



General Resistors

FRN, FKN, FSQ Series - Fusible Resistors / 保险丝电阻 熔断电阻

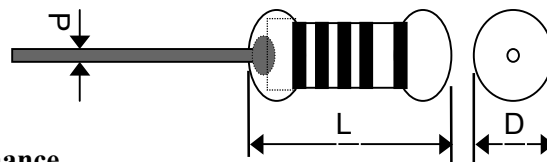
FRN, FKN, and FSQ Series are designed to act as an ordinary resistor under normal circuit conditions, and as a fuse under fault conditions. It is specially spiraled to provide the fusible function with flame retardant coating. Applications are widely used in constant voltage designed, overload protection, applicable for battery chargers, TV sets, cordless phones, and PC/CPU coolers. Token provides metal/carbon film (FRN), wirewound (FKN), and cement type (FSQ).



► Fusible Resistor General Specifications

Type	Rated Wattage	Dimension (mm)						Resistance Range	Dielectric Withstanding Voltage
		L ± 1.5	D ± 1	H ± 0.5	W ± 0.5	H ± 3	d ± 0.05		
FRN	1/4W	6	2.3			26	0.40~0.50	0.22Ω~100KΩ	300V
	1/2W	6	2.3			26	0.50~0.55	0.22Ω~100KΩ	300V
	1W	9	3.0			26	0.50~0.55	0.22Ω~100KΩ	350V
	2W	11	4.0			26	0.75~0.80	0.3Ω~100KΩ	500V
	3W	15	5.0			35	0.75~0.80	0.3Ω~100KΩ	500V
FKN	1W	9	4.5			26	0.50~0.55	0.1Ω~22Ω	500V
	2W	11	5.0			26	0.75~0.80	0.1Ω~60Ω	500V
	3W	15	5.5			35	0.75~0.80	0.1Ω~100Ω	500V
	5W	17	6.5			35	0.75~0.80	0.2Ω~200Ω	500V
	6W	24	8.5			38	0.75~0.80	0.3Ω~250Ω	500V
FSQ	2W	18		7	7	35	0.50~0.55	0.1Ω~22Ω	1000V
	3W	22		8	8	35	0.75~0.80	0.1Ω~120Ω	1000V
	5W	22		9	10	35	0.75~0.80	0.2Ω~120Ω	1000V
	7W	35		9	10	35	0.75~0.80	0.3Ω~250Ω	1000V
	10W	48		9	10	35	0.75~0.80	0.3Ω~500Ω	1000V

FSQ dimensions refer to SQP cement type.



► Fusible Resistor Electrical Performance

Test Items	Condition	Spec.
Operating Temp.	-30°C~155°C	
Resistance Temp. Coeff.	-30°C~150°C	± 200PPM / °C
Short Time Overload	2 times of rated voltage for 5 sec.	± 2 %
Temp. Cycle	-30°C~85°C for 5 cycles	± 1 %
Load Life	25°C on-off cycle 1,000 hrs.	± 5 %
Moisture-Proof Load Life	40°C 95°C RH on-off cycle 1,000 hrs.	± 5 %
Solder Pot	270°C for 3 sec.	± 1 %
Incombustibility	16 times of rated wattage for 5 min.	not flamed

► Fusing Characteristics

POWER WATTAGE	FUSING TIME
16 X Rated Wattage	Within 2 min
24 X Rated Wattage	Within 1 min
32 X Rated Wattage	Within 30 sec.



General Resistors

► How to Order

FRN

❶

1/2W

❷

0.47R

❸

J

❹

TB/P

❺

- ❶ Product type
- ❷ Rated Power (W)
- ❸ Resistance Value (Ω)
- ❹ Resistance Tolerance
- ❺ Packaging