

- High Voltage Resistors in thick film technology
- 1MΩ to 10TΩ Resistance range
- Low Values of TCR and VCR
- Non-Magnetic
- Conformal coating as standard
- Silicone coating available for climatic protection
- Radial, Axial, SIL (Single-in-line) Type Lead options
- Glass or Silicone passivation of resistive element (one side, no conformal coat)
- Unleaded version with solder pads available (with glass or Silicone passivation only, no conformal coating)



Table 1

Technical Data		LXP 25	LXP 50
Size			
Power rating P <sub>70</sub> (W) ( P <sub>125</sub> = 0W)		1.0W	3.0W
Operating voltage U <sub>-</sub> , U <sub>eff</sub> <sup>1</sup>		15kV	30kV
Resistance / Tolerance % / Temperature Coefficient (TCR) ppm°C <sup>3</sup> / (VCR) ppm <sup>4</sup>		(Closer resistance tolerances, TCR & VCR on request & by agreement)	
1M - 100M	± % ppm/°C ppm/V	0.25, 0.5, 1, 2, 5, 10, 20 25, 50, 100 1	0.25, 0.5, 1, 2, 5, 10, 20 25, 50, 100 1
>100M - 300M	% ppm/°C ppm/V	0.25, 0.5, 1, 2, 5, 10, 20 25, 50, 100 2	0.25, 0.5, 1, 2, 5, 10, 20 25, 50, 100 1
>300M - 1G	% ppm/°C ppm/V	1, 2, 5, 10, 20 25, 50, 100 2	1, 2, 5, 10, 20 25, 50, 100 1
>1G - 100G	% ppm/°C ppm/V	5, 10, 20, 30 100, 250 10	5, 10, 20, 30 50, 100 5
>100G - 1T	% ppm/°C ppm/V	5, 10, 20, 30 250, 500 50	5, 10, 20, 30 100, 250 25
>1T - 3T	% ppm/°C ppm/V	10, 20, 30 On request On request	10, 20, 30 On request On request
> 3T - 10T	% ppm/°C ppm/V	10, 20, 30 On request On request	10, 20, 30 On request On request
<sup>1</sup> Continuous operating voltage (U <sub>-</sub> , U <sub>eff</sub> ): $V \leq \sqrt{(P \cdot R)}$ or max. working voltage (the lower value)			
<sup>2</sup> Temp. coefficient TCR: in ppm/°C; +25°C to +125°C; TCR lower than standard TCR (highest value) or R >100G: +25°C to +85°C			
<sup>3</sup> VCR: typical values, all negative, not for all temperature coefficient values available			

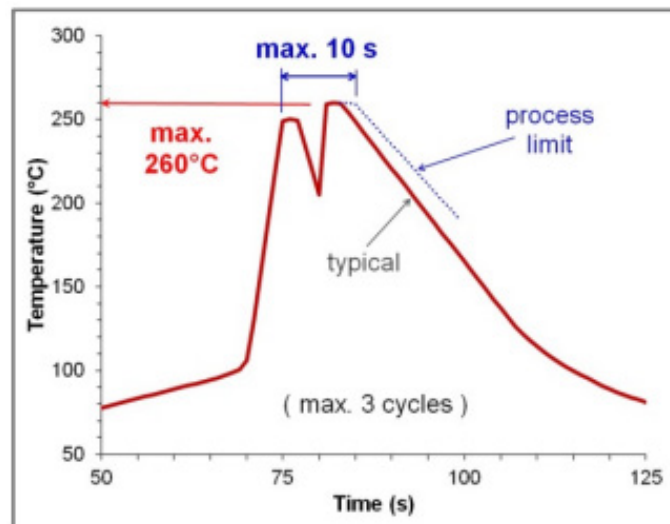
### Technical Data - General <sup>2</sup>

Operating temperature range	-55°C to +150°C
Climatic category acc. to IEC 60068-1	55/150/56
Environmental protection of the resistor element	Silicone conformal coating, Silicone passivation or Glass passivation
Solderability acc. to IEC 60068-2-20	245°C, 3s
Max. soldering temperature	260°C, 10s (maximum 3 cycles)

<sup>4</sup> The silicone coating is resistant to most solvents. For cleaning the use of isopropyl alcohol (IPA) is recommended. The use of acetone and methylene chloride is **not** allowed. Mechanical stress to coating should be avoided and high pressure cleaning should not be used. Some cleaning agents can cause discolourations or bleaching to the surface without any influence on the resistor element. The thickness of the coating is not specific. Other data according to EN 140401-802 (CECC 40401-802).

### Recommended Wave Soldering Profile

Fig. 1



### Dimensions (mm)

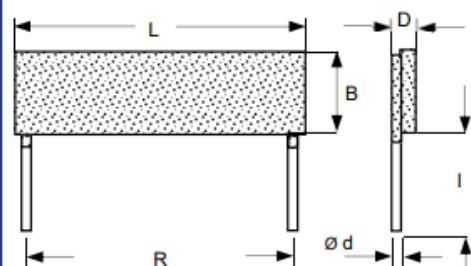
Table 2

Size	L (Length)	B (Width)	R (Pitch)
LXP 25	25.0	9.0	22.9
LXP 50	50.0	12.5	47.8

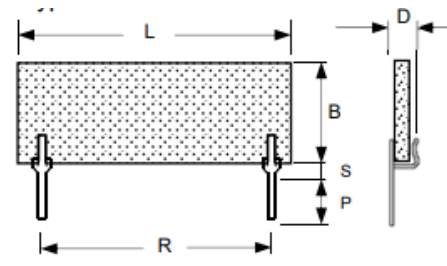
### Dimensions - Tolerance (if not specified) ±0.5mm - (Custom specific sizes upon request)

