



FKN, FSQ

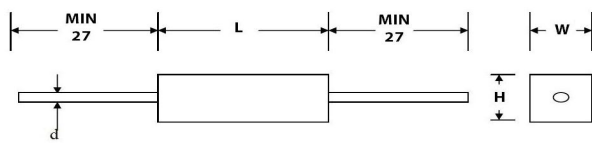
LEADFREE
RoHS Compliant

MEGASTAR-OHM FKN and FSQ series are low cost type resistors that provide circuit protection for overload or component failure. The resistor will be opened quickly under continued load, it prevents circuit board from damage and fire hazards.

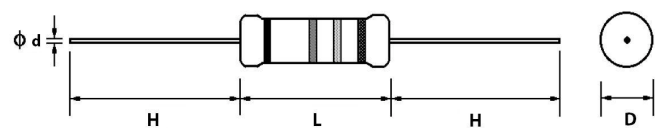
Features

1. Suitable to apply in transistor protection circuit.
2. Small in size with low cost.
3. Non-combustible insulating coat, solvent proof and excellent application in high temperature.
4. Standard TCR $\pm 200\text{PPM} / ^\circ\text{C}$
5. Uniform in fusing time.

Performance Characteristics and Dimensions(Units: mm)



FSQ



FKN

Style	Power Rating	Dimensions						Resistance Range	Dielectric Withstanding Voltage
		L ± 1.5	D ± 1	h ± 0.5	W ± 0.05	d ± 0.05	H (Min)		
FKN	1W	9	3	-	-	0.6	25	0.1 Ω ~10 Ω	500V
FKN	2W	11	4	-	-	0.73	27	0.1 Ω ~30 Ω	500V
FKN	3W	15	5.5	-	-	0.75	27	0.1 Ω ~50 Ω	500V
FKN	5W	17	6.5	-	-	0.75	27	0.3 Ω ~100 Ω	500V
FSQ	2W	18	-	7	7	0.65	27	0.1 Ω ~22 Ω	1000V
FSQ	3W	22	-	8	8	0.75	27	0.1 Ω ~50 Ω	1000V
FSQ	5W	22	-	9	10	0.75	27	0.2 Ω ~50 Ω	1000V
FSQ	7W	35	-	9	10	0.75	27	0.3 Ω ~100 Ω	1000V
FSQ	10W	48	-	9	10	0.75	27	0.3 Ω ~150 Ω	1000V

Characteristic	Condition	Spec
Operating Temperature	-55 $^\circ\text{C}$ ~ +275 $^\circ\text{C}$	
Resistance Temperature Coefficient	-30 $^\circ\text{C}$ ~ +150 $^\circ\text{C}$	$\pm 200\text{ppm} / ^\circ\text{C}$
Short Time Overload	2.5 times of rated voltage for 5 seconds.	$\pm 2\%$
Insulation Resistance	500V megger	1,000M Ω
Temp Cycle	-30 $^\circ\text{C}$ ~ +85 $^\circ\text{C}$ for 5 cycles	$\pm 1\%$
Load Life	70 $^\circ\text{C}$ on-off cycles 1,000 hours.	$\pm 5\%$
Moisture-Proof Load Life	40 $^\circ\text{C}$ 95% RH on-off cycle 1,000 hours	$\pm 5\%$
Solder Pot	270 $^\circ\text{C}$ for 3 sec.	$\pm 1\%$
Incombustibility	16 times of rated wattage for 5 min.	not flamed



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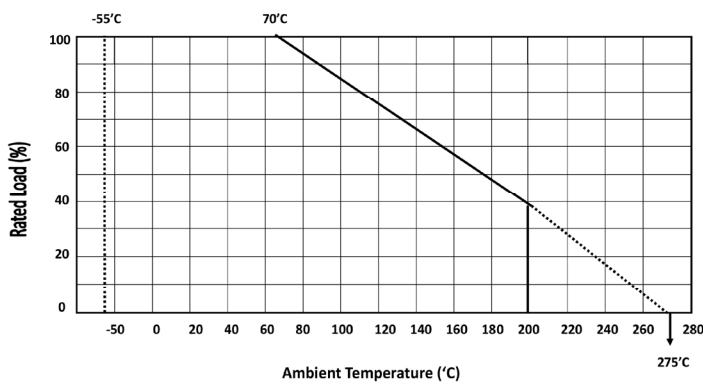
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FUSING CHARACTERISTICS

Resistance Range	Fusing Power	
	FKN	FSQ
0.22Ω ~ 1Ω	32 x Rated Power	16 x Rated Power
1.1Ω ~ 2Ω	25 x Rated Power	16 x Rated Power
2.1Ω ~ 10Ω	16 x Rated Power	16 x Rated Power
12Ω ~ 10KΩ	12 x Rated Power	16 x Rated Power

Fusing Time: within 60 sec.

DERATING CURVE



PART NUMBERING SYSTEM

FSQ	2W	XXX or XXXX	F	T																															
<table border="1"> <thead> <tr> <th>Type</th> </tr> </thead> <tbody> <tr> <td>FNK</td> </tr> <tr> <td>FSQ</td> </tr> </tbody> </table>	Type	FNK	FSQ	<table border="1"> <thead> <tr> <th>Code</th> <th>Power Rating</th> </tr> </thead> <tbody> <tr> <td></td> <td>1W</td> </tr> <tr> <td></td> <td>2W</td> </tr> <tr> <td></td> <td>3W</td> </tr> <tr> <td></td> <td>5W</td> </tr> <tr> <td></td> <td>7W</td> </tr> <tr> <td></td> <td>10W</td> </tr> </tbody> </table>	Code	Power Rating		1W		2W		3W		5W		7W		10W		<table border="1"> <thead> <tr> <th colspan="2">Resistance Tolerance</th> </tr> </thead> <tbody> <tr> <td>F</td> <td>±1%</td> </tr> <tr> <td>J</td> <td>±5%</td> </tr> </tbody> </table>	Resistance Tolerance		F	±1%	J	±5%	<table border="1"> <thead> <tr> <th colspan="2">Packaging</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>Bulk</td> </tr> <tr> <td>T</td> <td>Tape & Reel</td> </tr> <tr> <td>TB</td> <td>Tape & Box</td> </tr> </tbody> </table>	Packaging		B	Bulk	T	Tape & Reel	TB	Tape & Box
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Resistance Value: 3 DIGIT CODE (5% Tolerance E24 xxx)				
Code	0R1	1R0	100	101
Values	0.1Ω	1Ω	10Ω	100Ω

First two digits are significant figures and third digit is number of zeros.
Letter "R" indicates decimal values under 100 ohms.

Resistance Value: 4 DIGIT CODE (1% Tolerance E96 xxxx)				
Code	0R10	1R00	10R0	1000
Values	0.1Ω	1Ω	10Ω	100Ω

First three digits are significant figures and fourth digit is number of zeros.
Letter "R" indicates decimal values under 100 ohms.