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(DQ) Wave-Shape Ribbon-Wound Power Resistor

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▶ Product Introduction

Wave-Shape Ribbon-Wound Power Resistor Design Neutralizes Inductance Parasitoid

Features :

- Fixed, tapped styles, or adjustable type are available.
- Special terminals are available for unusual applications.
- Special tolerances, temperature coefficients, and resistance value can be specified.
- Ayrton Perry type non-inductive winding formats are available. See DQS Series when required.
- Standard resistance tolerance is H($\pm 3\%$), J($\pm 5\%$) and K($\pm 10\%$). Closer tolerances are available upon request.
- The wire is spot welded to the terminal bands and then "fastened" onto the core with a silicone, cement, or vitreous enamel coating.
- Standard lug terminals available with or without terminal hardware. Single and double quick connect terminals can be specified.
- DQ Series Design allows for efficient heat dissipation at higher temperature ranges so the resistor is half the physical size of an equivalent rated roundwire resistor.

Applications :

- The Power Ribwound DQ Series is suitable for educational modeling applications, load testing, industrial machinery resistor, electric power distribution resistors, instruments, automation control installations, etc.
- Typical applications for roundwire (DQ) series in motor/motion control include areas such as lift trucks, overhead cranes, elevator resistors, arc and spot welders, battery charger resistors, machine tools, conveyor resistors, and UPS systems.

A tubular ceramic has two terminals, and is wound with a resistance element consisting of a wave-shaped alloy ribbon.

Terminal bands are spot welded after installation on the core and then a resistance-alloy ribbon wire is crimped and edge wound onto the core.

Non-flammable resin insulation is applied after cooling and drying through a temperature process and then the component mounts are attached.

The resistance value range is relatively low due to alloy material limitations; see the DR series if upper resistance values required.

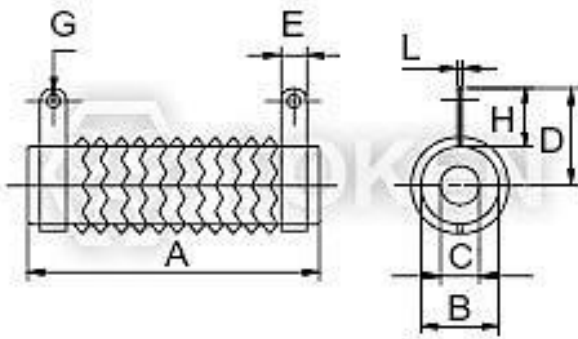
Power Wave-Shape Ribbon wound Resistor supports the use of numerous taps, has low impedance, and can be fabricated in various shapes to support a wide range of applications. The DQ Series is RoHS compliant and lead free. For custom specifications, or order individual replacement units, entire grids with various mounting configurations, please contact us to discuss the details. Or link to Token official website "[High Power Resistors](http://www.token.com.tw)" to get more information.



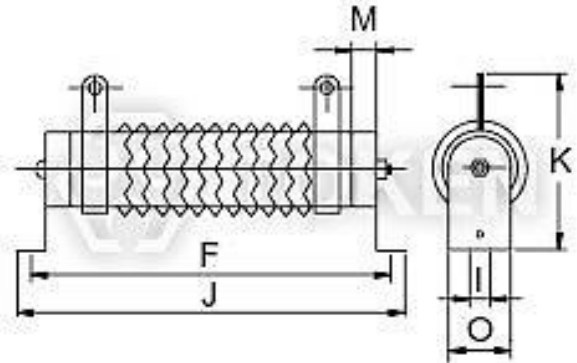
► **DQ-A Dimensions**

Dimensions Rib-Wound (DQ-A 75W ~ 2000W)

