

# YESO Non-Flammable Wave-Shape Ribbon-Wound Power Resistors



## DQ Resistor Series

A tubular ceramic resistor has two terminals, and is wound with a resistance element consisting of a wave-shaped alloy ribbon. A high temperature, non-flammable resin insulation is applied after cooling and drying through a high temperature process and then the component mounts are attached. The resistance value range is relatively low due to alloy material limitations; see the DR resistor series if high resistance values are required. This product supports the use of numerous taps, has a low impedance, and can be fabricated in various shapes to support a wide range of resistor applications. These resistors are suitable for educational modeling applications, load testing, industrial machinery, electric power distribution, instruments, automation control installations, etc. For custom specifications, please contact us to discuss the details.

### DQR TYPE 75W-2000W

Tubular ceramic, wave-type wire-wound resistor.

POWER RATING	DIMENSIONS 寸法 (m/m)														RESISTANCE RANGE ( $\Omega$ )
	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	0.1-8 $\Omega$
90W	90	28	18	32	8	130	5	19	6	146	60	1.2	6	27	0.1-9 $\Omega$
120W	110	28	18	32	8	150	5	19	6	166	60	1.2	6	27	0.1-12 $\Omega$
150W	140	28	18	32	8	180	5	19	6	196	60	1.2	6	27	0.1-15 $\Omega$
180W	160	28	18	32	8	200	5	19	6	216	60	1.2	6	27	0.1-18 $\Omega$
225W	195	28	18	32	8	235	5	19	6	251	60	1.2	6	27	0.1-23 $\Omega$
240W	185	35	24	36	10	225	5	19	8	245	76	1.6	6	34	0.1-24 $\Omega$
300W	210	35	24	36	10	250	5	19	8	274	76	1.6	6	34	0.3-30 $\Omega$
375W	210	40	25	38	12	250	5	20	8	274	78	1.6	6	34	0.3-38 $\Omega$
450W	260	40	25	38	12	300	5	20	8	320	78	1.6	6	34	0.3-45 $\Omega$
600W	330	40	25	38	12	370	5	20	8	395	78	1.6	6	34	0.3-60 $\Omega$
750W	330	50	35	50	12	380	6	25	9	400	100	1.6	8	40	0.3-75 $\Omega$
900W	400	50	35	50	12	450	6	25	9	470	100	1.6	8	40	0.3-90 $\Omega$
1000W	460	50	35	50	12	510	6	25	9	530	100	1.6	8	40	0.5-100 $\Omega$
1200W	460	60	40	55	15	515	6	30	10	535	110	1.6	10	50	0.5-120 $\Omega$
1500W	540	60	40	55	15	595	6	30	10	615	110	1.6	10	50	0.5-150 $\Omega$
2000W	650	65	42	62	15	702	6	30	10	722	115	1.6	10	50	0.5-200 $\Omega$

### DQN TYPE 75W-2000W

Tubular ceramic, wave, low inductive wire-wound resistor.

POWER RATING	DIMENSIONS 寸法 (m/m)														RESISTANCE RANGE ( $\Omega$ )
	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	0.1-8 $\Omega$
90W	90	28	18	32	8	130	5	19	6	146	60	1.2	6	27	0.1-9 $\Omega$
120W	110	28	18	32	8	150	5	19	6	166	60	1.2	6	27	0.1-12 $\Omega$
150W	140	28	18	32	8	180	5	19	6	196	60	1.2	6	27	0.1-15 $\Omega$
180W	160	28	18	32	8	200	5	19	6	216	60	1.2	6	27	0.1-18 $\Omega$
225W	195	28	18	32	8	235	5	19	6	251	60	1.2	6	27	0.1-23 $\Omega$
240W	185	35	24	36	10	225	5	19	8	245	76	1.6	6	34	0.1-24 $\Omega$
300W	210	35	24	36	10	250	5	19	8	274	76	1.6	6	34	0.3-30 $\Omega$
375W	210	40	25	38	12	250	5	20	8	274	78	1.6	6	34	0.3-38 $\Omega$
450W	260	40	25	38	12	300	5	20	8	320	78	1.6	6	34	0.3-45 $\Omega$
600W	330	40	25	38	12	370	5	20	8	395	78	1.6	6	34	0.3-60 $\Omega$
750W	330	50	35	50	12	380	6	25	9	400	100	1.6	8	40	0.3-75 $\Omega$
900W	400	50	35	50	12	450	6	25	9	470	100	1.6	8	40	0.3-90 $\Omega$
1000W	460	50	35	50	12	510	6	25	9	530	100	1.6	8	40	0.5-100 $\Omega$
1200W	460	60	40	55	15	515	6	30	10	535	110	1.6	10	50	0.5-120 $\Omega$
1500W	540	60	40	55	15	595	6	30	10	615	110	1.6	10	50	0.5-150 $\Omega$
2000W	650	65	42	62	15	702	6	30	10	722	115	1.6	10	50	0.5-200 $\Omega$

### DQS TYPE 75W-2000W

Tubular ceramic, wave, variable wire-wound resistor.

