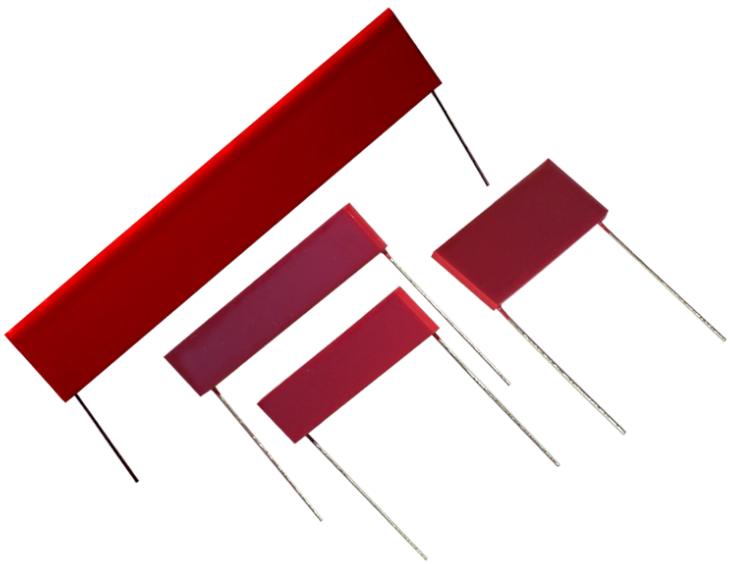


- High voltage resistors in thick film technology
- Resistance values up to 10T Ω
- Working voltages to 65kV
- Power rating to 6W
- Low TCR temperature coefficient resistance
- Low VCR to 1ppm/V voltage coefficient resistance
- Non-magnetic
- Conformal coated or silicone coating option for climatic protection
- Different lead versions available
- Radial, axial & SIL lead options
- Variety of lead wires & diameters available
- Option for glass or silicone passivation on the resistive element (one side, no conformal coating)
- Solder pad option available without leads
- Customised parts available

e3 ELV RoHS Compliant 2000/53/EC 2011/65/EC

Technical Data — Table 1

Size	LXV 20	LXV 25	LXV 30	LXV 40	LXV 50	LXV 75	LXV 100
Power rating P_{70} (W) (P_{125} = 0W)	1.0W	1.0W	1.0W	1.2W	3.0W	4.5W	6W
Operating voltage U_, U_{eff} [1]	10kV	15kV	10kV	20kV	30kV	45kV	65kV

[1] Continuous operating voltage (U_, Ueff): V ≤ √(P*R) or max. working voltage (the lower value).

[2] Temperature coefficient TCR: in ppm/°C +25°C to +125°C; TCR lower than standard TCR (highest value) >100G +25°C to +85°C.

[3] VCR: Typical values, all negative, not for all TCR values available.