Fig. 2

#### Standard type (radial)

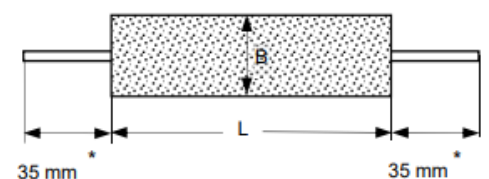


#### SIL type



#### Special type (axial)

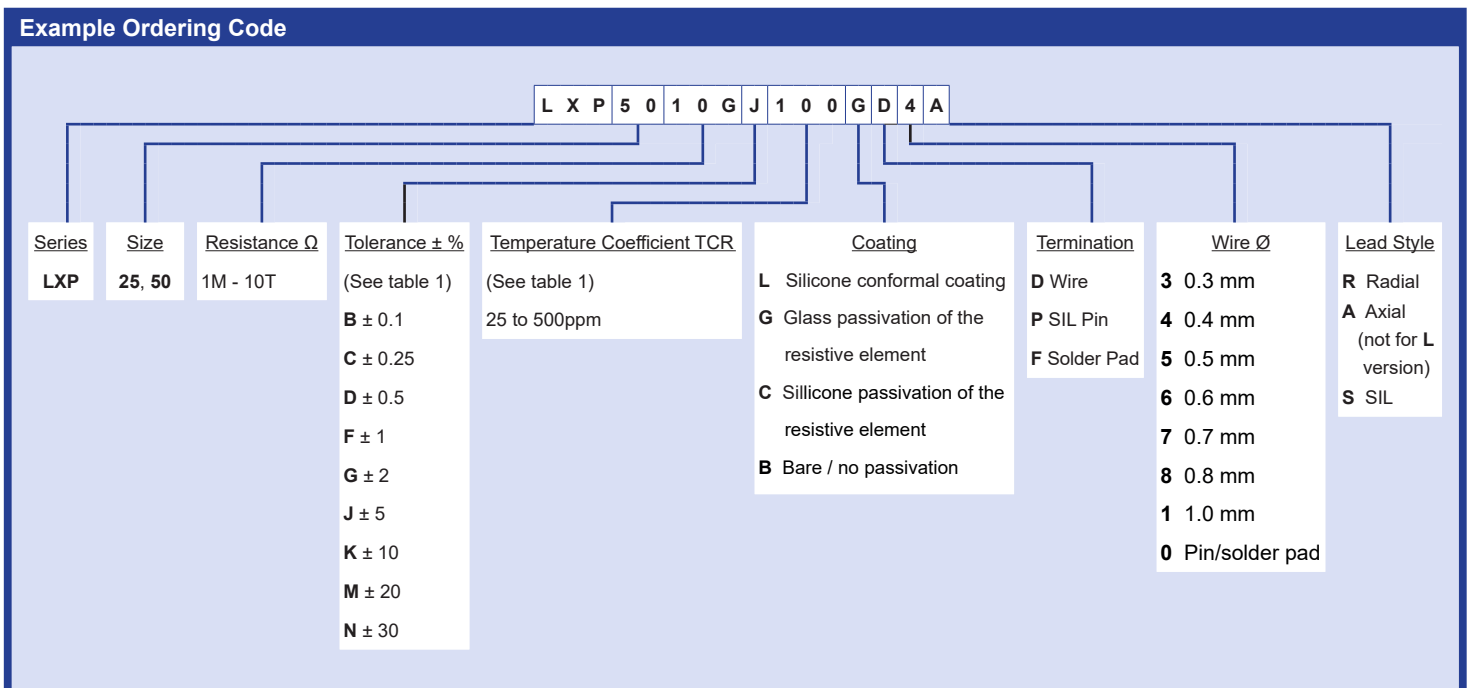
for G-, C- and B- types only  
Not for L type (conformal coating)



\* Custom specific wire lengths up to 70mm on special request and by agreement. Tolerance of dimensions (if not specified) ±0.5mm

Material		Table 3		
<b>Cu / Surface finish: 100% Sn</b>				
<b>Wire leads</b>	Wire diameter (standard)	<b>In Stock</b>	d	0.40 ±0.05 mm
		<b>New</b>	<b>d</b>	0.60 ±0.05 mm
	Applicable wire diameter		d	0.3; 0.4; 0.5; 0.6; 0.7; 0.8; 1.0 mm
	Thickness		D max.	1.3 mm + d
	Wire length (standard)	<b>In Stock</b>	l	20 +0/-2 mm
		<b>New</b>	l	20 +0/-2 mm
<b>Wire length - axial (standard)</b>		l	35 +0/-2 mm	
<b>CuSn6 (2.1020) / Surface finish: 100% Sn</b>				
<b>SIL-Pin</b>	Stand off	S	1 ±0.4 mm	
	Pin length	P	9 ±1 mm	
	Pin cross section	A	0.5 * 0.25 mm <sup>2</sup>	
	Thickness	D max.	2mm	

Packaging
Cardboard boxes with foam spacer (small amounts; bulk in plastic bags or cardboard boxes)
Labeling is made at the packing unit only.
Components are not marked (only on request for individual cases).
<a href="#">Contact Durakool for minimum quantities</a>



NB: Standard TCR will be the highest value in the table unless otherwise requested. Measuring voltage will be 10V, (50V for values >1G). Other voltages are available - specific requirements must be requested.

Standard versions are LD4R and LD6R (Silicone coating: 0.4mm / 0.6mm wire; radial).