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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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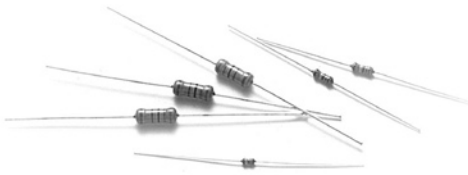
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Wirewound Resistors

Fusible & Flame-Proof Type

Normal & Miniature Style [FKN Series]



INTRODUCTION

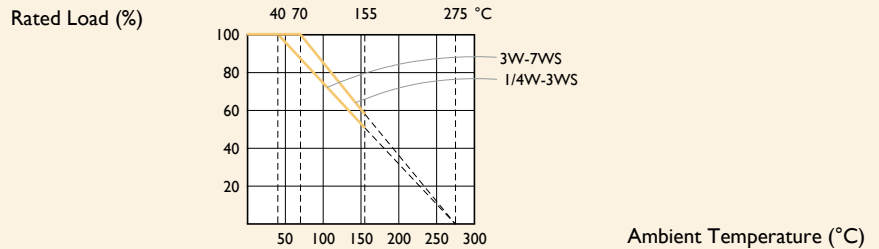
The resistor element is a resistive wire which is wound in a single layer on a ceramic rod, with tinned connecting wires of electrolytic copper welded to the end-caps. The ends of the resistive wire and the leads are connected to the caps by welding. The resistors are coated with layers of green color flame-proof lacquer. Overload protection without risk of fire. Wide range of overload currents.

FEATURES

Power Rating	1/4W, 1/2W, 1W, 2W, 3W, 4W, 5W, 7W
Resistance Tolerance	±1%, ±5%
T.C.R.	±350ppm/°C
Flameproof Multi-layer Coating Meets	UL-94V-0
Flameproof Feature Meets Overload Test	UL-1412

DERATING CURVE

For resistors operated in ambient temperatures above 40°C, power rating must be derated in accordance with the curve below.



FUSING CHARACTERISTICS

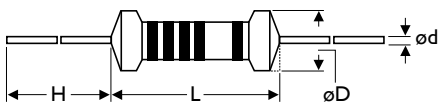
$R \leq 2.0 \Omega$ Fusing time within 60 seconds at 36 times of rated power

$R > 2.0 \Omega$ Fusing time within 60 seconds at 25 times of rated power

Fusing residual resistive value at least 100 times rated resistance

DIMENSIONS

Unit: mm



5th color code: white

STYLE	DIMENSION					
	Normal	Miniature	L	øD	H	ød
FKN-25		FKN50S	6.3±0.5	2.4±0.2	28±2.0	0.55±0.05
FKN-50		FKN1WS	9.0±0.5	3.3±0.3	26±2.0	0.55±0.05
FKN100		FKN2WS	11.5±1.0	4.5±0.5	35±2.0	0.8±0.05
FKN200		FKN3WS	15.5±1.0	5.0±0.5	33±2.0	0.8±0.05
FKN300						
FKN400		FKN5WS	17.5±1.0	6.5±0.5	32±2.0	0.8±0.05
FKN500		FKN7WS	24.5±1.0	8.0±0.5	38±2.0	0.8±0.05

Note: FKN1WS (for MBType) ød = 0.8±0.05 mm

ELECTRICAL CHARACTERISTICS

NORMAL STYLE

STYLE	FKN-25	FKN-50	FKN100	FKN200	FKN300	FKN400	FKN500
Power Rating at 40°C					3W	4W	5W
Power Rating at 70°C	1/4W	1/2W	1W	2W			
Voltage Proof	200V	300V					
Resistance Range (±1%)			0.5 Ω - 100 Ω	0.47 Ω - 150 Ω	0.56 Ω - 330 Ω		1 Ω - 620 Ω
Resistance Range (±5%)	2.5 Ω - 22 Ω	0.5 Ω - 47 Ω	0.5 Ω - 100 Ω	0.47 Ω - 150 Ω	0.56 Ω - 330 Ω		1 Ω - 620 Ω
Operating Temp. Range	-40°C to +155°C						
Temperature Coefficient	±350ppm/°C						

Note: Special value is available on request

MINIATURE STYLE

STYLE	FKN50S	FKNIWS	FKN2WS	FKN3WS	FKN5WS	FKN7WS
Power Rating at 40°C					5W	7W
Power Rating at 70°C	1/2W	1W	2W	3W		
Voltage Proof	200V	300V				
Resistance Range (±1%)		0.47 Ω - 62 Ω	0.47 Ω - 150 Ω	0.47 Ω - 240 Ω	0.56 Ω - 330 Ω	1 Ω - 620 Ω
Resistance Range (±5%)	2.5 Ω - 22 Ω	0.47 Ω - 62 Ω	0.47 Ω - 150 Ω	0.47 Ω - 240 Ω	0.56 Ω - 330 Ω	1 Ω - 620 Ω
Operating Temp. Range	-40°C to +155°C					
Temperature Coefficient	±350ppm/°C					

Note: Special value is available on request

ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD		APPRAISE
Short Time Overload	IEC 60115-1 4.13	10 times rated power for 5 Sec.	±2.0%+0.05 Ω
Voltage Proof	IEC 60115-1 4.7	in V-block for 60 Sec., test voltage by type	By type
Temperature Coefficient	IEC 60115-1 4.8	-55°C to +155°C	By type
Insulation Resistance	IEC 60115-1 4.6	in V-block for 60 Sec.	>100M Ω
Solderability	IEC 60115-1 4.17	235±5°C for 3±0.5 Sec.	95% Min. coverage
Solvent Resistance of Marking	IEC 60115-1 4.30	IPA for 5±0.5 Min. with ultrasonic	No deterioration of coatings and markings
Robustness of Terminations	IEC 60115-1 4.16	Direct load for 10 Sec. in the direction of the terminal leads	≥2.5kg (24.5N)
Damp Heat Steady State	IEC 60115-1 4.24	40±2°C, 90-95% RH for 56 days, loaded with 0.1 times RCWV	±5.0%+0.05 Ω
Endurance at 70°C	IEC 60115-1 4.25	70±2°C at RCWV for 1,000 Hr. (1.5 Hr. on, 0.5 Hr. off)	±5.0%+0.05 Ω
Temperature Cycling	IEC 60115-1 4.19	-55°C ⇌ Room Temp. ⇌ +155°C ⇌ Room Temp. (5 cycles)	±1.0%+0.05 Ω
Resistance to Soldering Heat	IEC 60115-1 4.18	260±3°C for 10±1 Sec., immersed to a point 3±0.5mm from the body	±1.0%+0.05 Ω
Accidental Overload Test	IEC 60115-1 4.26	4 times RCWV for 1 Min.	No evidence of flaming or arcing

Note: Rated Continuous Working Voltage (RCWV) = $\sqrt{\text{Power Rating} \times \text{Resistance Value}}$