

HIGH FREQUENCY MAGNETICS

T1/E1 Through Hole Transformers

TM00121

- Operates as a line-interface pulse transformer in DS1 and CEPT applications
- Designed for automatic machine placement into printed wiring boards
- Only difference between the 2745AJ and 2745AJ2 is the terminal length
- Only difference between the 2745CA and 2745CA2 is the terminal length
- Operating temperature range: -40° C to +85° C
- Meets IEC 695, 2-2 flammability requirements
- PWB Process Capability: standard printed wiring board assembly techniques, total-immersion cleaning
- Reliability testing: Shock, vibration, temperature cycling, temperature - humidity - bias

ELECTRICAL SPECIFICATIONS at 25° C

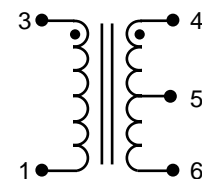
| Part Number | Turns Ratio ± 2% | Primary Inductance* mH min | Leakage Inductance μH max | DCR Ω max | | Interwinding Capacitance pFmax | Interwinding Breakdown Voltage Vrms min | Shielded Version |
|-------------|---------------------|-------------------------------|------------------------------|--------------|------|-----------------------------------|--|------------------|
| | Pri : Sec | | | Pri | Sec | | | |
| 2745AJ | 1 : 1.07 CT | 1.0 | 0.8 | 0.50 | 1.00 | N/A | 850 | — |
| 2745AJ2 | 1 : 1.07 CT | 1.0 | 0.8 | 0.50 | 1.00 | N/A | 850 | — |
| 2745CA | 1 : 1.36 CT | 0.92 | 0.7 | 0.85 | 1.2 | 20 | 1000 | 2741H2 |
| 2745CA2 | 1 : 1.36 CT | 0.92 | 0.7 | 0.85 | 1.2 | 20 | 1000 | 2741H2 |

* Measured at 10 kHz, 0.1 Vac

| Lucent IC Part Number | Application | Receive | Transmit |
|-----------------------|-------------------------|-----------------|-----------------|
| | | Bel Part Number | Bel Part Number |
| T7288 | CEPT 75 / CEPT 120 | 2745AF2 | 2745CA2 |
| T7289A | DS1 | 2745AF2 | 2745G3 |
| T7290A | DS1 | 2745AF2 | 2745AJ2 |
| | T1 / CEPT 75 / CEPT 120 | 2745AF2 | 2745CA2 |
| T7630 | DS1 | 2745G3 | 2745G3 |
| | CEPT 75.1 | 2745AJ2 | 2745AJ2 |
| | CEPT 75.2 / CEPT 120 | 2745CA2 | 2745CA2 |
| T7688 | CEPT 75.1 | 2745AJ2 | 2745AJ2 |
| | CEPT 75.2 / CEPT 120 | 2745CA2 | 2745CA2 |
| T7689 | DS1 | 2745G3 | 2745G3 |
| T7690 T7698 | DS1 | 2745G3 | 2745G3 |
| | CEPT 75.1 | 2745AJ2 | 2745AJ2 |
| | CEPT 75.2 / CEPT 120 | 2745CA2 | 2745CA2 |

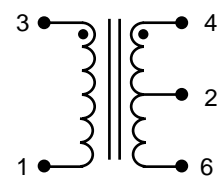
SCHEMATICS

2745AJ
2745AJ2



Primary Secondary

2745CA
2745CA2

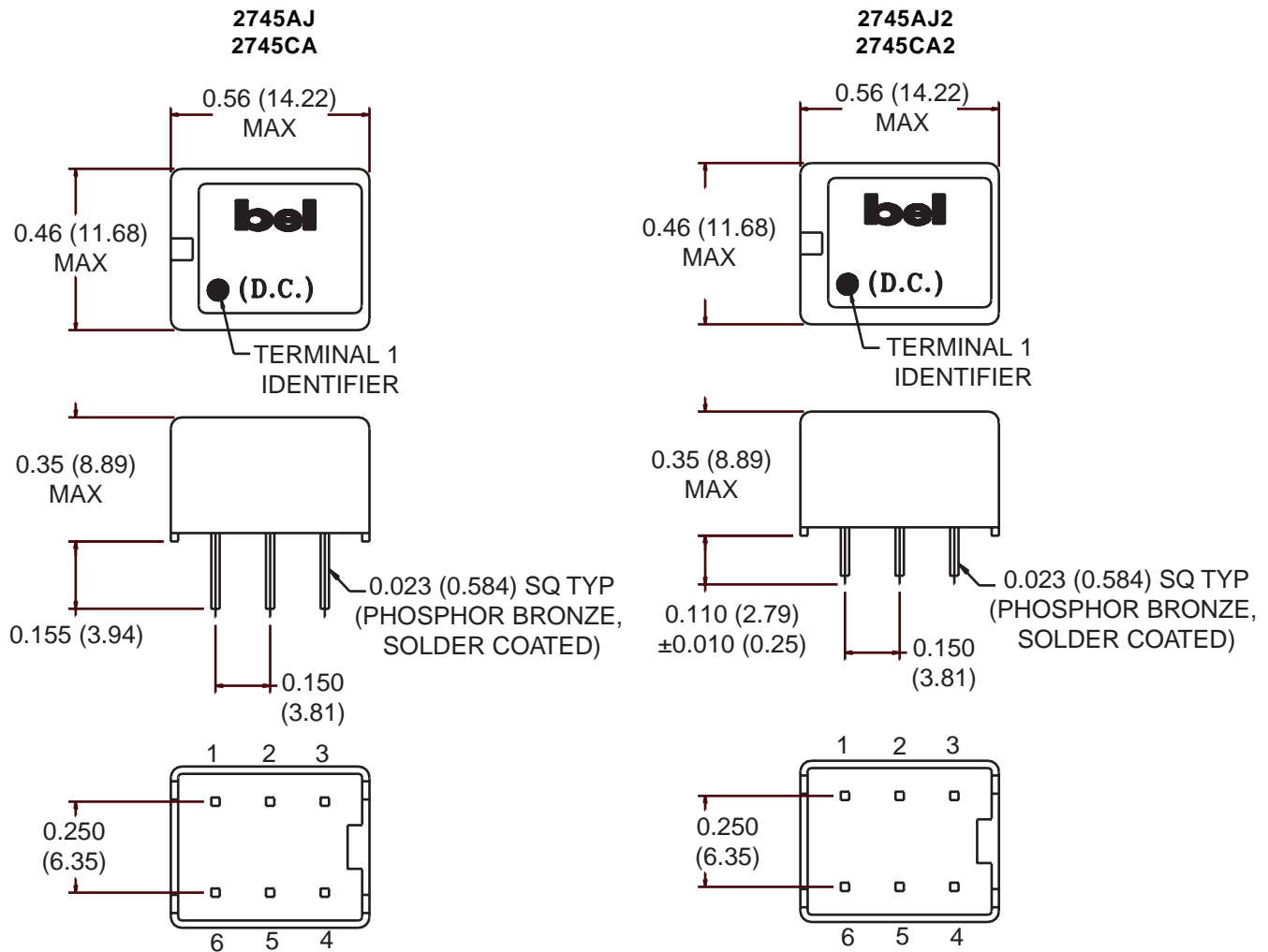


Primary Secondary

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TM00121

MECHANICAL



Unless otherwise specified, dimensions are nominal and in inches (millimeters).

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