

## KFF Series Datasheet

Power Fusible Wirewound Resistor | Axial  
Fiber glass core | ceramic case

### ORDERING CODE - Example

New SAP Part Nr.:

<b>KFF</b>	<b>250</b>	<b>K</b>	<b>B</b>	<b>-</b>	<b>AX-</b>	<b>100R</b>	<b>AA</b>
Serie	* Power rating	Tol. J = ±5% K = ±10%	Pack-Code B = Bulk	TCR - Base on spec.	Forming type AX- = Axial	R Value	Special AA = Standard

Historical VTM Part Nr.:

<b>KF206 - 4</b>	<b>5</b>	<b>B</b>	<b>100R</b>
Type	Tol. J = ±5% K = ±10%	Pack-Code B = Bulk	R Value

### APPLICATIONS

- Industrial
- Consumer & Electronics
- Power & Energy
- Computer & Peripherals

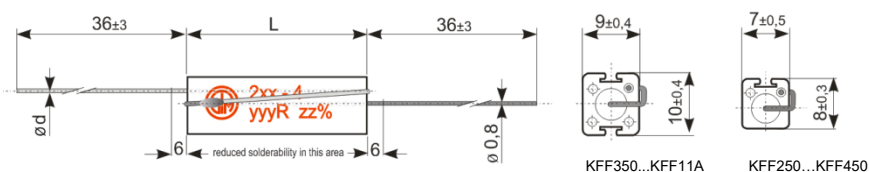
### FEATURES

- Pulse version available
- Excellent ratio power Vs Fusing
- RoHs and REACH Compliant

### ELECTRICAL SPECIFICATIONS

Type		KFF250	KFF300	KFF450	KFF350	KFF500	KFF700	KFF11A
Historical Part Number		KF206-4	KF208-4	KF210-4	KF212-4	KF214-4	KF216-4	KF218-4
Nominal Power Rating	* P <sub>25</sub>	2,5	3,0	4,5	3,5	5,0	7,0	11,0
	P <sub>70</sub>	1,2	1,5	2,5	2,0	3,0	4,0	6,0
Resistance Range	Min. [Ω]	R1	R12	R33	R12	R33	R51	R91
	Max.	9K1	15K	33K	15K	33K	47K	82K
E-Series (preferred)		(Other values upon request)						
Tolerances	±[%]	E24 = 5% ; E12 = 10% (Other upon request)						
Temperature Coefficient	±[10 <sup>-6</sup> K <sup>-1</sup> ]	Depends on the value, please check the table below						
Working Temperature Range	[°C]	-55 ... +150						
Thermal Resistance	[KW <sup>-1</sup> ]	70	56	34	43	28	22	14
Insulation Resistance IEC60115-1 clause 4.6	[MΩ]	> 10 <sup>4</sup>						
Max. Working Voltage	[V] <sub>RMS</sub>	$\sqrt{P_{70} \times R}$						
Dielectric Withstanding Voltage IEC60115-1 clause 4.7 (1[min])	[V] <sub>RMS</sub>	2000						

### DIMENSIONS [mm]



New P/Nr. Type	Historical P/N:	L	ø d
KFF250	KF206 - 4	20 ±1,0	0,6 ±0,015
KFF300	KF208 - 4	25 ±1,0	
KFF450	KF210 - 4	38 ±1,0	0,8 ±0,015
KFF350	KF212 - 4	25 ±1,0	
KFF500	KF214 - 4	38 ±1,0	
KFF700	KF216 - 4	50 ±1,5	
KFF11A	KF218 - 4	75 ±2,0	

