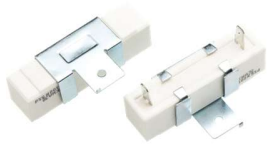
KWA Series Datasheet

Power Wirewound Resistor | Fiber Glass core | Radial | Ceramic case | AMP contacts



ORDERING CODE - Example

New SAP Part Nr.:

KWA	40A	J	F	-	RD-	47R	AA
Serie	* Power rating	Tol.	Pack-Code	TCR	Forming type	R Value	Special
		G =±2% **J** = ±5%	**F**= Fiber Glass Element	**-** Base on spec.	**RD-** = Radial		**AA** =Standard **A1**=Without bracket

Historical VTM Part Nr.:

KWA40A	5	B	47R
Type	Tol.	Pack-Code	R Value

APPLICATIONS

Power & Energy

Automotive

FEATURES

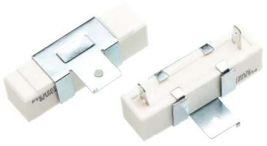
- Automotive grade
- Electrical / hybrid vehicles battery management
- High Pulse capability version available
- RoHs and REACH Compliant

ELECTRICAL SPECIFICATIONS

Type		KWA15A	KWA20A	KWA30A	KWA40A
Historical Part Number		KWA15A	KWA20A	KWA30A	KWA40A
Nominal Power Rating P_{70}	[W]	15	20	30	40
Resistance Range	[Ω]	R051 ... 5K6	0R51 ... 10K	0R62 ... 10K	0R62 ... 10K
		(Other values upon request)			
E-Series (preferred)		E24 (Other upon request)			
Tolerances	±[%]	2(G); 5(J)			
Temperature Coefficient	±[10^{-6}*K^{-1}]	250			
Working Temperature Range	[°C]	-55 ... +350			
Thermal Resistance	[KW^{-1}]	19	14	9	7
Max. Working Voltage	$[V]_{RMS}$	$\sqrt{P_{70} \times R}$			
Insulation Resistance IEC60115-1 clause 4.6	[MΩ]	> 10^4			
Dielectric Withstanding Voltage IEC115-1 clause 4.7 (1[min])	$[V]_{RMS}$	2000			

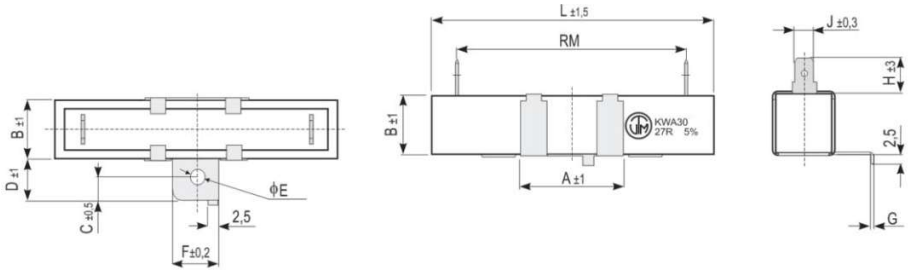
KWA Series Datasheet

Power Wirewound Resistor | Fiber Glass core | Radial | Ceramic case | AMP contacts



DIMENSIONS [mm]

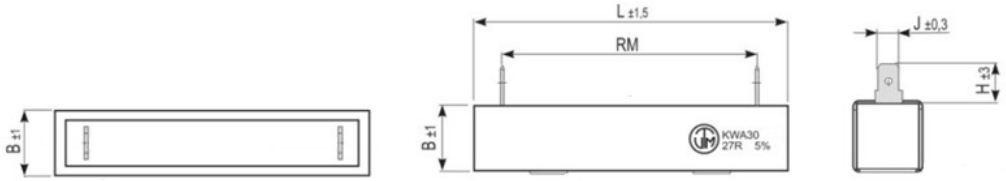
Standard:



New P/Nr. Type	*Historical P/N:*	L	RM	B	A	C	D	E	F	G	H	J
KWA15A	KWA15	48,0	34,0	13,0	25,0	6,0	12,5	4,0	12,0	0,6	9,0	4,8*
KWA20A	KWA20	63,5	48,0	13,0	25,0	6,0	12,5	4,0	12,0	0,6	9,0	4,8*
KWA30A	KWA30	75,0	56,0	19,0	40,0	8,0	18,0	4,2	18,0	0,8	12,0	6,3
KWA40A	KWA40	90,0	71,0	19,0	40,0	8,0	18,0	4,2	18,0	0,8	12,0	6,3

* Special AMP contacts 6,3mm available types KWA15001 and KWA20001

Without bracket:

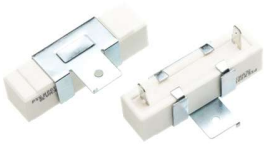


New P/Nr. Type	*Historical P/N:*	L	RM	B	H	J
KWA15A	KWA15	48,0	34,0	13,0	9,0	4,8*
KWA20A	KWA20	63,5	48,0	13,0	9,0	4,8*
KWA30A	KWA30	75,0	56,0	19,0	12,0	6,3
KWA40A	KWA40	90,0	71,0	19,0	12,0	6,3

* Special AMP contacts 6,3mm available types KWA15001 and KWA20001

KWA Series Datasheet

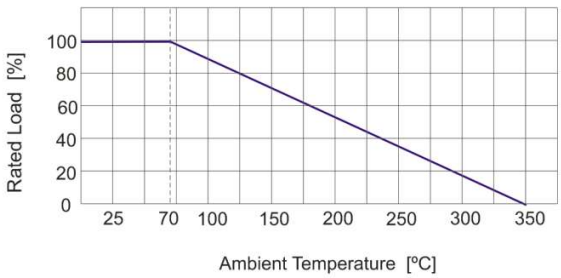
Power Wirewound Resistor | Fiber Glass core | Radial | Ceramic case | AMP contacts

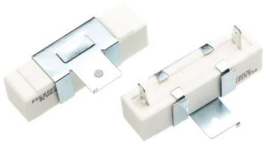


PERFORMANCE DATA

Type		KWA15A	KWA20A	KWA30A	KWA40A
Historical Part Number		KWA15A	KWA20A	KWA30A	KWA40A
Derating Linear	[°C]	70...350 (0W)			
Climatic Category		55/200/21			
Failure Rate *(Total, ϑ_0, max, 60[%] cont. lev.)*	[10^{-9} h^{-1}]	appr. 100 depends on value			
Endurance *IEC60115-1 clause 4.25* *(P_{70}, @ 70[°C], 1000[h])*	±[%]	5,0			
Damp Heat, Steady State *IEC60115-1 clause 4.24* *(40[°C], 93[% r.h.], 56[d])*	±[%]	5,0			
Resistance to Soldering Heat *IEC60115-1 clause 4.18* *($260^{\pm5}$[°C], $10^{\pm1}$[s])*	±[%]	1,0			
Solderability *IEC60068-2-20* *($245^{\pm5}$[°C] $3^{+0.5}$[s])*		Solder bath method (> 95% coverage)			
Marking *IEC60062*		Printed in clear			

PERFORMANCE GRAPHS





PACKAGING

The standard packaging for KWA in radial type is bulk, dimensions below.

New P/Nr. Type	*Historical P/N:*	Pieces	Pack Code	*Forming Type*
KWA15A	KWA15	70	**F** = Bulk with Fiber Glass Element	**RD-** = Radial
KWA20A	KWA20	60		
KWA30A	KWA30	14		
KWA40A	KWA40	14		

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Before purchasing or using VITROHM products, please confirm the latest information with a VITROHM sales representative.