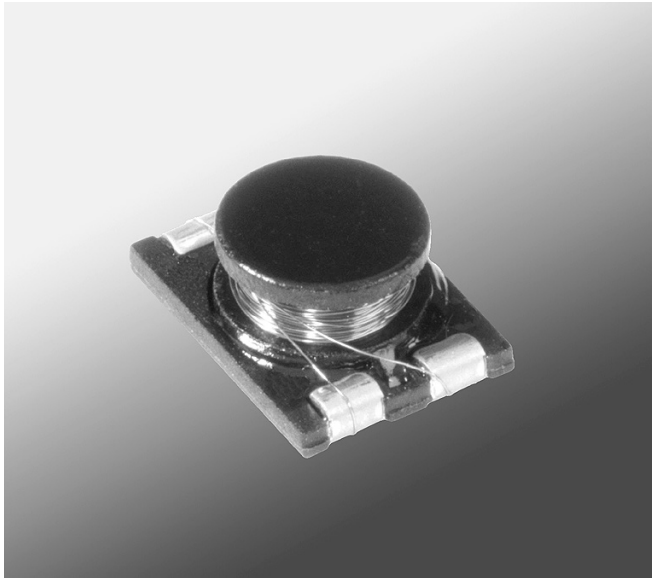
DW3316 Coupled Inductors for xDSL



- Coupled inductor optimized for xDSL filtering applications
- Can be used as a common mode choke, 1:1 transformer or in SEPIC applications

Core material Ferrite

Terminations RoHS compliant gold over nickel over phos bronze. Other terminations available at additional cost.

Weight 1.13 – 1.34 g

Ambient temperature –40°C to +85°C

Storage temperature Component: –40°C to +85°C. Tape and reel packaging: –40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

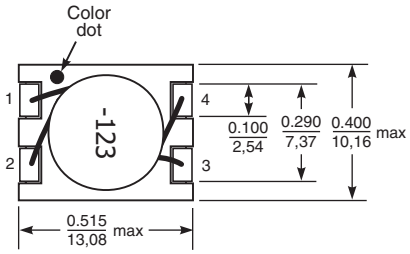
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

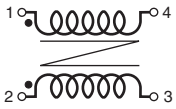
Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 750 per 13″ reel Plastic tape: 24 mm wide, 0.36 mm thick, 16 mm pocket spacing, 5.5 mm pocket depth

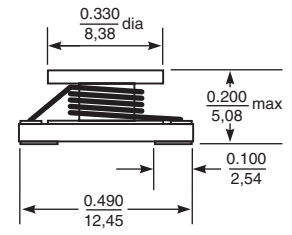
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

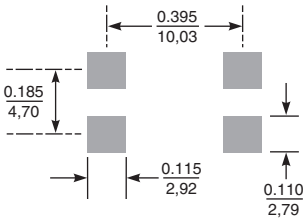
Part number[1]	Inductance[2] ±20% (mH)	DCR max (Ohms)	SRF[3] typ (MHz)	Isat[4] (mA)
DW3316-155ML_	1.5	10.8	1.70	300
DW3316-275ML_	2.7	18.0	1.25	230
DW3316-335ML_	3.3	20.0	1.10	180
DW3316-395ML_	3.9	23.0	0.968	160
DW3316-475ML_	4.7	26.0	0.850	160
DW3316-685ML_	6.8	42.0	0.690	150





Schematic





Recommended Land Pattern

Dimensions are in inches / mm

1. When ordering, please specify **termination** and **packaging** codes:

   DW3316-685MLD

   Termination: **L** = Gold over nickel over phos bronze terminations Special order: **T** = RoHS tin-silver-copper (95.5/4/0.5) or **S** = non-RoHS tin-lead (63/37).

   Packaging: **D** = 13″ machine-ready reel. EIA-481 embossed plastic tape (750 parts per full reel).

   B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter C instead.
2. Inductance is per winding, tested at 10 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
3. SRF is measured using an Agilent/HP 8753D network analyzer.
4. DC current at which the inductance drops 10% (typ) from its value without current.
5. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

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