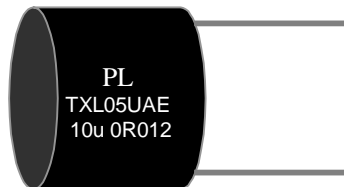


## TXL05 RANGE OF HIGH CURRENT LOW PROFILE RADIAL INDUCTORS



### **TECHNICAL DESCRIPTION:**

**Primeworld** TXL05--- range of high current radial inductors are manufactured in one mechanical outline, providing a wide range of inductance values with peak energy storage, ( $1/2 LI^2$ ), capability of up to 300uJ.

Windings are enamelled copper wire, wound on a low profile drum shaped bobbin core. SnAgCu tinned lead-outs are held in place with black polyolefin heat shrink sleeve around the bobbin core. Lead-outs are also secured on to a flame retardant glass filled nylon 46 (Stanyl TE250F6) base to maintain an accurate pitch and improve robustness.

The TXL05 range is designed for use in power supplies, dc/dc converters and inverters, EMI/RFI noise suppression, and smoothing choke applications.

### **RATINGS AND CHARACTERISTICS:**

**Maximum Working Voltage:** 250V ac rms., 400V dc

**Rated current:** See tables for TXL05--- range

**Inductance:** See tables for TXL05--- range

**DC Resistance:** See tables for TXL05--- range

**Climatic category:** 25/105/56

**Maximum temperature range:**

Operating: -25 to +105 °C

Storage: -55 to 125 °C

**Mass:**

Size U: 10g max

**Vibration:** Frequency sweep of 10Hz to 55Hz with 0.35mm displacement for 6 hours. IEC68-2-6 Test Fc

**Requirement:** No visible damage, Inductance +/- 10%

**Bump:** 1000 bumps of each 16ms with acceleration of 98m/s. IEC68-2-29 Test Eb

**Requirement:** No visible damage, Inductance +/- 10%.

**Resistance to soldering heat:** Solder bath for 3s @ 260 °C, 6mm from body IEC68-2-20A Method 1B

**Solderability:** Maximum soldering time, 2.5s @ 260 °C Solder globule test, IEC 68-2-20Ta.

**Robustness of terminations:**

1Kg (10N)	IEC 68-2-21 Test Ua Tensile
500g (5N)	IEC 68-2-21 Test Ub Bending

**Requirement:** No visible damage to the body. No deviation in nominal inductance and dc resistance.

### **INSPECTION REQUIREMENTS**

**Visual inspection: Random Sample**

**Failure Criteria:**

- |         |  |
|---------|--|
| Marking | - Non-legible marking.<br>- Missing or double marking.   |
| Package | - Dimensions out of tolerance.<br>- Broken or damaged plastic.<br>- Contamination by oil, flux, etc.<br>- Voids, holes or cracks.  |
| Leads   | - Broken, cracked or loose leads.<br>- More than 10% non-plated surface in the soldering area.<br>- Blistering, peeling or other surface defects exposing base material.<br>- Contamination by oil, flux, etc. |
| Packing | - Inconsistent mechanical strength.<br>- Incorrect labelling and sealing.<br>- Incorrect quantity and type.  |

**Inductance: 100%**

**Limits:**

+/- 20% for L < 10uH @ 100KHz, 0.1V ac rms.  
+/- 10% for L > 10uH @ 10KHz, 0.1V ac rms.

**DC resistance: 100%**

**Limits:** +5% -10%.

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## **PRIMEWORLD LIMITED**

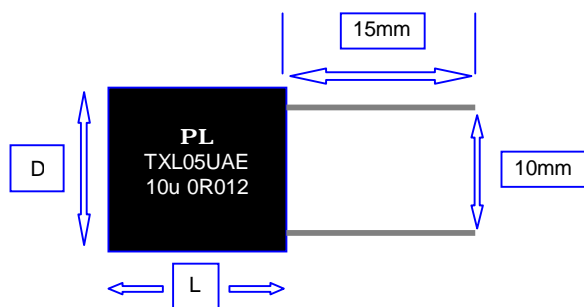
**Derwent, Sawbridgeworth Road, Hatfield Heath, Bishop's Stortford, HERTS, CM22 7DR**

**Tel: 01279 730031 Fax: 01279 731113**

**TXL05-- RANGE:**

	NOMINAL	DC	CONTINUOUS	DC	Lead Dia.
CODE	INDUCTANCE	RESISTANCE	DC CURRENT	CURRENT (A)	d
SIZE...U--	(uH) @ 1KHz	(OHM) MAX	(A) @ 40 ° C	@ 90% Lnom	(mm) MAX
TXL05UAA	2.2	0.005	11.54	15.95	0.9
TXL05UAB	3.3	0.006	10.42	13.03	0.9
TXL05UAC	4.7	0.008	8.53	10.92	0.9
TXL05UAD	6.8	0.011	7.53	9.07	0.9
TXL05UAE	10	0.013	6.84	7.48	0.9
TXL05UAF	15	0.017	6.00	6.11	0.9
TXL05UAG	22	0.024	5.02	5.05	0.75
TXL05UAH	33	0.041	3.84	4.12	0.75
TXL05UAI	47	0.052	3.41	3.45	0.75
TXL05UAJ	68	0.084	2.67	2.87	0.6
TXL05UAK	100	0.102	2.43	2.37	0.6
TXL05UAL	150	0.125	2.19	1.93	0.5
TXL05UAM	220	0.199	1.74	1.60	0.5
TXL05UAP	330	0.368	1.28	1.30	0.4
TXL05UAQ	470	0.524	1.07	1.09	0.4
TXL05UAR	680	0.672	0.94	0.91	0.4
TXL05UAS	820	1.069	0.75	0.83	0.3
TXL05UAW	1000	1.222	0.70	0.75	0.3

**Mechanical Data**



SIZE	L	D
U	12	13

**ALL DIMENSIONS ARE IN mm**

**TOLERANCE +/- 10%**

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