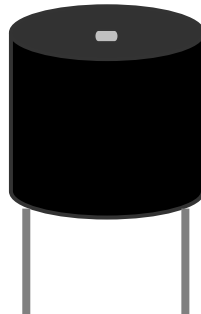


## TXL02 RANGE OF RADIAL POWER INDUCTORS



### **TECHNICAL DESCRIPTION:**

**Primeworld** TXL02--- range of high current radial inductors are manufactured in two different mechanical outlines, (**Q and R**), providing a wide range of inductance values with peak energy storage, ( $1/2 LI^2$ ) capabilities of 1500uJ and 2500uJ, respectively.

Windings are enamelled copper wire, wound on a drum shaped bobbin core. Tinned lead-outs are held in place with black heat shrink sleeve around the bobbin core. Lead-outs of the taller TXL02R-- range are also secured on to a flame retardant glass filled nylon 66 base.

The TXL02 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:** 270V ac rms., 400V dc

**Rated current:** See tables for TXL02--- range

**Inductance:** See tables for TXL02--- range

**DC Resistance:** See tables for TXL02--- range

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

**Maximum temperature range:**

Operating: -25 to +105 °C

Storage: -55 to 125 °C

**Mass:**

Size Q: 30g max

Size R: 50g 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 @ 350 °C, 6mm from body IEC68-2-20A Method 1B

**Solderability:** Maximum soldering time, 2.5s @ 235 °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, twisted, cracked or loose leads.<br>- More than 5% non-plated surface in the soldering area.<br>- Blistering, peeling or other surface defects exposing base material.<br>- Lead dimensions out of tolerance.<br>- Contamination by oil, flux, etc. |
| Packing | - Inconsistent mechanical strength.<br>- Incorrect labelling and sealing.<br>- Incorrect quantity and type.   |

