

Metal Plate Current Sense Resistor

Type LR72 A/B/C

ISO 9001:2008
TS-16949

1. Features

- Superior thermal expansion cycling
- Inductance less than 10 nanohenries
- Flameproof
- Custom values available
- Lead flexible for thermal expansion
- Low termination stress ("J" leads)
- Shape provides cooler operation
- Solderable pads (60/40 SnPb plate)

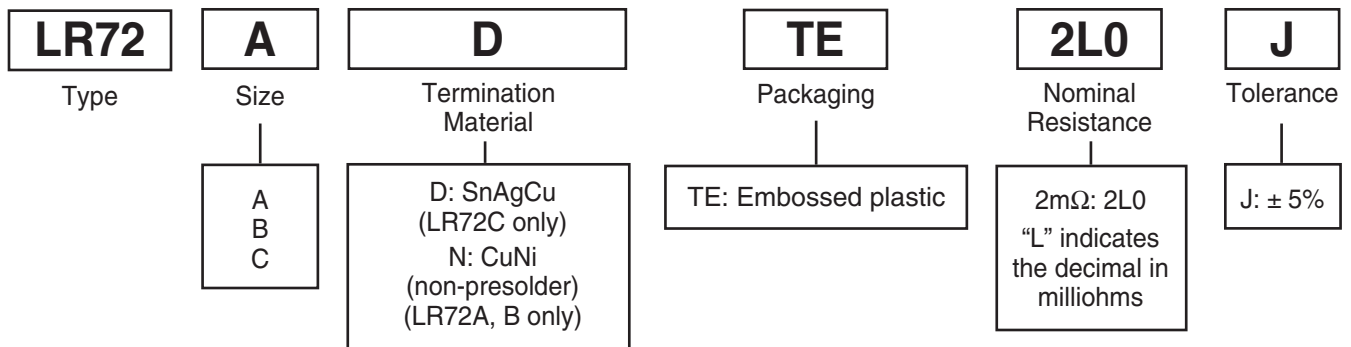
2. Applications

- Current sensing
- Low inductance
- AC applications (please contact factory)
- Feedback
- Surge & pulse

3. Type Designation

The type designation shall be in the following form:

New Type



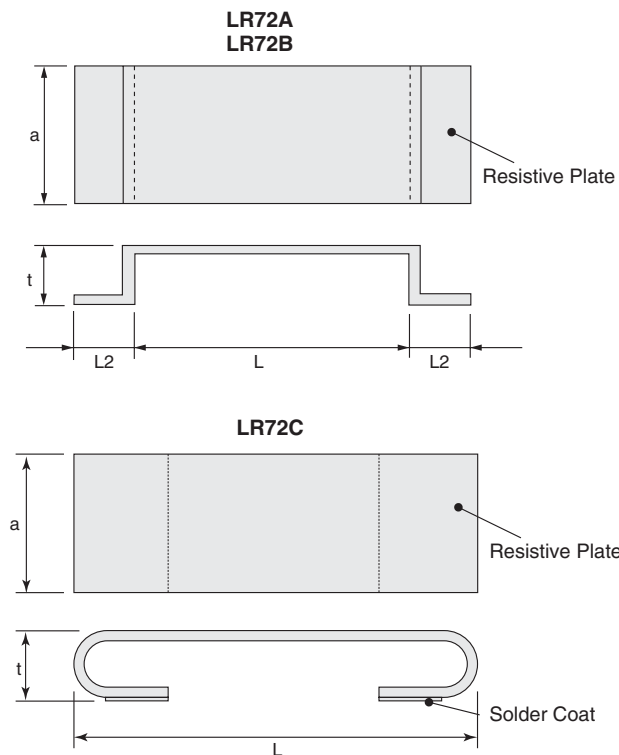
4. Standard Applications

Part Designation	Power Rating*	T.C.R. (ppm/°C) Max.	Standard Resistance**	Resistance Tolerance	Rated Ambient Temperature	Operating Temperature Range
LR72A	1/2W	±100	2mΩ ~ 8mΩ	J: ±5%	+70°C	-40°C to +180°C
LR72B	1/4W		3mΩ ~ 5mΩ			
LR72C	1W	±350	2mΩ, 3mΩ		+85°C	-40°C to +155°C

* Rated power in case of glass epoxy resin (FR-4) is used for the substrate material

** Please contact factory for custom made resistance values

5. Dimensions



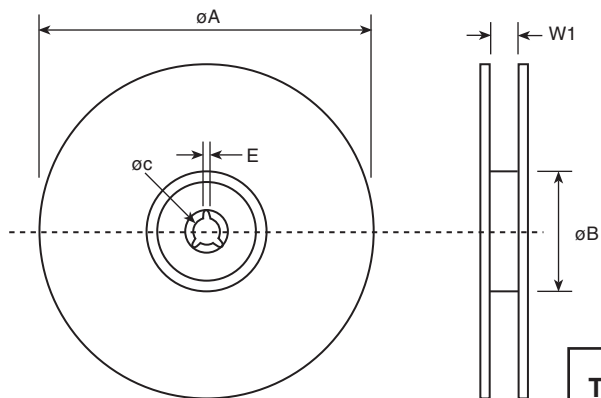
Size Code	Dimensions inches (mm)			
	L	L2 ^{+0.1} / _{-.02}	W	t
LR72A	.39±.004 (10.0±0.1)	.079 (2.0)	.20±.008 (5.2±0.2)	.079 (2 Max.)
LR72B	.39±.004 (10.0±0.1)	.079 (2.0)	.118±.008 (3.0±0.2)	.079 (2 Max.)
LR72C	.44±.016 (11.2±0.4)	—	.126±.016 (3.2±0.4)	.137±.016 (3.5±0.4)

6. Characteristics

Parameter	Requirement $\Delta R \pm\%$		Test Method
	Limit	Typical	
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	Room temp. +100°C UP
Resistance to Soldering Heat	±2.0%	±1.6%	350°C ± 10°C, 3 seconds
Moisture Resistance	±5.0%	±4.5%	Power rating x 1/10, 40°C, 90% - 95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 70°C	±5.0%	±4.5%	Rated voltage 70°C, 1000 hours 1.5 hr ON, 0.5 hr OFF cycle

8. Packaging Specifications (continued)

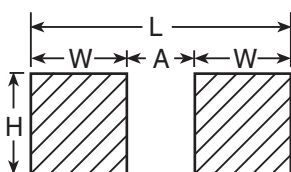
8.2 Reel Dimensions



Dimensions in inches (mm)

Type	A	B	C	E	W1
LR72A	10.0	3.15	.511	.079	1.0
LR72B	(255 ± +0.0 -3.0)	(80 ± +1.0 -0)	(13.0 ± 0.2)	(2.0 ± 0.5)	(25.5 ± 2.0)
LR72C	12.99	3.94	.511	.079	1.0
	(330 ± 2.0)	(100 ± 2.0)	(13.0 ± 0.2)	(2.0 ± 0.5)	(25.5 ± 2.0)

9. Pad Dimensions



Dimensions in inches (mm)

	L	W	H	A
A	.622 (16.0)	.118 (3.0)	.236 (6.0)	.394 (10.0)
B	.622 (16.0)	.118 (3.0)	.150 (3.8)	.394 (10.0)
C	.369 (9.36)	.121 (3.07)	.142 (3.60)	.127 (3.22)