

ISDN U-Interface Transformers

| Manufacturer Name | I.C. P/N | Transformer P/N | High Isolation P/N |
|-------------------|----------------|-----------------|--------------------|
| Motorola | MC145472 | T-13209 | T-13223 |
| Motorola | MC145572 | T-13207 | T-13221 |
| National | TP 3410 | T-13211 | T-13224 |
| National | TP 3410 | T-13212 | T-13220 |
| Siemens | PEB 2091 | T-13214 | T-13222 |
| Siemens | PEB 2090/20901 | T-13215 | T-13225 |
| SGS-Thomson | SD 5411 | T-13210 | T-13219 |

For both 2B1Q & 4B3T ISDN U-Interface Applications

Excellent Longitudinal Balance

Designed for use with leading Transceiver Chips

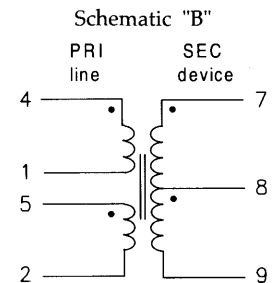
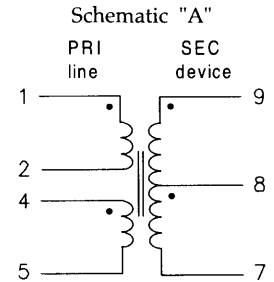
Meets key parameters of ANSI T1.601-1992

Isolation 2000 V_{RMS} & 3000 V_{RMS} Minimum

Surface Mount Versions Available

Electrical Specifications at 25°C

| Part Number | Turns Ratio (± 3%) | OCL ^(1,3) Pri ±6% (mH) | Line Side Pins | DCR ⁽¹⁾ max. (Ω) | DCR ⁽²⁾ max. (Ω) | DC Bias (mA) | Coding | Isolation (V _{RMS}) | Schem. Style ⁽³⁾ |
|-------------|--------------------|-----------------------------------|----------------|-----------------------------|-----------------------------|--------------|--------|-------------------------------|-----------------------------|
| T-13207 | 1.25:1 | 28.0 | (1-5) | 12 | 8 | 80 | 2B1Q | 2000 | A |
| T-13209 | 2.00:1 | 27.0 | (1-5) | 11.6 | 6.4 | 60 | 2B1Q | 2000 | A |
| T-13210 | 1.50:1 | 15.0 | (4-2) | 16 | 2.5 | 60 | 2B1Q | 2000 | B |
| T-13211 | 1.50:1 | 27.0 | (4-2) | 20 | 3.0 | 60 | 2B1Q | 2000 | B |
| T-13212 | 1.50:1 | 27.0 | (1-5) | 20 | 3.0 | 60 | 2B1Q | 2000 | A |
| T-13214 | 1.65:1 | 15.5 | (1-5) | 6.0 | 3.5 | 60 | 2B1Q | 2000 | A |
| T-13215 | 1.32:1 | 7.7 | (1-5) | 2.4 | 2.7 | 60 | 4B3T | 2000 | A |
| T-13219 | 1.50:1 | 15.0 | (4-2) | 18 | 3.0 | 60 | 2B1Q | 3000 | B |
| T-13220 | 1.50:1 | 27.0 | (1-5) | 20 | 3.0 | 60 | 2B1Q | 3000 | A |
| T-13221 | 1.25:1 | 25.5 | (1-5) | 13 | 9.0 | 80 | 2B1Q | 3000 | A |
| T-13222 | 1.65:1 | 15.5 | (1-5) | 6.0 | 3.5 | 60 | 2B1Q | 3000 | A |
| T-13223 | 2.00:1 | 27.0 | (1-5) | 12.6 | 7.4 | 60 | 2B1Q | 3000 | A |
| T-13224 | 1.50:1 | 27.0 | (4-2) | 20 | 3.0 | 60 | 2B1Q | 3000 | B |
| T-13225 | 1.32:1 | 7.7 | (1-5) | 2.7 | 3.0 | 60 | 4B3T | 3000 | A |



1. Line Side.
2. Device Side
3. OCL Tested @10 kHz / 700 mV, pins 2&4 shorted for Schem. "A"; pins 1&5 shorted for Schem. "B."
3. For all parts unused Pin # 6 can be removed for keying to printed circuit board, Add suffix "-9"

Longitudinal Balance (2B1Q Coding)
281 Hz to 40 KHz 55 dB min.
> 40 KHz -20 dB/decade

Longitudinal Balance (4B3T Coding)
5 KHz 20 dB min.
20 KHz to 150 KHz 40 dB min.
1 MHz 36 dB min.

Return Loss
10 and 25 KHz 20 dB min.

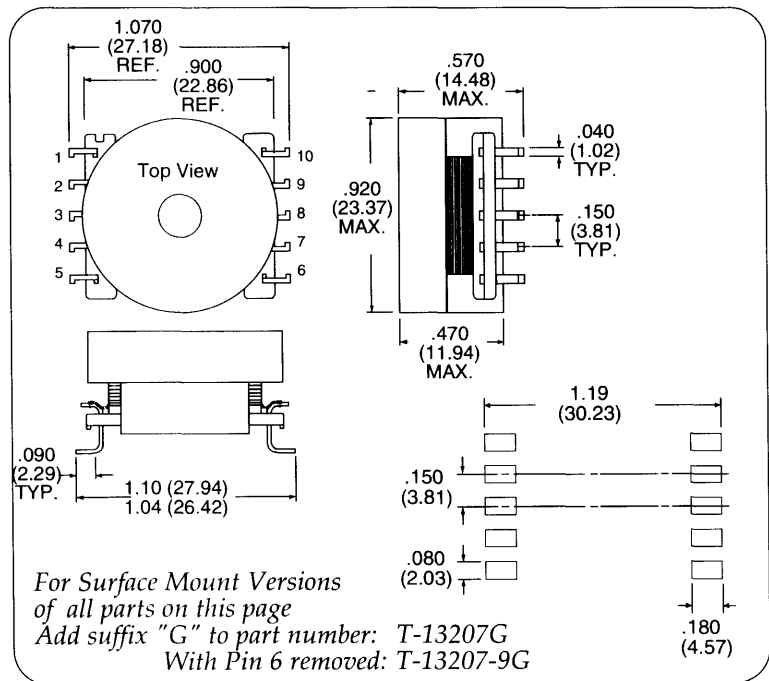
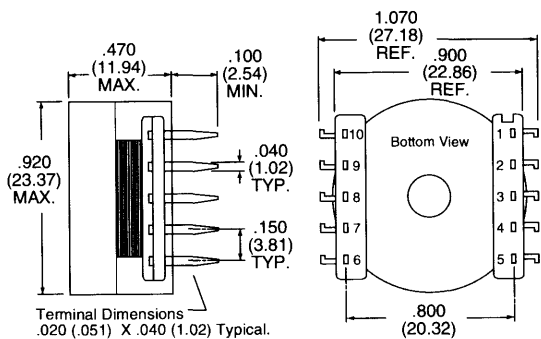
Operating Temp. Range -40°C to +85°C

Primary is Line Side / Secondary is Chip Side

Surge Voltage Capability:

Metallic Voltage: 800 V peak, 10/700 μS
Longitudinal Voltage: 2400 V peak, 10/560 μS

Package Physical Dimensions in inches (mm)



For complete details including downloadable PDF catalogs and data sheets please visit www.rhombus-ind.com