

GFV Series Datasheet

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

ORDERING CODE-Example

New SAP Part Nr.:

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

Historical VTM Part Nr.:

GF0512	5	T	10K
Type	Tol.	Pack-Code	R Value

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

APPLICATIONS

- Automotive
- Charger
- Alternative Energy
- Power Supply
- Home Appliances
- Industrial

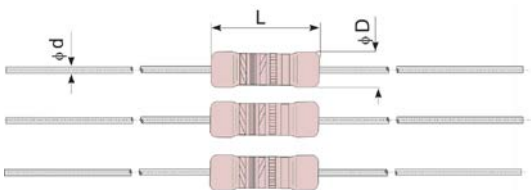
FEATURES

- High voltage
- High pulse loading capability
- "Z" preforming ; Other preforming available
- RoHS & REACH Compliant

ELECTRICAL SPECIFICATIONS

Type		GFV-25	GFV-50	GFV100	GFV300	
Historical Part Number	AXIAL	GF0207	GF0410	GF0512	GF0616	
	SMD	RZV1	RZV2	RZV3	RZV4	
Nominal Power Rating	P ₇₀	[W]	0,25	0,5	1,0	3,0
Resistance Range	[Ω]	10K ... 100M (Other values upon request)				
E-Series		E24 , E96 (E24 / E96 1% ; E24 5%)				
Tolerances	±[%]	F = 1% ; J = 5%				
Temperature Coefficient	±[10 ⁻⁶ K ⁻¹]	G = 200				
Working Temperature Range	[°C]	-55 ... +155				
Max. Overload Voltage	[V] _{RMS}	3000	7000	10000	14000	
Max. Working Voltage	[V] _{RMS}	1600	3500	5000	7000	
Dielectric Withstanding Voltage IEC115-1 clause 4.7 (1[min])	[V] _{RMS}	300	500	600	600	

DIMENSIONS [mm]



Type	Historical P/N:	L	∅ D	∅ d
GFV-25	GF0207	6,3 ^{±0,5}	2,4 ^{±0,2}	0,55 ^{±0,05}
GFV-50	GF0410	9,0 ^{±0,5}	3,3 ^{±0,3}	0,55 ^{±0,05}
GFV100	GF0512	11,5 ^{±1,0}	4,5 ^{±0,5}	0,80 ^{±0,05}
GFV300	GF0616	15,5 ^{±1,0}	5,0 ^{±0,5}	0,80 ^{±0,05}

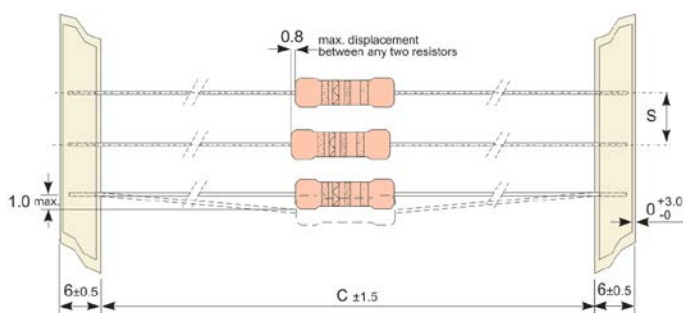
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PERFORMANCE DATE

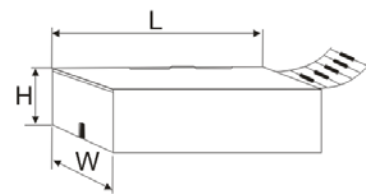
Type		GFV-25	GFV-50	GFV100	GFV300
Historical Part Number	AXIAL	GF0207	GF0410	GF0512	GF0616
	SMD	RZV1	RZV2	RZV3	RZV4
Derating Linear	[°C]	70...155 (0W)			
Climatic Category		55/155/56			
Max. Cont. Surface Temperature	[°C]	155			
Short Time Overload <i>IEC60115-1 clause 4.13</i>	±[%]	2,0			
Endurance <i>IEC60115-1 clause 4.25</i> <i>(P_{70v} @ 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^{±5}[°C], 3^{±1}[s])</i>	±[%]	1,0			
Terminal Tensile Strength	[N]	50			
Solderability <i>IEC60068-2-20</i> <i>(245^{±5}[°C] 3^{±0.5}[s])</i>		Solder bath method (> 95% coverage)			
Marking <i>IEC60062</i>		Color code			

PACKAGING

The standard packaging for GFV in axial type is taped, dimensions below.