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## PERFORMANCE DATA

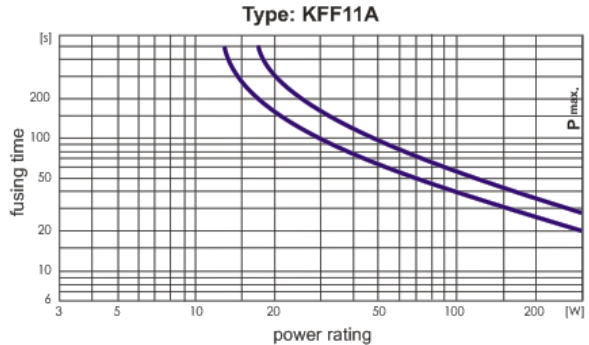
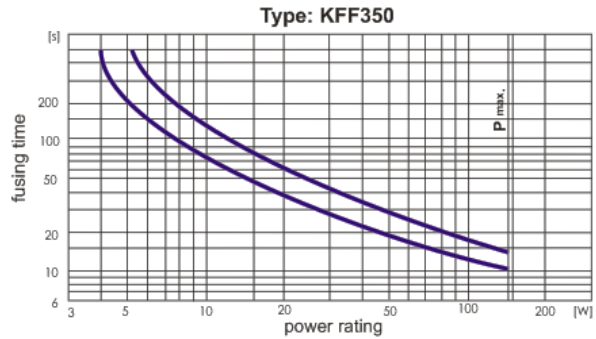
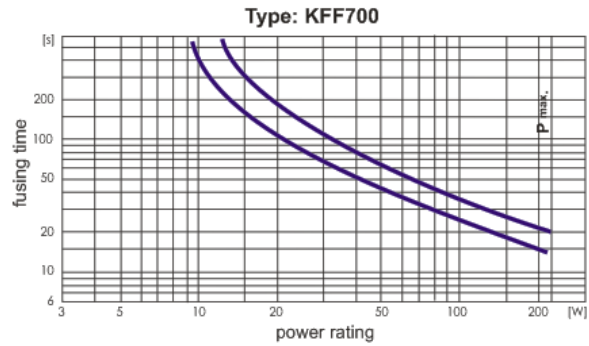
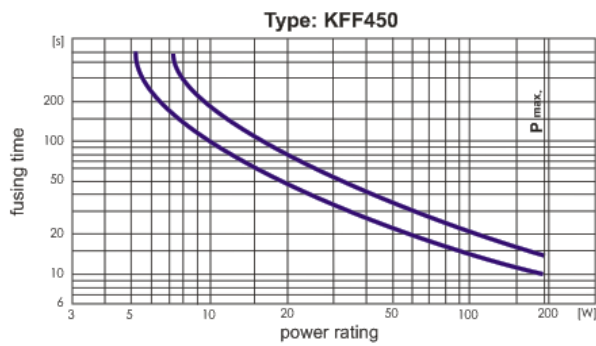
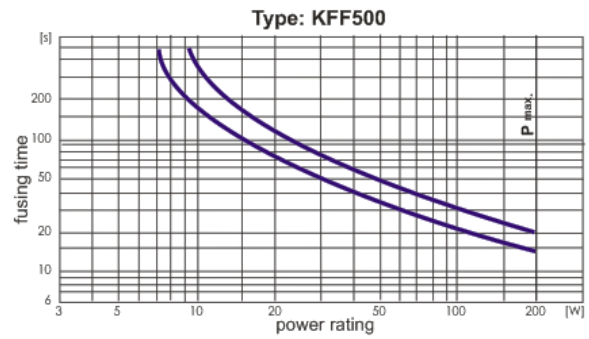
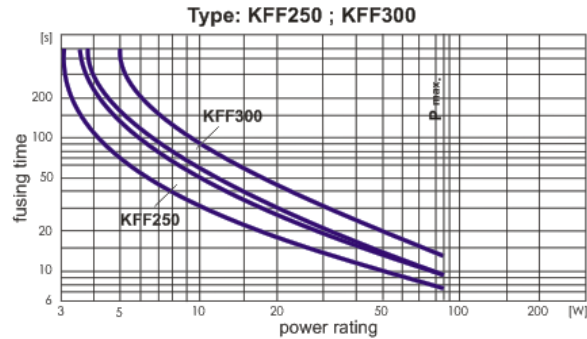
Type		KFF250	KFF300	KFF450	KFF350	KFF500	KFF700	KFF11A
Historical Part Number		KF206-4	KF208-4	KF210-4	KF212-4	KF214-4	KF216-4	KF218-4
Derating Linear	[°C]	70...150 (0W)						
Climatic Category		55/150/56						
Failure Rate <i>(Total, <math>\theta_o</math>, max, 60[%] cont. lev.)</i>	[10 <sup>-9</sup> h <sup>-1</sup> ]	appr. 100 depends on value						
Endurance <i>IEC60115-1 clause 4.25 (P<sub>70</sub> @ 70[°C], 1000[h])</i>	±[%]	3						
Damp Heat, Steady State <i>IEC60115-1 clause 4.24 (40[°C], 93[% r.h.], 56[d])</i>	±[%]	2						
Climatic Sequence <i>IEC60115-1 clause 4.23</i>	±[%]	2						
Resistance to Soldering Heat <i>IEC60115-1 clause 4.18 (260<sup>±5</sup>[°C], 3,5<sup>±1</sup>[s])</i>	±[%]	0,2						
Terminal Strength	±[%]	1						
Terminal Tensile Strength	[N]	50						
Solderability <i>IEC60068-2-20 (245<sup>±5</sup>[°C] 3<sup>±0,5</sup>[s])</i>		Solder bath method (> 95% coverage)						
Marking <i>IEC60062</i>		Printed in clear						