Wattage Rating	Dimensions (Unit: mm)														Resistance Range
	A	B	C	D	E	F	G	H	I	J	K	L	M	O	
75W	110	25	16	30	8	150	5	18	6	166	58	1.2	6	27	1.5~8Ω
90W	90	28	18	32	8	130	5	19	6	146	60	1.2	6	27	1.5~9Ω
120W	110	28	18	32	8	150	5	19	6	166	60	1.2	6	27	2~12Ω
150W	140	28	18	32	8	180	5	19	6	196	60	1.2	6	27	2~15Ω
180W	160	28	18	32	8	200	5	19	6	216	60	1.2	6	27	3~18Ω
225W	195	28	18	32	8	235	5	19	6	251	60	1.2	6	27	3~23Ω
240W	185	35	24	36	10	225	5	19	8	245	76	1.6	6	34	5~24Ω
300W	210	35	24	36	10	250	5	19	8	274	76	1.6	6	34	5~30Ω
375W	210	40	25	38	12	250	5	20	8	274	78	1.6	6	34	6~38Ω
450W	260	40	25	38	12	300	5	20	8	320	78	1.6	6	34	6~45Ω
600W	330	40	25	38	12	370	5	20	8	395	78	1.6	6	34	7~60Ω
750W	330	50	35	50	12	380	6	25	9	400	100	1.6	8	40	8~75Ω
900W	400	50	35	50	12	450	6	25	9	470	100	1.6	8	40	8~90Ω
1000W	460	50	35	50	12	510	6	25	9	530	100	1.6	8	40	12~100Ω
1200W	460	60	40	55	15	515	6	30	10	535	110	1.6	10	50	12~120Ω
1500W	540	60	40	55	15	595	6	30	10	615	110	1.6	10	50	15~150Ω
2000W	650	65	42	62	15	702	6	30	10	722	115	1.6	10	50	15~200Ω



(DQ-A) **N** - No Mount

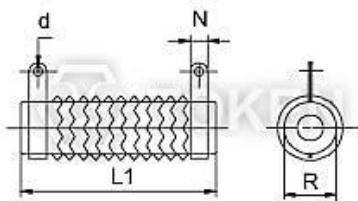


(DQ-A) **G** - Horizontal Mount

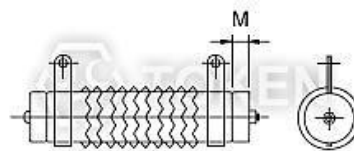
► DQ-B Dimensions

Dimensions Rib-Wound (DQ-B 30W ~ 20000W)

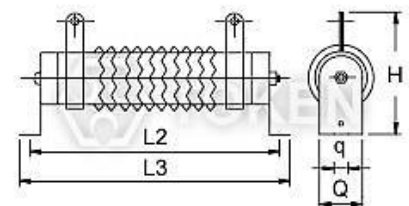
Wattage Rating	Dimensions (Unit: mm)										Resistance Range
	R	L1	L2	L3	H	N	d	M	q	Q	
30W	20	70	100	120	50	6	3.5	5	5	20	2~1KΩ
40W	20	87	115	137	50	6	3.5	5	5	20	2~1KΩ
50W	28	90	122	143	68	9	4.5	5.5	6	28	5~1KΩ
80W	28	90	122	143	68	9	4.5	5.5	6	28	5~2KΩ
100W	28	170	202	223	68	9	4.5	5.5	6	28	10~3KΩ
150W	28	215	247	268	68	9	4.5	5.5	6	28	10~3KΩ
200W	28	267	299	320	68	9	4.5	5.5	6	28	10~5KΩ
250W	28	267	299	320	68	9	4.5	5.5	6	28	10~5KΩ
300W	40	267	305	343	90	10	4.5	6	6	40	20~5KΩ
400W	40	330	367	406	90	10	4.5	6	6	40	20~5KΩ
500W	50	330	370	415	98	10	6	8.5	8	50	20~5KΩ
600W	50	330	370	415	98	10	6	8.5	8	50	20~5KΩ
700W	50	400	440	485	95	10	6	8.5	8	50	20~5KΩ
800W	70	300	331	362	135	15	8	-	8	70	40~500Ω
1000W	70	300	331	362	135	15	8	-	8	70	40~500Ω
1500W	70	415	446	477	135	15	8	-	8	70	40~500Ω
2000W	70	510	541	572	135	15	8	-	8	70	40~500Ω
2500W	70	600	631	662	135	15	8	-	8	70	40~500Ω
3000W	70	600	631	662	135	15	8	-	8	70	40~500Ω
4000W	100	430	468	521	185	15	8	-	8	100	40~500Ω
5000W	100	500	538	591	185	15	8	-	8	100.	40~500Ω
6000W	100	600	638	691	185	15	8	-	8	100.	40~500Ω
10000W	150	600	640	720	260	30	8	-	10	152	40~500Ω
12000W	150	660	700	780	260	30	8	-	10	152	40~500Ω
15000W	150	660	700	780	260	30	8	-	10	152	40~500Ω
20000W	150	1000	1040	1120	260	30	8	-	10	152	40~500Ω



