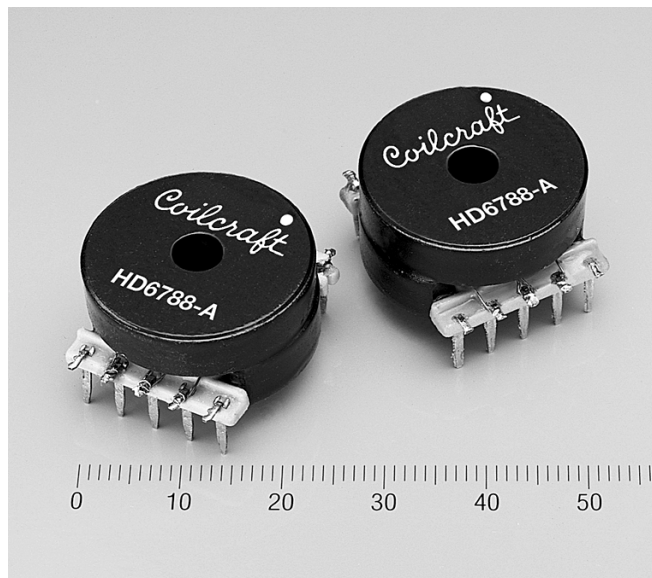


# HDSL Transformers



These HDSL transformers have been designed to work with a variety of specific transceiver chips to provide 2B1Q coded data transmission.

They're engineered for low leakage inductance and return loss as well as high line isolation. Longitudinal balance and THD are optimized for the best overall performance at a given transmission speed.

For free evaluation samples or to discuss custom designs, please contact Coilcraft.

## SPECIFICATIONS

| Part number | Chip set          | Data rate (kb/s) | Turns ratio chip:line | Primary inductance (mH) $\pm 6\%$ | Leakage inductance ( $\mu$ H) max | DCR ( $\Omega$ ) max |                 |
|-------------|-------------------|------------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------|
|             |                   |                  |                       |                                   |                                   | Chip side            | Line side       |
| HD6788      | Brooktree BT8952  | 784              | 2CT:1:1               | 3.0                               | 20                                | 4.4 (2-4)            | 2.2 (6-7, 8-9)  |
| HD6789      | Brooktree BT8952  | 1168             | 2CT:1:1               | 2.0                               | 20                                | 4.4 (2-4)            | 2.2 (6-7, 8-9)  |
| HD6790      | Brooktree BT8921  | 784              | 1CT:1:1               | 3.0                               | 20                                | 2.2 (2-4)            | 2.2 (6-7, 8-9)  |
| HD6791      | Brooktree BT8921  | 1168             | 1CT:1:1               | 2.0                               | 20                                | 2.2 (2-4)            | 2.2 (6-7, 8-9)  |
| HD6792      | Level One SK70704 | 784              | 1CT:1.8 CT            | 2.75                              | 45                                | 3.2 (2-4)            | 3.0 (6-8, 8-10) |
| HD6793      | Level One SK70704 | 1168             | 1CT:1.8 CTS           | 2.06                              | 40                                | 2.0 (2-4)            | 2.0 (6-7, 9-10) |