**Inductance: 100%**

**Limits:** +/- 10% @ 10KHz, 0.1V ac rms.

**DC resistance: 100%**

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

---

## **PRIMEWORLD LIMITED**

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

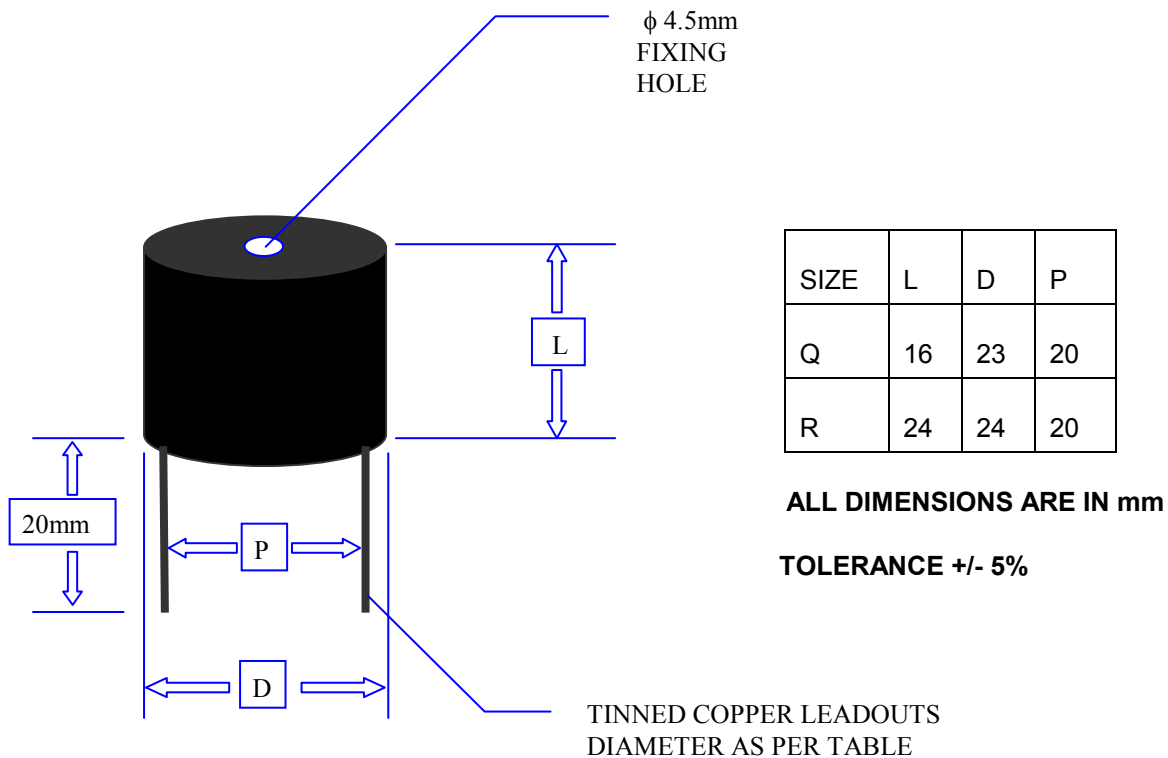
**Tel: 01279 730031**

**Fax: 01279 731113**

**TXL02-- RANGE:**

	NOMINAL	DC	CONTINUOUS	DC	Lead Dia.
CODE	INDUCTANCE	RESISTANCE	DC CURRENT	CURRENT (A)	d
	(uH) @ 1KHz	(OHM) MAX	(A) @ 40 °C	@ 90% L <sub>nom</sub>	(mm) MAX
TXL02QRA	10	0.007	13.80	15.81	1.3
TXL02QRB	15	0.009	12.47	12.91	1.3
TXL02QRC	22	0.011	11.33	10.66	1.3
TXL02QRD	33	0.015	9.48	8.70	1.3
TXL02QRE	47	0.019	8.41	7.29	1.3
TXL02QRF	68	0.032	6.51	6.06	1.1
TXL02QRG	100	0.043	5.58	5.00	1.1
TXL02QRH	150	0.066	4.51	4.08	0.9
TXL02QRI	220	0.105	3.59	3.37	0.9
TXL02QRJ	330	0.172	2.80	2.75	0.8
TXL02QRK	470	0.226	2.44	2.31	0.7
TXL02QRL	680	0.282	2.19	1.92	0.7
TXL02QRM	1000	0.418	1.80	1.58	0.7
TXL02QRP	1500	0.602	1.50	1.29	0.6
TXL02QRR	2200	1.016	1.15	1.07	0.5
TXL02QRS	3300	1.778	0.87	0.87	0.5
TXL02QRT	4700	2.263	0.77	0.73	0.5
TXL02QRU	6800	3.463	0.62	0.61	0.4
TXL02QRW	8200	3.803	0.60	0.55	0.4
TXL02QRX	10000	4.640	0.54	0.50	0.4
TXL02RRA	10	0.006	15.59	18.71	1.5
TXL02RRB	15	0.008	14.09	15.28	1.5
TXL02RRC	22	0.010	12.17	12.61	1.5
TXL02RRD	33	0.012	10.99	10.30	1.5
TXL02RRE	47	0.015	9.91	8.63	1.5
TXL02RRF	68	0.020	8.76	7.17	1.5
TXL02RRG	100	0.041	6.04	5.92	1.1
TXL02RRH	150	0.052	5.37	4.83	1.1
TXL02RRI	220	0.067	4.73	3.99	1.1
TXL02RRJ	330	0.080	4.34	3.26	1.1
TXL02RRK	470	0.153	3.13	2.73	0.9
TXL02RRL	680	0.279	2.32	2.27	0.7
TXL02RRM	1000	0.349	2.07	1.87	0.7
TXL02RRP	1500	0.454	1.82	1.53	0.7
TXL02RRR	2200	0.822	1.35	1.26	0.6
TXL02RRS	3300	1.101	1.17	1.03	0.6
TXL02RRT	4700	1.829	0.91	0.86	0.5
TXL02RRU	6800	2.200	0.83	0.72	0.5
TXL02RRW	8200	2.494	0.78	0.65	0.5
TXL02RRX	10000	2.797	0.73	0.59	0.5

## Mechanical Data



**NOTE: INDUCTORS ARE INDELIBLY MARKED WITH MANUFACTURER'S CODE, "PL"  
PART CODE PLUS VALUE e.g. "TXL02RRM 1mH 0R35", AND BATCH CODE.**

*Specifications and information contained in this data sheet are intended for guidance only. The Company's policy is one of continuous improvement and the right to change materials, designs, dimensions and descriptive matter, etc. at any time without notice is reserved.*

*Primeworld shall not be liable for any loss, direct or consequential, which may result from the use of this information.*

© 2007 Primeworld Limited

---

## **PRIMEWORLD LIMITED**

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

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