

## GFV Series Datasheet

Metal Glaze Film Resistors | Axial and SMD Version  
High ohmic / High voltage | Flameproof coating

### ORDERING CODE - Example

New SAP Part Nr.:

<b>GFV</b>	<b>100</b>	<b>J</b>	<b>T</b>	<b>G</b>	<b>73-</b>	<b>10K</b>	<b>AA</b>
Serie	Power rating	Tol.	Pack-Code	TCR	Forming type	R Value	Special
		F = ±1% J = ±5%	T = Tape on Box	G = ±200ppm	52- Inner Taping dimension or 73- Inner Taping dimension or ZB- Z version		AA = Standard

Historical VTM Part Nr.:

<b>GF0512</b>	<b>5</b>	<b>T</b>	<b>10K</b>
Type	Tol.	Pack-Code	R Value

<b>RZV3</b>	<b>6720</b>	<b>J</b>	<b>K</b>	<b>-</b>	<b>13</b>	<b>10K</b>
Type	Size	Tol.	K = Blister tape reel	TC	Reel diam.	R Value

### APPLICATIONS



Industrial



Consumer & Electronics

### FEATURES

High voltage

High pulse loading capability

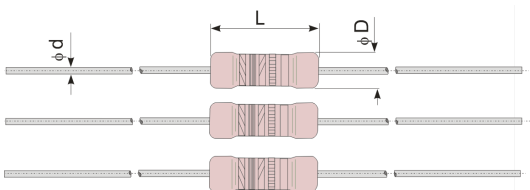
"Z" preforming ; Other preforming available

RoHs & REACH Compliant

### ELECTRICAL SPECIFICATIONS

Type		GFV-25	GFV-50	GFV100	GFV200	GFV300	
Historical Part Number	AXIAL	GF0207	GF0410	GF0512	-	GF0616	
	SMD	RZV1	RZV2	RZV3	-	RZV4	
Nominal Power Rating	P <sub>70</sub>	[W]	0,25	0,5	1,0	2,0	3,0
Resistance Range	[Ω]	100K ... 68M (Other values upon request)					
E-Series		E24 , E96 (E24 / E96 1% ; E24 5%)					
Tolerances	±[%]	F = 1% ; J = 5%					
Temperature Coefficient	±[10 <sup>-6</sup> K <sup>-1</sup> ]	G = 200					
Working Temperature Range	[°C]	-55 ... +155					
Max. Overload Voltage	[V] <sub>RMS</sub>	3000	7000	10000	14000		
Max. Working Voltage	[V] <sub>RMS</sub>	1600	3500	5000	7000		
Dielectric Withstanding Voltage IEC115-1 clause 4.7 (1[min])	[V] <sub>RMS</sub>	500	500	700			

### DIMENSIONS [mm]



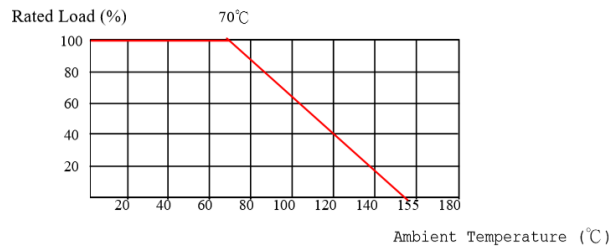
Type	Historical P/N:	L	Ø D	Ø d
<b>GFV-25</b>	GF0207	6,3 <sup>±0,5</sup>	2,4 <sup>±0,2</sup>	0,55 <sup>±0,05</sup>
<b>GFV-50</b>	GF0410	9,0 <sup>±0,5</sup>	3,3 <sup>±0,3</sup>	0,55 <sup>±0,05</sup>
<b>GFV100</b>	GF0512	11,5 <sup>±1,0</sup>	4,5 <sup>±0,5</sup>	0,80 <sup>±0,05</sup>
<b>GFV200</b>	-	15,5 <sup>±1,0</sup>	5,0 <sup>±0,5</sup>	0,80 <sup>±0,05</sup>
<b>GFV300</b>	GF0616	15,5 <sup>±1,0</sup>	5,0 <sup>±0,5</sup>	0,80 <sup>±0,05</sup>

