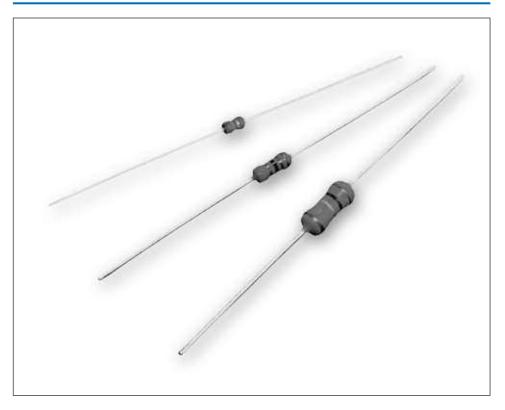


## **Key Features**

- Metal film technology
- Non-flammable
- High power in small package
- High stability, reliability and uniformity characteristics
- Good performance for pulse applications
- Defined interruption behavior (fusing time)
- Various forming styles



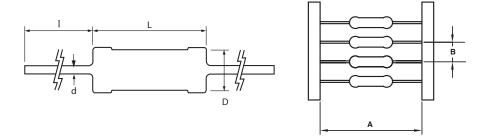
The RR Series is manufactured by depositing a homogeneous film of metal alloy onto a high-grade ceramic body. After a helical groove has been cut in the resistive layer, tinned connecting wires of electrolytic copper are welded to the end-caps. The resistors are coated with a red, non-flammable lacquer, which provides electrical, mechanical and climatic protection. The coating is resistant to all cleaning solvents in accordance with MIL-STD-202, method 215 and IEC 60068-2-45.

Characteristics - Electrical							
Licotrical	RF	RR01 RR		102 F		RR03	
Resistance Range:	0.22Ω-1ΜΩ	10R - 1M0	0.33Ω-1ΜΩ	0.33Ω-1MΩ 10R - 1M0		10R - 1M0	
Tolerance and Series:	±5%, E24	±1%, E24/E96	±5%, E24	±1%, E24/E96	±5%, E24	±1%, E24/E96	
Maximum Dissipation: at T <sub>amb</sub> . = 70°C	1W		2	2W		3W	
Thermal Resistance:	120k/W		80k/W		65k/W		
Limiting Voltage (DC or RMS):	350V		500V		750V		
Rated Voltage (1):	Pn x R						
Temperature Coefficient:	±300ppm/°C						
Basic Specification:	IEC 60115-1 and 60115-4						
Climatic Category (IEC 60068):	55/155/56						
Stability ΔR/R Max. After:	For tolerance 5%			For tolerance 1%			
Load	±5.0% +0.1Ω			±1.0% +0.1Ω			
Climatic Tests	±3.0% +0.1Ω			±1.0% +0.1Ω			
Resistance to Soldering Heat	$\pm 1.0\% + 0.05\Omega$ $\pm 0.5\% + 0.05\Omega$			Ω			

<sup>(1)</sup> Maximum rated voltage is the limiting voltage



## **Dimensions**

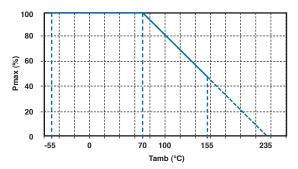


	A ±1	В	L ±1	øD ±0.5	ød ±0.1	l ±3
RR01	52	5 ±0.5	6.8	2.6	0.65	30
RR02	52	5 ±0.5	9.0	3.5	0.8	30
RR03	63	10 ±1	15.0	5.0	0.8	30

## Mounting

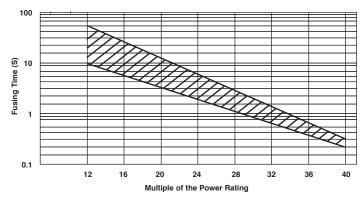
The resistors are suitable for processing on automatic insertion equipment, cutting and bending machines.

## **Derating Curve**



Maximum dissipation (Pmax) in percentage of rated power as a function of ambient temperature (Tamb)

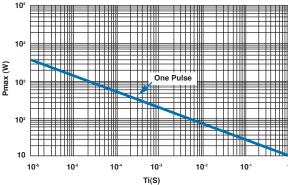
## **Fusing Characteristics**

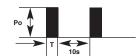




### **Pulse Characteristics -**

#### **1W**



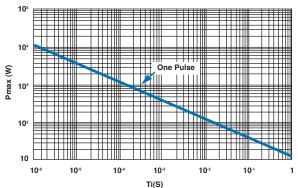


Condition Test: Resistance change ≤±5% with pulse 1000 cycles as like the figure (reference only).

- 1. Added power and added voltage are within the lower teritory of this graph.
- 2. Added in normal temperature and humidity.

Maximum permissible peak pulse power (Pmax) as a function of pulse duration (Ti)

#### **2W**



like the figure (reference only).

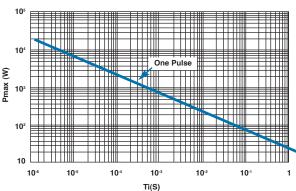
1. Added power and added voltage are within the lower teritory of this graph.

Condition Test: Resistance change ≤±5% with pulse 1000 cycles as

Added in normal temperature and humidity.

# Ti(S) Maximum permissible peak pulse power (Pmax) as a function of pulse duration (Ti)

#### **3W**



Maximum permissible peak pulse power (Pmax) as a function of pulse duration (Ti)

10s

Condition Test: Resistance change ≤±5% with pulse 1000 cycles as like the figure (reference only).

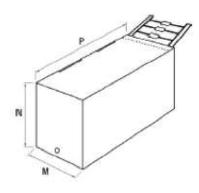
- Added power and added voltage are within the lower teritory of this
- 2. Added in normal temperature and humidity.

## Marking

The nominal resistance and tolerance are marked on the resistor using four or five coloured bands in accordance with IEC publication 60062 "Colour code for fixed resistors". Standard values of nominal resistance are taken from the E24/E96 series for resistors with a tolerance of ±5% or ±1%. The values of the E24/E96 series are in accordance with IEC publication 60063.

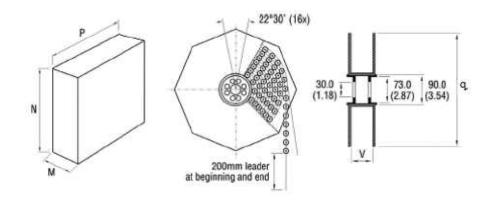


#### Packaging -Ammo Pack Boxed



	М	N	Р	Quantity
RR01	75	100	255	5000
RR02	75	55	255	1000
RR03	100	110	265	1000

## Packaging - Tape and Reeled



	Taping	М	N	Р	q	٧	Quantity pcs.
RR01	52 ±1.0	80	295	295	310	75	5000
RR02	52 ±1.0	80	295	295	310	75	2500
RR03	63 ±1.0	80	295	295	310	75	1000

#### **How to Order** RR 1K0 TR 01 **Common Part Power Rating Tolerance Value Packaging** 100 ohm (100 ohms) 100R 01 - 1 Watt J - 5% TR - Reeled RR - Power Resistor 02 - 2 Watts (1000 ohms) 1K0 F - 1% TB - Ammo Pack 100 K ohm 03 - 3 Watts (100,000 ohms) 100K

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