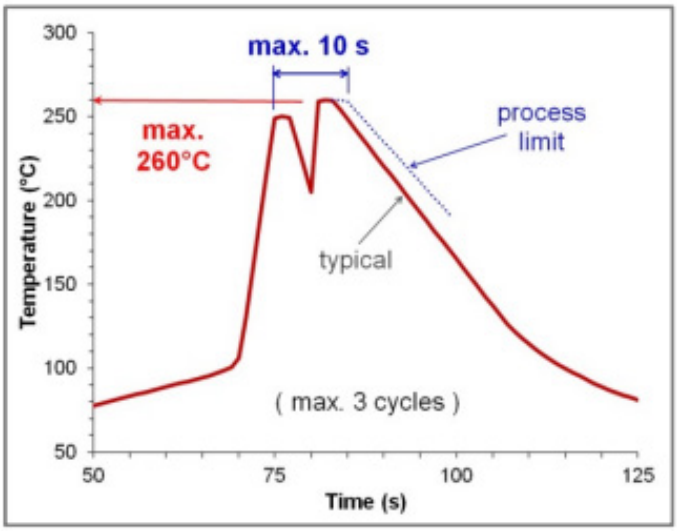
Resistance / Tolerance % / Temperature Coefficient (TCR[2]) ppm°C[3] (Lower resistance tolerances, TCR & VCR on request & by agreement)								
1M - 100M	± %	0.25,0.5,1,2,5,10	0.25,0.5,1,2,5,10	0.25,0.5,1,2,5,10	0.25,0.5,1,2,5,10	0.25,0.5,1,2,5,10	0.25,0.5,1,2,5,10	0.25,0.5,1,2,5,10
	ppm/°C	25,50,100	25,50,100	25,50,100	25,50,100	25,50,100	25,50,100	25,50,100
	ppmV	5	1	2	1	1	1	1
>100M - 1G	± %	1,2,5,10,20	1,2,5,10,20	1,2,5,10,20	1,2,5,10,20	1,2,5,10,20	1,2,5,10,20	1,2,5,10,20
	ppm/°C	50,100,250	50,100,250	50,100,250	50,100,250	25,50,100	25,50,100	25,50,100
	ppmV	10	2	5	2	1	1	1
>1G - 100G	± %	5,10,20,30	5,10,20,30	5,10,20,30	5,10,20,30	5,10,20,30	5,10,20,30	5,10,20,30
	ppm/°C	250,500	250,500	250,500	250,500	100,250	100,250	50,250
	ppmV	50	10	20	10	5	5	2
>100G - 1T	± %	5,10,20,30	5,10,20,30	5,10,20,30	5,10,20,30	5,10,20,30	5,10,20,30	5,10,20,30
	ppm/°C	500,1000	500,1000	500,1000	500,1000	250,500	250,500	100,500
	ppmV	100	50	100	50	25	25	10
>1T - 10T	± %	-	-	-	-	10,20,30	10,20,30	10,20,30
	ppm/°C					TCR,VCR	TCR,VCR	TCR,VCR
	ppmV					on request	on request	on request

Technical Data - General	
Operating temperature range	-55°C to +150°C
Climatic category acc. to IEC 60068-1	55/150/56
Climatic protection of resistive element	Silicone conformal coating [4], Silicone passivation [1], or Glass passivation
Solderability acc. to IEC 60068-2-20	245°C, 3s
Max. soldering temperature	260°C, 10s, max. 3 cycles

Technical Data - General (continued)		
Long term stability	≤ 10G	> 10G
Storage 125°C/1000h	< 1%	< 2%
Maximum voltage/1000h	< 1%	< 2%

[4] The silicone coating is resistant to most solvents. For cleaning the use of ispropyl alcohol (IPA) is recommended. The use of acetone and methylene chloride is **not** allowed. Some cleaning agents can cause discolorations or bleaching at the surface without any influence on the resistor element. The thickness of the coating is not specified. In the area of the resistor element only, a closed surface is required and the coating has to be free of pin holes. Coating voids in the area of the internal interconnections are no quality issues. Mechanical stress to coating should be avoided, no use of high pressure cleaning.

Recommended Wave Soldering Profile — Fig. 1

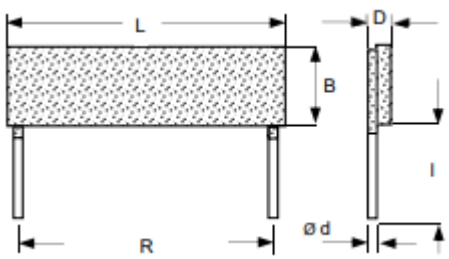


Dimensions (mm) — Table 2

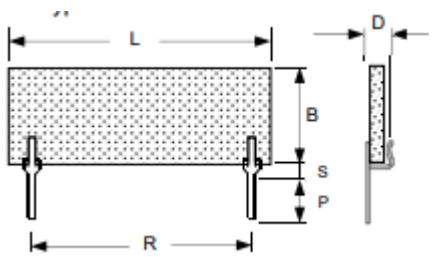
Size	L (Length)	B (Width)	R (Pitch)
LXV 20	20.0	5.0	17.0
LXV 25	25.0	9.0	22.9
LXV 30	30.0	6.0	27.5
LXV 40	40.0	6.0	37.8
LXV 50	50.0	12.5	47.8
LXV 75	75.0	9.0	72.8
LXV 100	100.0	12.5	97.8

Dimensions (mm) — Fig. 2

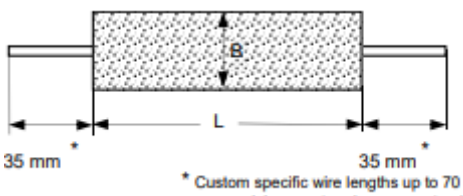
Standard type (radial)



SIL type



Special type (axial)
for G-, C- and B- type only
not for L- type (conformal coating)



* Custom specific wire lengths up to 70 mm on special request and agreement only

Specifications are subject to change without notice. E&OE.

