

## TXL20 RANGE OF HIGH CURRENT RADIAL INDUCTORS



### **TECHNICAL DESCRIPTION:**

**Primeworld** TXL20--- 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 5x20mm rod core. Tinned lead-outs are held in place with black heat shrink sleeve around the bobbin core.

The TXL20 range is designed for use in power supplies, dc/dc converters, inverters and smoothing choke applications.

### **RATINGS AND CHARACTERISTICS:**

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

**Rated current:** See tables for TXL20--- range

**Inductance:** See tables for TXL20--- range

**DC Resistance:** See tables for TXL20--- range

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

**Maximum temperature range:**

Operating: -25 to +105 °C

Storage: -55 to 125 °C

**Mass:**

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 @ 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, 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:**

+/- 33% for L < 2u2H @ 100KHz, 0.1V ac rms  
+/- 20% for L < 10uH @ 100KHz, 0.1V ac rms.  
+/- 10% for L > 10uH @ 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

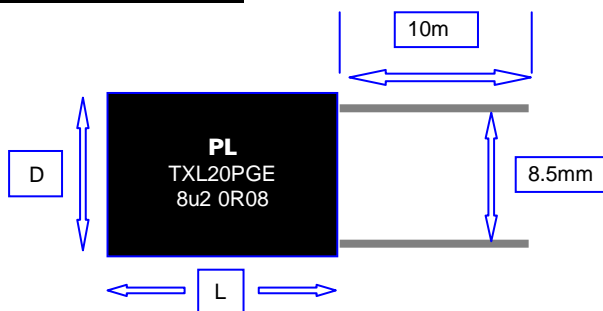
sales@primeworld.co.uk

www.primeworld.co.uk

**TXL20-- RANGE:**

	NOMINAL	DC	CONTINUOUS	DC	Diameter, D	Lead Diameter
CODE	INDUCTANCE	RESISTANCE	DC CURRENT	CURRENT (A)		d
SIZE...P--	(uH) @ 1KHz	(OHM) MAX	(A) @ 40 ° C	@ 90% Lnom	(mm)	(mm)
TXL20PGB	1.5	0.0016	20	22	12	1.7
TXL20PGC	1.5	0.0020	18	20	12	1.6
TXL20PGD	3.3	0.006	9.2	13.5	10	1.1
TXL20PGE	8.2	0.008	7.9	8.5	11	1.3
TXL20PGF	22	0.03	4.1	5.2	9	0.75
TXL20PGG						
TXL20PGH						
TXL20PGI						
TXL20PGJ						
TXL20PGK						
TXL20PGL						
TXL20PGM						
TXL20PGP						
TXL20PGQ						
TXL20PGR						
TXL20PGS						
TXL20PGW						

**Mechanical Data**



SIZE	L
P	22

ALL DIMENSIONS ARE IN mm

LEADOUT TOLERANCES +/-20%, L & D max.

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

sales@primeworld.co.uk

www.primeworld.co.uk