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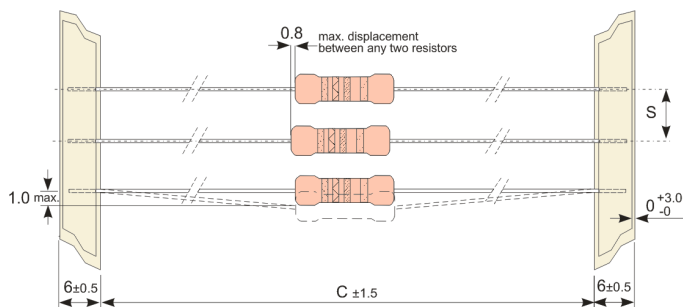
## PERFORMANCE DATA

Type		GFV-25	GFV-50	GFV100	GFV200	GFV300
Historical Part Number	AXIAL	GF0207	GF0410	GF0512	-	GF0616
	SMD	RZV1	RZV2	RZV3	-	RZV4
Derating Linear	[°C]	70...155 (0W)				
Climatic Category		55/155/56				
Max. Cont. Surface Temperature	[°C]	155				
Short Time Overload <i>IEC60115-1 clause 4.13</i>	±[%]	2,0				
Endurance <i>IEC60115-1 clause 4.25</i> <i>(P<sub>70%</sub> @ 70[°C], 1000[h])</i>	±[%]	5,0				
Damp Heat, Steady State <i>IEC60115-1 clause 4.24</i> <i>(40[°C], 93[% r.h.], 56[d])</i>	±[%]	5,0				
Thermal Shock <i>IEC60115-1 clause 4.19</i> <i>(-55 ~ 150[°C], 3[min], 100 cycles)</i>	±[%]	1,0				
Resistance to Soldering Heat <i>IEC60115-1 clause 4.18</i> <i>(350<sup>±5</sup>[°C], 3<sup>±1</sup>[s])</i>	±[%]	1,0				
Terminal Tensile Strength	[N]	50				
Solderability <i>IEC60068-2-20</i> <i>(245<sup>±5</sup>[°C] 3<sup>±0,5</sup>[s])</i>		Solder bath method (> 95% coverage)				
Marking <i>IEC60062</i>		Color code				

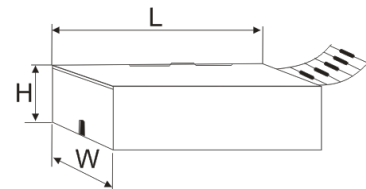
## DERATING CURVE



## PACKAGING



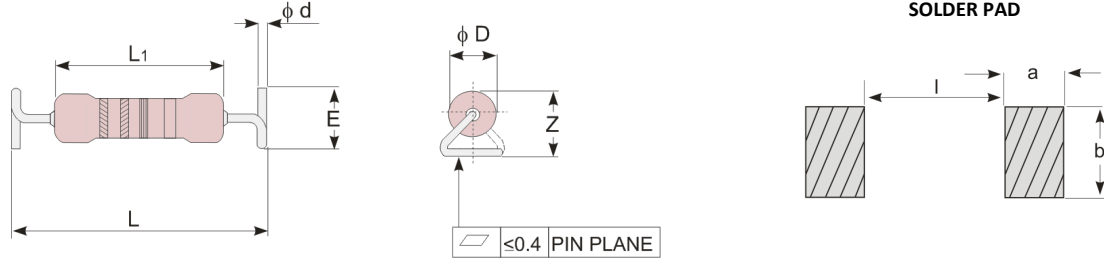
Tape on Box:



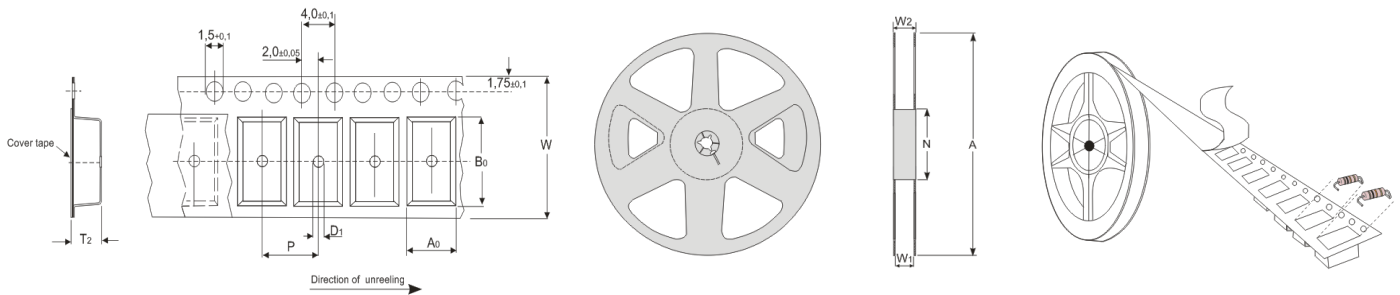
Type	Historical P/N:	Pack Code	Pieces	Forming Type (Inner Taping dim.)	C	S	Box dimensions		
							W	H	L
GFV-25	GF0207	T = Taped Ammo pack	5000	52-	52	5	81	104	260
GFV-50	GF0410		1000				73	45	
GFV100	GF0512		1000	73-	78				
GFV200	-		1000			103	94		
GFV300	GF0616		1000	73-	73	10			

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## SMD LEAD CONFIGURATIONS



Type	Historical P/N	Size	L	L <sub>1</sub>	Ø D	Ø d	E	Z max	l	a	b
GFV-25	RZV1	5315	13,4±0,5	6,3 ±0,5	2,4 ±0,2	0,55 <sup>+0,05</sup> <sub>+0,05</sub>	5,0±0,5	7,0	10	10	10
GFV-50	RZV2	6720	17,0±1,0	9,0 ±0,5	3,3 ±0,3	0,55 <sup>+0,05</sup>		7,5	14		
GFV100	RZV3	6720		11,5 ±1,0	4,5 ±0,5	0,80 <sup>+0,05</sup>					
GFV200	-	-	20,9±1,0	15,5 ±1,0	5,0 ±0,5	0,80 <sup>+0,05</sup>					
GFV300	RZV4	8424	20,9±1,0	15,5 ±1,0	5,0 ±0,5	0,80 <sup>+0,05</sup>		8,0	16		



Type	A0	B0	W	D1	P	T2
GFV-25	5,0	13,7	24	2,0	8	7,2
GFV-50 GFV100	5,7	16,7	24	2,0	8	7,6
GFV200 GFV300	6,0	21,4	32	2,0	12	8,1

Type	W1	W2	N	A
GFV-25	25,4	29,5	90	330
GFV-50 GFV100				380
GFV200 GFV300				380

Type	Packaging	Pieces
GFV-25 GFV-50 GFV100	13(inch) Blister tape	1000
GFV200 GFV300	15(inch) Blister tape	

### Ordering Code for SMD :

GFV	100	J	K	-	ZB-	10K	AA
Serie	Power rating	Tol. J = ±5%	Pack-Code K = Blister Tape Reel	TCR - Base on spec.	Forming type ZB- Z version	R Value	Special AA = Standard

## ALTERNATIVE LEAD CONFIGURATIONS

This type GFV is also available in a different pre-forming, as shown below, other's upon request.

### THOUGH HOLE VERSION

Axial Goal Post (AG-)	Axial Goal Post Kink (AK-)	Radial (RD-)	Radial 2 Kink (RK-)