(DQ-B) N - No Mount



(DQ-B) Z - Vertical Mount



(DQ-B) G - Horizontal Mount

▶ **Order Codes**

Order Codes (DQ)

DQA	1500W	100R		K	G
Part Number	Rated Power (W)	Resistance Value		Resistance Tolerance (%)	
DQA	75W~2000W	0R1	0.1Ω	H	±3%
DQB	30W~20000W	1R	1Ω	J	±5%
DQAN	75W~2000W	10R	10Ω	K	±10%
DQBN	30W~20000W	12R	12Ω		
		100R	100Ω		
					N No mount.
					C Clip mount.
					G Horizontal mount.
					Z Vertical mount.

► General Information

Benefits & Features

Providing design engineers with an economical resistor with high quality performance, Token Electronics offers industry grade power wire wound devices.

Token provide terminal blocks, thermal switches, fusing, fans, junction boxes, screened or solid bottom plates, conduit knockouts, and customer specified requirements. For large applications a welded frame construction is utilized to provide a robust design for power resistor mounting in both indoor and outdoor environments.

Products range from large capacity metal clad, nonflammable fixed and adjustable, wave ribbon wire-wound, slide, starter, box type, to nonflammable flat type. Token extends a complete line for both military and commercial applications.

Utilization Notes

1. Smoke emitted from non-flammable resistors on initial use in powered circuits is a normal phenomenon and the component can be safely utilized.
2. All resistors manufactured by Token Electronics Industry Corporation comply with the U.S. UL-94 non-flammability test, Class V-0, a continuous combustion period of zero seconds.
3. Never use organic solvents to clean non-flammable resistors.
4. Non-flammable resistors cannot be utilized in oil.
5. Non-flammable resistors cannot be used in high frequency machinery because of the inductance produced by the windings. A suitable type of resistor must be selected. Contact us for details.
6. In applications where resistors are subject to intermittent current surges and spikes, be sure in advance that the components selected are capable of withstanding brief durations of increased load.
7. Do not exceed the recommended usable load. Resistors must use within the rated voltage range to prevent the shortening of service life and/or failure of the wound resistance elements.
8. Minimum load. Resistors must be utilized at 1/10 or more of the rated voltage to prevent poor conductance due to oxidation build-up.
9. Although the hardness exceeds that of a 3H pencil lead, do not nick the resistor coating with screw drivers or other pointed objects.
10. Avoid touching non-flammable resistors in operation; the surface temperature ranges from approximately 350°C ~ 400°C when utilized at the full rated value. Maintaining a surface temperature of 200°C or less will extend resistor service life.
11. Keep temperature from rising by choosing a resistor with a higher rated capacity; do not use a component having the exact load value required. For considerations of safety in extended period applications, the resistor rating should be more than four times higher than the actual wattage involved, but never use a resistor at less than 25% of its rated power.
12. Application and Placement: Wire-wound resistors use different gauges of wire as resistance elements. Sometimes the gauge is extremely thin (finer than a strand of human hair) and very susceptible to breakage in environments containing salts, ash, dust and corrosives. Avoid utilization in such environments. Do not install in dusty areas because the accumulation will cause shorts and poor conductance.