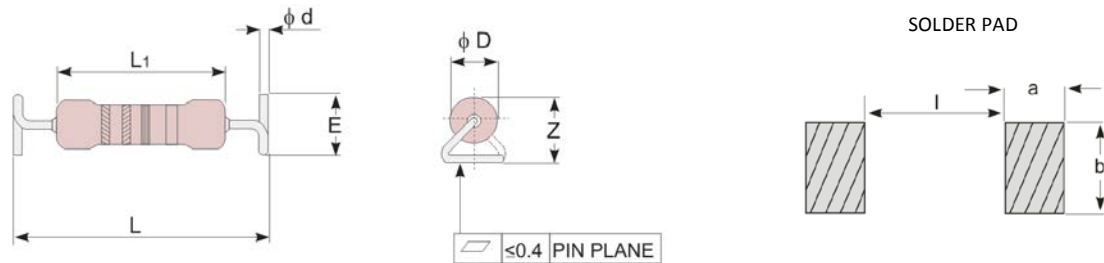
Tape on Box:



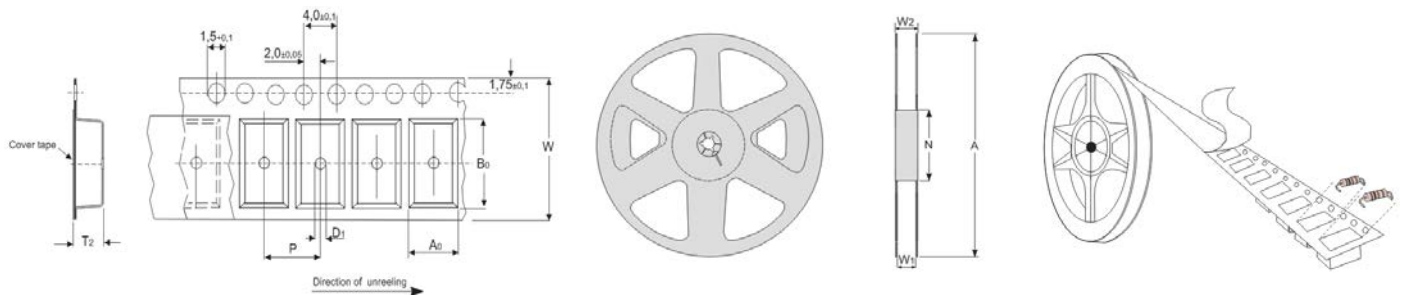
Type	Historical P/N:	Pack Code	Pieces	Forming Type (Inner Taping dim.)	C	S	Box dimensions		
							W	H	L
GFV-25	GF0207	T = Taped Ammo pack	5000	52-	52	5	81	104	260
GFV-50	GF0410		1000				73	45	
GFV100	GF0512		1000				103	78	
GFV300	GF0616		1000	73-	73	10		94	

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SMD LEAD CONFIGURATIONS



Type	Historical P/N	Size	L	L ₁	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 ^{-±0,05} _{+0,05}	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 ^{-±0,05} _{+0,05}		7,5	14		
GFV100	RZV3	6720		11,5 ±1,0	4,5 ±0,5	0,80 ^{-±0,05} _{+0,05}		8,0	16		
GFV300	RZV4	8424	20,9±1,0	15,5 ±1,0	5,0 ±0,5	0,80 ^{-±0,05} _{+0,05}					



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
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				380
GFV100				
GFV300	33,4	37,4	100	380

Type	Packaging	Pieces
GFV-25 GFV-50 GFV100	13(inch) Blister tape	1000
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 POS 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-)