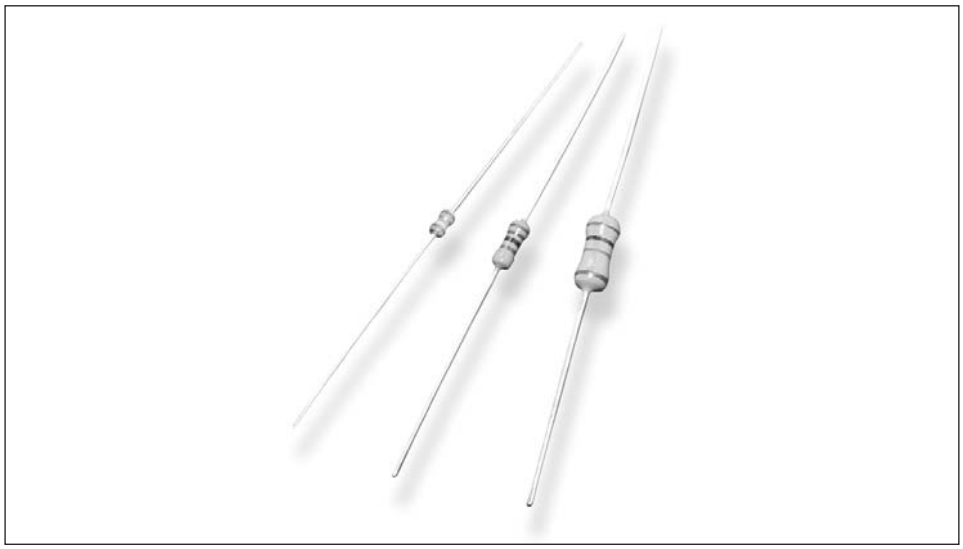
Type LR Series

Key Features

- **Superior quality metal film resistors with 1% tolerance and temperature coefficients down to 50 ppm. 3 case sizes are available in 0.25, 0.6, 0.75W. The LR1L series is a low ohmic value range from 0.1 to 0.82 ohm. Ideally suited where low resistance and small size are required.**
- **Metal film resistors have excellent stability under load and severe environmental conditions. They exhibit very low noise current and voltage coefficients. They are available in a wide range of resistance values and are suitable for general purpose and precision applications.**



The resistive element comprises a thin film of nickel-chrome alloy evaporated onto a high thermal conductivity ceramic element. Metal end caps are force fitted to the element prior to spiralling to value. Tinned copper lead wires are welded to the end caps and the components are then coated. One coat of phenolic resin is followed by three coats of epoxy resin. All resistors are tested for value and tolerance.

Characteristics - Electrical

	LR0204		LR1L	LR1			LR2	LR100	LR200
Rated Power @ 70°C (W)	0.25		0.5	0.6			0.75	1	2
Resistance Range (Ohms) Min	1R0	10R	R10	1R0	10R	1M1	1R0	10R	10R
Max	9R1	1M0	R82	9R1	1M0	10M	1M0	1M0	1M0
Tolerance (%)	1	1	5	0.5 1 2	0.5 1 2	0.5 1 5	1 2	1 5	1 5
Code Letter	F	F	J	D F G	D F G	D F J	F G	F J	F J
Temp. Coefficient (ppm/°C)	± 100	± 100	± 200	± 100	± 50	± 100	± 100	25/50/100	25/50/100
Selection Series	E24	E24	E12	E24	E24	E24	E24	E24	E24
On Request		E96			E96		E96	E96	E96
Limiting Element Voltage	200		350	350			350	500	500
Max Permitted Element Voltage	200		350	350			350	500	500
Max Overload Voltage	400		500	700			700	1000	1000
Max Intermittent Overload Voltage	500		750	750			750	1000	1000
Operating Temp. Range (°C)	-55 to +155								
Climatic Category	55/155/56								
Dielectric Strength (V)	500		700	700			700	700	700
Insulation Resistance Min Dry (Mohms)	1000								

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

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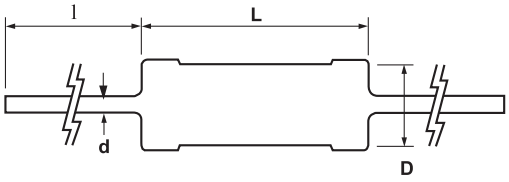
Type LR Series

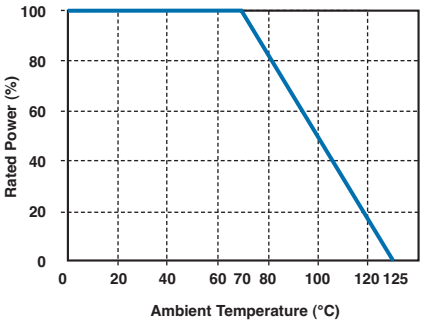
Dimensions



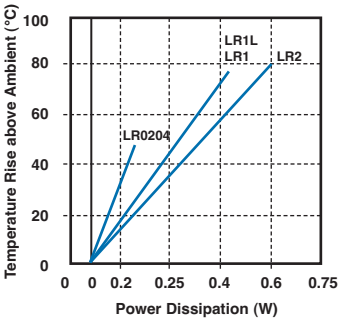
Style	L*	D	d Nom	l
LR0204	3.5 +/-0.2	2.0 max	0.45	28 +/-3.0
LR1	6.2 +/-0.5	2.3 +/-0.2	0.55	28 +/-3.0
LR1L	6.2 +/-0.5	2.3 +/-0.2	0.55	28 +/-3.0
LR2	9.7 +/-0.3	3.5 +/-0.2	0.55	28 +/-3.0
LR100	12.0 max	5.0 max	0.7	28 +/-3.0
LR200	12.0 max	5.5 max	0.7	28 +/-3.0

* Length is measured in accordance with IEC 294.

Power Derating Curve



Surface Temperature Rise Vs Load



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Type LR Series

Mounting

The resistors are suitable for processing on automatic insertion equipment and cutting and bending machines.

Marking

The resistors are marked with a colour band code in accordance with JIS C 0802.

Packaging

LR0204, LR1L and LR1 resistors are normally supplied taped in 'ammo' boxes of 4000 pieces.
LR2 resistors are normally supplied taped in 'ammo' boxes of 1000 pieces.
Other package styles on request.
All tape specifications are in accordance with IEC 286-1.

Performance Characteristics

The evaluation of the performance characteristics is carried out with reference to IEC Specifications QC 400 000 and QC 400 100.

TEST REF	Long Term Tests ±(1% + 0.05 ohm)
4.23	Climatic sequence
4.24	Damp heat, steady state
4.25.1	Endurance at 70°C
4.25.3	Endurance at 125°C
TEST REF	**Short Term Tests ±(0.25% + 0.05 ohm)**
4.13	Overload
4.16	Robustness of terminations
4.18	Resistance to soldering heat
4.19	Rapid change of temperature
4.22	Vibration

* For LR1L the limits are ± (5% + 0.1 ohm) and ± (1% + 0.05 ohm) respectively. All resistance values are measured at a distance of 12mm from the end cap.

How to Order

LR	1	F	100R
Common Part	**Style**	**Tolerance**	**Value**
LR - Metal Film Fixed Resistor	0204 - 0.25W 1L - 0.5W 1 - 0.6W 2 - 0.75W 100 - 1W 200 - 2W	J - 5% G - 2% F - 1% D - 0.5%	100 ohm (100 ohms) 100R 1K0 (1000 ohms) 1K0 100 K ohm (100,000 ohms) 100K

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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.

Как с нами связаться

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