## TEMPERATURE COEFFICIENT

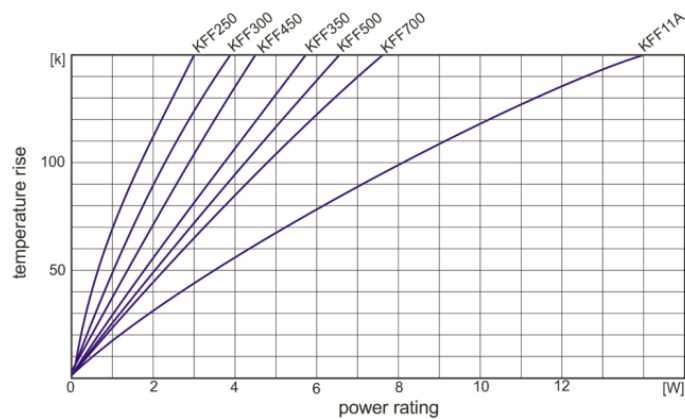
New P/Nr. Type	Historical P/N:	400 ± 50 ppm/K		-20 ± 60 ppm/K		0 ± 10 ppm/K	
KFF250	KF206 - 4	≥ R1	≤ R2	≥ R22	≤ 300R	≥ 330R	≤ 9K1
KFF300	KF208 - 4	≥ R12	≤ R3	≥ R33	≤ 470R	≥ 510R	≤ 15K
KFF450	KF210 - 4	≥ R33	≤ R68	≥ R75	≤ 910R	≥ 1K	≤ 33K
KFF350	KF212 - 4	≥ R12	≤ R3	≥ R33	≤ 470R	≥ 510R	≤ 15K
KFF500	KF214 - 4	≥ R33	≤ R68	≥ R75	≤ 910R	≥ 1K	≤ 33K
KFF700	KF216 - 4	≥ R51	≤ 1R	≥ 1R1	≤ 1K3	≥ 1K5	≤ 47K
KFF11A	KF218 - 4	≥ R91	≤ 1R6	≥ 1R8	≤ 2K4	≥ 2K7	≤ 82K

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## FUSE CHARACTERISTICS



## TEMPERATURE RISE



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## PACKAGING

The standard packaging for KFF in axial type is bulk, dimensions below.



New P/Nr. Type	Historical P/N:	Pack Code	Pieces	Forming Type
<b>KFF250</b>	KF206 - 4	<b>B = Bulk</b>	100	<b>AX- = Axial</b>
<b>KFF300</b>	KF208 - 4		100	
<b>KFF450</b>	KF210 - 4		100	
<b>KFF350</b>	KF212 - 4		100	
<b>KFF500</b>	KF214 - 4		100	
<b>KFF700</b>	KF216 - 4		100	
<b>KFF11A</b>	KF218 - 4		100	