15 | See Circuit Diagram | See Circuit Diagram | RoHS (7a) |
| TG42-1505NXLF | C | 1:1.41 | 1:1.41 | 1-2, 6-7, 11-12, 16-17 | 38-37, 33-22, 28-27, 23-22 | Pb-Free |
| TG42-1505NXRL | C | 1:1.41 | 1:1.41 | 1-2, 6-7, 11-12, 16-17 | 38-37, 33-22, 28-27, 23-22 | RoHS (7a) |
| TG49-LVL1NXLF | D | 1:2CT | 1CT:2 | 4-5, 9-10, 14-15, 19-20 | 1-3, 6-8, 11-13, 16-18 | Pb-Free |
| TG49-LVL1NXRL | D | 1:2CT | 1CT:2 | 4-5, 9-10, 14-15, 19-20 | 1-3, 6-8, 11-13, 16-18 | RoHS (7a) |
| TG63-1505NXLF | E | 1:1.15 | 1:2CT | 1-2, 6-7, 11-12, 16-17 | 38-36, 33-31, 28-26, 23-21 | Pb-Free |
| TG63-1505NXRL | E | 1:1.15 | 1:2CT | 1-2, 6-7, 11-12, 16-17 | 38-36, 33-31, 28-26, 23-21 | RoHS (7a) |
| TG63-S003NXLF | C | 1:1.15 | 1:2 | 3-4, 8-9, 13-14, 18-19 | 1-2, 6-7, 11-12, 16-17 | Pb-Free |
| TG63-S003NXRL | C | 1:1.15 | 1:2 | 3-4, 8-9, 13-14, 18-19 | 1-2, 6-7, 11-12, 16-17 | RoHS (7a) |
| TG64-1505NXLF | G | 1:1/1.26 | 1:2CT | 1-2, 6-7, 11-12, 16-17 | 37-36, 32-31, 27-26, 22-21 | Pb-Free |
| TG64-1505NXRL | G | 1:1/1.26 | 1:2CT | 1-2, 6-7, 11-12, 16-17 | 37-36, 32-31, 27-26, 22-21 | RoHS (7a) |
| TG70-1505NXLF | D | 1:1.36CT | 1:1.36CT | 4-5, 9-10, 14-15, 19-20 | 40-39, 35-34, 30-29, 25-24 | Pb-Free |
| TG70-1505NXRL | D | 1:1.36CT | 1:1.36CT | 4-5, 9-10, 14-15, 19-20 | 40-39, 35-34, 30-29, 25-24 | RoHS (7a) |
| TG73-1505NXLF | C | 1:2.3 | 1:1 | 3-4, 8-9, 13-14, 18-19 | 1-2, 6-7, 11-12, 16-17 | Pb-Free |
| TG73-1505NXRL | C | 1:2.3 | 1:1 | 3-4, 8-9, 13-14, 18-19 | 1-2, 6-7, 11-12, 16-17 | RoHS (7a) |
| TG80-1505NXLF | G | 1:2.45CT | 1:2.45CT | 1-2, 6-7, 11-12, 16-17 | 37-36, 32-31, 27-26, 22-21 | Pb-Free |
| TG80-1505NXRL | G | 1:2.45CT | 1:2.45CT | 1-2, 6-7, 11-12, 16-17 | 37-36, 32-31, 27-26, 22-21 | RoHS (7a) |
| TG83-1505NXLF | C | 1:2 | 1:1 | 1-2, 6-7, 11-12, 16-17 | 37-36, 32-31, 27-26, 22-21 | Pb-Free |
| TG83-1505NXRL | C | 1:2 | 1:1 | 1-2, 6-7, 11-12, 16-17 | 37-36, 32-31, 27-26, 22-21 | RoHS (7a) |
| TG87-S004NXLF | E | 1:2CT | 1:1 | 38-36, 33-31, 28-26, 23-21 | 1-2, 6-7, 11-12, 16-17 | Pb-Free |
| TG87-S004NXRL | E | 1:2CT | 1:1 | 38-36, 33-31, 28-26, 23-21 | 1-2, 6-7, 11-12, 16-17 | RoHS (7a) |

Notes:

1. Pb-Free parts are RoHS 6/6 compliant. RoHS (7a) parts contain lead per exemption 7a.
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| | Standard Temp | Extended Temp |
|------|--------------------|--------------------|
| OCL: | 1.2mH (typ) | 1.5mH (typ) |
| DCR: | 0.7 Ω (max) | 0.8 Ω (max) |
| LL: | 0.4 μ F (max) | 0.5 μ F (max) |

Electrical Specifications @ 25°C

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