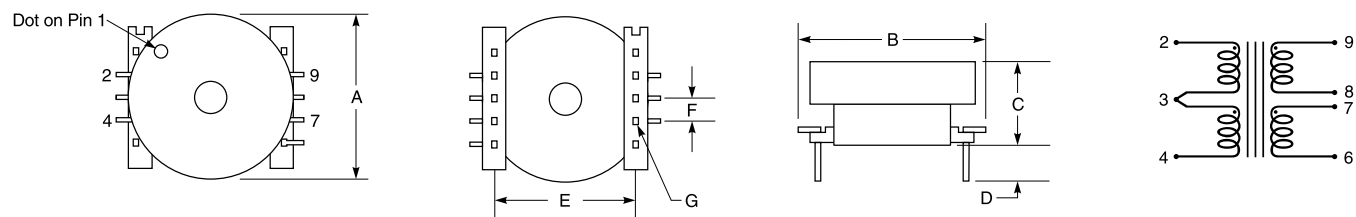
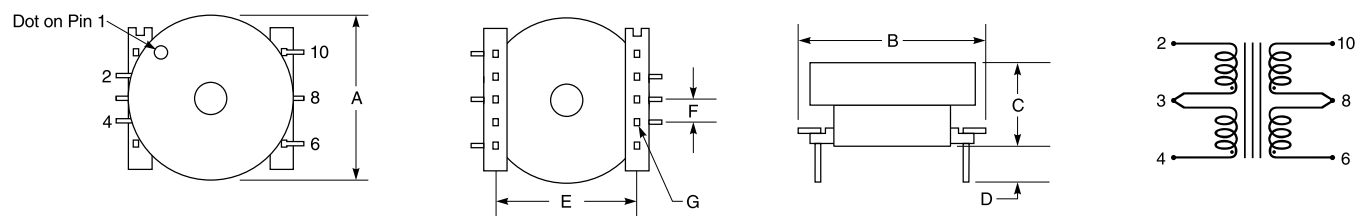
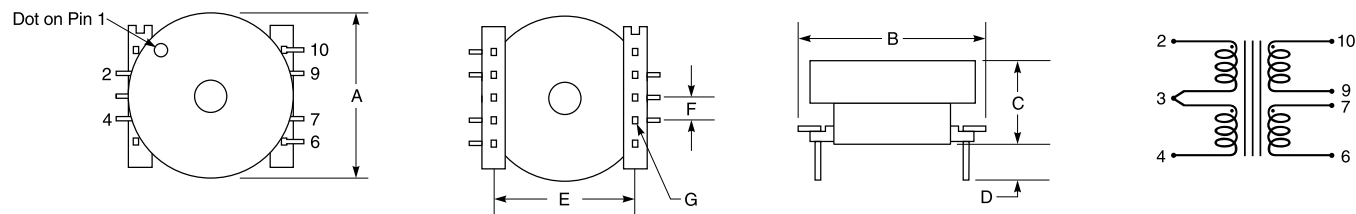
| Part number | DC bias capacity (mA) | Dielectric strength (V) min | Return loss (dB) min | Longitudinal balance (dB) typ |              | THD (dB) typ  |
|-------------|-----------------------|-----------------------------|----------------------|-------------------------------|--------------|---------------|
| HD6788      | 160                   | 1500                        | 18 @ 40 - 200 kHz    | 69 @ 30 kHz                   | 63 @ 196 kHz | -74 @ 100 kHz |
| HD6789      | 160                   | 1500                        | 16.5 @ 40 - 320 kHz  | 77 @ 30 kHz                   | 63 @ 292 kHz | -74 @ 100 kHz |
| HD6790      | 80                    | 1500                        | 18 @ 40 - 200 kHz    | 68 @ 30 kHz                   | 56 @ 196 kHz | -74 @ 100 kHz |
| HD6791      | 80                    | 1500                        | 16.5 @ 40 - 320 kHz  | 75 @ 30 kHz                   | 62 @ 292 kHz | -74 @ 100 kHz |
| HD6792      | 80                    | 1500                        | 18 @ 40 - 200 kHz    | 60 @ 30 kHz                   | 48 @ 196 kHz | -75 @ 5 kHz   |
| HD6793      | 80                    | 1500                        | 16.5 @ 40 - 320 kHz  | 60 @ 30 kHz                   | 48 @ 292 kHz | -74 @ 5 kHz   |

Specifications subject to change without notice. Document 201-1 Revised 5/21/99

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**NEW!**

# HDSL Transformers

**HD6788, HD6789, HD6790, HD6791****HD6792****HD6793**

| A max | B max | C max | D min | E     | F typ | G typ       |
|-------|-------|-------|-------|-------|-------|-------------|
| .950  | 1.05  | .46   | .12   | .800  | .150  | .045 x .025 |
| 24,13 | 26,7  | 11,7  | 3,0   | 20,32 | 3,81  | 1,14 x 0,64 |

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Specifications subject to change without notice. Document 201-2 Revised 5/21/99

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