Material			Table 3
Cu / Surface finish: 100% Sn			
Wire leads	Wire diameter (Standard)	In stock d	0.40 ±0.05 mm
		New d	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)	In stock l	20 +0/-2 mm
		New l	20 +0/-2 mm
	Wire length	D max.	35 +0/-2 mm
CuSn6 (2.1020) / Surface finish: 100% Sn			
SIL-Pin	Stand off	S	1 ±0.4 mm
	Pin length	P	9 ±1 mm
	Pin cross section	A	0.5 * 0.25 mm^2
	Thickness	D max.	2mm

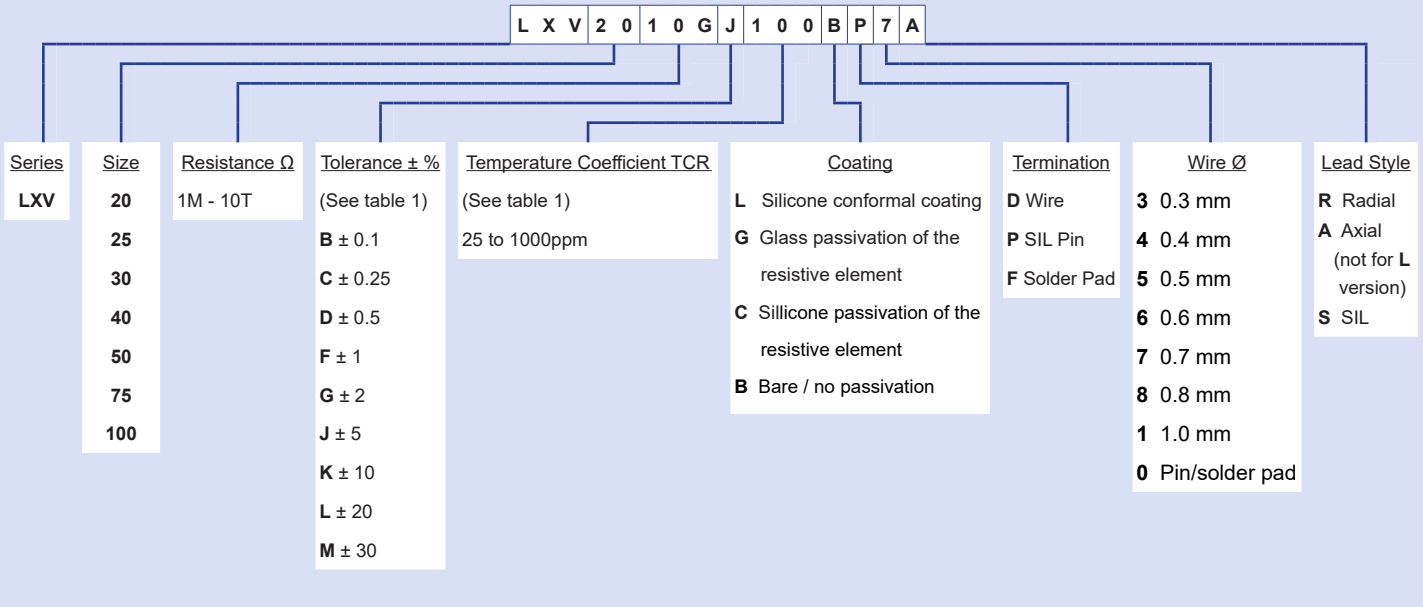
Packaging

Cardboard boxes with foam spacer (small amounts: bulk in plastic bags or cardboard boxes)

The labeling is made at the packing unit only.

The components are not marked (only on request at individual cases).

Example Ordering Code



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 LD6R and LD4R (Silicone coating; 0.6/0.4 wire; radial).