POWER RATING	DIMENSIONS 寸法 (m/m)															RESISTANCE RANGE (Ω)
	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	0.1-8Ω	
90W	90	28	18	32	8	130	5	19	6	146	60	1.2	6	27	0.1-9Ω	
120W	110	28	18	32	8	150	5	19	6	166	60	1.2	6	27	0.1-12Ω	
150W	140	28	18	32	8	180	5	19	6	196	60	1.2	6	27	0.1-15Ω	
180W	160	28	18	32	8	200	5	19	6	216	60	1.2	6	27	0.1-18Ω	
225W	195	28	18	32	8	235	5	19	6	251	60	1.2	6	27	0.1-23Ω	
240W	185	35	24	36	10	225	5	19	8	245	76	1.6	6	34	0.1-24Ω	
300W	210	35	24	36	10	250	5	19	8	274	76	1.6	6	34	0.3-30Ω	
375W	210	40	25	38	12	250	5	20	8	274	78	1.6	6	34	0.3-38Ω	
450W	260	40	25	38	12	300	5	20	8	320	78	1.6	6	34	0.3-45Ω	
600W	330	40	25	38	12	370	5	20	8	395	78	1.6	6	34	0.3-60Ω	
750W	330	50	35	50	12	380	6	25	9	400	100	1.6	8	40	0.3-75Ω	
900W	400	50	35	50	12	450	6	25	9	470	100	1.6	8	40	0.3-90Ω	
1000W	460	50	35	50	12	510	6	25	9	530	100	1.6	8	40	0.5-100Ω	
1200W	460	60	40	55	15	515	6	30	10	535	110	1.6	10	50	0.5-120Ω	
1500W	540	60	40	55	15	595	6	30	10	615	110	1.6	10	50	0.5-150Ω	
2000W	650	65	42	62	15	702	6	30	10	722	115	1.6	10	50	0.5-200Ω	

### PERFORMANCE SPECIFICATIONS

項目 TEST ITEM	試驗方法 TEST METHODS	性能 CHARACTERISTICS	Remark
電阻值容許誤差 Resistance tolerance	JIS-C-5202 5-1	Resistance Nominal Tolerance 1≤R 1>R ±5% (J) ±10% (K)	
電阻溫度特性 Temperature coefficient	JIS-C-5202 5-2	±400PPM/°C MAX	ETC
定格負荷 Power rating load	JIS-C-5202 5-4	Δ R/R ≤ ± (0.5% + 0.1Ω) Surface temperature up 350°C MAX	
短時間過負荷 Short-term overload	JIS-C-5202 5-5 500% rated power 5 seconds	Free of appearance or structural irregularity Δ R/R ≤ ± (2% + 0.1Ω)	
絕緣抵抗 Insulation resistance	JIS-C-5202 5-6 500VDC	100MΩ min	ETC
耐電壓 Dielectric withstanding voltage	JIS-C-5202 5-7 1000VDC 1 minute Between terminal and anchor stand	Free of appearance or structural irregularity Δ R/R ≤ ± (0.1% + 0.05Ω)	ETC
端子強度 Terminal strength	JIS-C-5202 6-1 8kg 30 seconds	Free of appearance or structural irregularity	ETC
電阻器強度 Resistor strength	JIS-C-5202 6-2 30kg 30 seconds	Free of appearance or structural irregularity	ETC
耐振性 Vibration	JIS-C-5202 6-3 1.5m/m 10 ~ 50 ~ 10 Hz/min X-Y-Z 2 hours each	Free of appearance or structural irregularity Δ R/R ≤ ± (1% + 0.05Ω)	ETC
熱衝擊 Thermal shock	JIS-C-5202 7-3 Room temp 30 minutes ON-55°C 15 minutes OFF	Resistor free of structural irregularity Surface coating crack Δ R/R ≤ ± (1% + 0.05Ω)	
耐濕性 Humidity	JIS-C-5202 7-5 40°C 90%RH 240 hours	Free of appearance or structural irregularity Δ R/R ≤ ± (3% + 0.1Ω)	ETC
耐久性 Load life	JIS-C-5202 7-10 90 minutes ON - 30 minutes OFF 500 hours	Free of appearance or structural irregularity Δ R/R ≤ ± (5% + 0.1Ω)	
難燃性 Flame retardation	JIS-C-5202 7-13-3-2 100% - 600% rated power load	US UL-94 flame retardation test V-0 grade noncombustible	

備註 REMARKS

- Items noted with ETC were tested by Taiwan Electronic Testing Center as shown in report No.ET89T-03-086-C00.
- Resistance and resistance tolerance were tested in-house with micro resistance meter.
- Resistor coating refers to UL-certified data provided by supplier.

### HOW TO ORDER

Product type.	Rated power.	Resistance value. (Ω)	Resistance tolerance.	Assembly method.	Product status.
DQR type DQN type DQS type	75W~2000W 75W~2000W 75W~2000W	(Ω)Indicates resistance value in units of ohms.	H = ±3% J = ±5% K = ±10%	2-8 part assembly G- Horizontal mount N- No mounts. Z- Vertical mount.	A~ Special order. O~ General specification. Z~ Other.