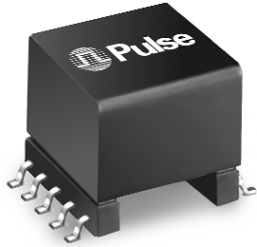


# ISDN U-INTERFACE TRANSFORMERS SMALL SURFACE MOUNT PACKAGE For Applications in 2B1Q and 4B3T Coding



**Small Surface  
Mount Package**

- Matched to leading transceiver ICs
- Meets ANSI T1.601-1992 and ETSI ETR 080 standards for longitudinal balance, linearity and return loss
- Small compact footprint and minimum Isolation: 1500 Vrms

## Electrical Specifications @ 25°C

| Part Number | Turns Ratio<br>Line:Chip<br>(±2%) | Line Side<br>Pins | OCL<br>Line side<br>(mH) | DCR<br>Line Side<br>(Ω) | DCR<br>Chip Side<br>(Ω) | Isolation<br>Voltage<br>(Vrms MIN) | Idc<br>(mA) | Schematic |
|-------------|-----------------------------------|-------------------|--------------------------|-------------------------|-------------------------|------------------------------------|-------------|-----------|
| T4031       | 1.65CS:1CT                        | (1-5)             | 13-18                    | 7.40 MAX                | 4.4 MAX                 | 1500                               | 50          | A         |
| T4032       | 1.25CS:1CT                        | (1-5)             | 11.9-16.1                | 6.40 MAX                | 4.4 MAX                 | 1500                               | 50          | A         |
| T4033       | 1.25CS:1CT                        | (1-5)             | 25.5-30.5                | 15.66 MAX               | 11 MAX                  | 1500                               | 40          | B         |
| T4043*      | 2CS:1CS                           | (1-5)             | 13.5-16.5                | 7.80 MAX                | 4.0 MAX                 | 1500                               | 50          | C         |
| T4067       | 1.32CS:1                          | (1-5)             | 7.5-8.3                  | 1.60 MAX                | 2.5 MAX                 | 1500                               | 55          | D         |

## Additional Specifications

| Part Number | Return Loss                  | Longitudinal Balance          |
|-------------|------------------------------|-------------------------------|
| T4031       | 10 kHz to 25 kHz @ 20 dB MIN | 281 Hz to 40 kHz @ 55 dB MIN  |
| T4032       | 15 kHz to 50 kHz @ 16 dB MIN | 20 kHz to 150 kHz @ 40 dB MIN |
| T4033       | 10 kHz to 25 kHz @ 20 dB MIN | 281 Hz to 40 kHz @ 55 dB MIN  |
| T4043*      | 10 kHz to 25 kHz @ 20 dB MIN | 281 Hz to 40 kHz @ 55 dB MIN  |
| T4067       | 15 kHz to 50 kHz @ 16 dB MIN | 15 kHz to 50 kHz @ 40 dB MIN  |

NOTES: Common Mode Chokes for EMI reduction are also available. Recommended part numbers are either **PE-68624** (Surface Mount) or **PE-65944** (Through Hole) — see data sheet **G002**. Six Sigma analysis has substantiated that **T4033** line side inductance may range from 25.5 to 30.5 mH. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (ex: T4031T).

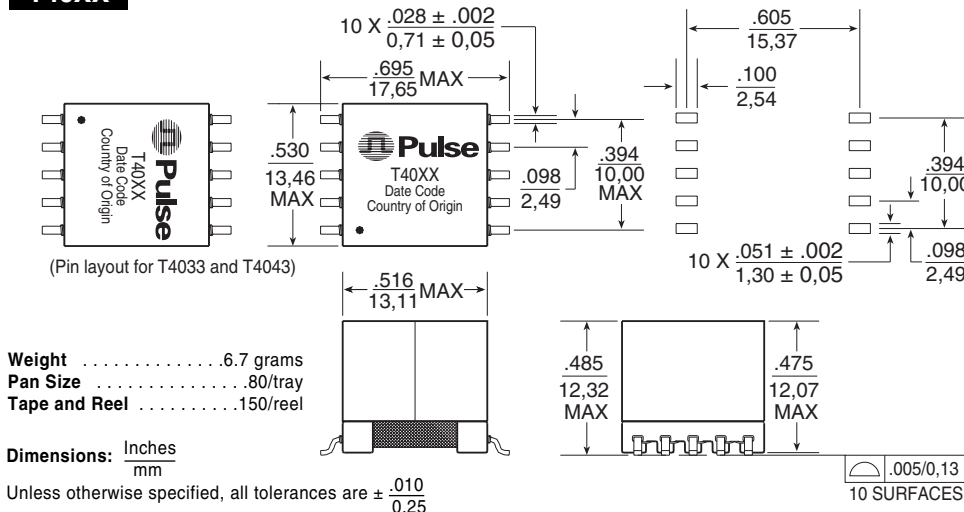
\*Provisional Specifications

## Transformer Selection

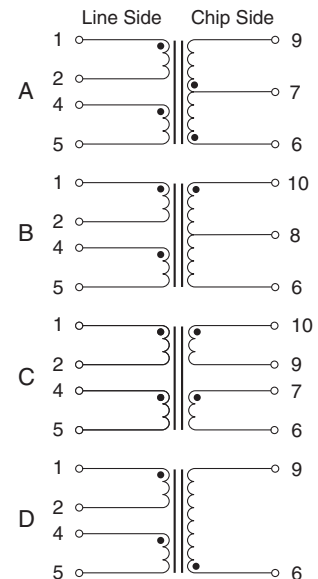
| Company  | Chip            | Transformer |
|----------|-----------------|-------------|
| Motorola | MC145572        | T4033       |
| Infineon | PEB 2091        | T4031       |
|          | PEB 8091/8191   | T4031       |
|          | PEB 24902/24911 | T4031       |
|          | PSB 21910/21911 | T4031       |
|          | PEB 2491        | T4032       |
| Alcatel  | PEB 20901       | T4067       |
|          | MTC 20276       | T4043       |

## Mechanical

### T40XX



## Schematics



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