

High Power Resistors

Type ES Series

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The ES is a new wirewound resistor from Tyco manufactured to stringent quality control requirements and is an economy sister to the well known Tyco ER Series. Whilst very slightly larger than the ER and manufactured to a marginally different specification, the ES is suited to volume requirements in power supplies, process control instruments, communication equipment, and other industrial positions. In addition to the ES we offer the practicality of a wirewound resistor down to 9.0mm. x 3.00 mm., body size.

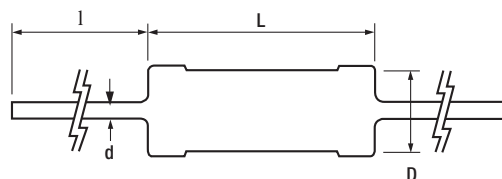
Key Features

- High Power to Size Ratio
- Entirely Welded Construction
- 0.5 Watt to 10 Watt Sizes
- Insulation Resistance >1000M
- Completely Flameproof
- Temperature Coefficient 300 ppm
- All Product Banded

Characteristics - Electrical

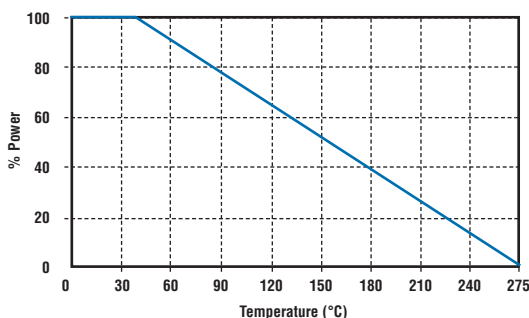
Resistance Values:	R10 - 3K3 (Other values by agreement/see wattage table below)
Selection Tolerance:	± 5 % (Other tolerances by agreement)
Rated Dissipation @ 20°C:	See Table Below
Dielectric Strength:	500V AC
Insulation Resistance:	1000 M
Short Term Overload Power:	5 times overload 5 seconds
Terminal Strength:	5lb pull Test
Solderability:	Meets MIL - STD - 202
Maximum Operating Temperature:	200°C
Temperature Coefficient of Resistance:	± 300ppm°C

Dimensions

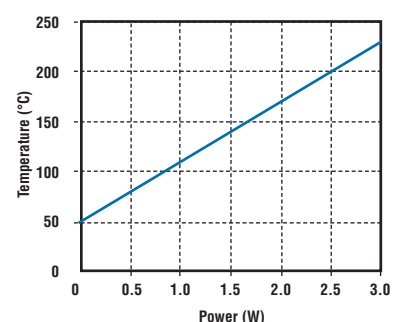


Type ES @ 20°C	Dimensions				Resistance Range	Dielectric Withstand Voltage
	D±1.0	L±1.5	l±3.0	d±0.05		
1/2W	3.0	9.0	30.0	0.65	R05-68R	350V
1W	4.0	9.0	30.0	0.65	R05-100R	500V
2W	5.0	11.0	30.0	0.80	R05-150R	500V
3W	5.5	13.0	38.0	0.80	R05-200R	500V
3WY	6.0	17.0	38.0	0.80	201R-470R	500V
5W	6.5	20.0	38.0	0.80	R10-390R	500V
6W	8.5	25.0	38.0	0.80	R10-1K0	500V
7W	8.5	32.0	38.0	0.80	R10-1K5	500V
8W	8.5	41.0	38.0	0.80	R10-2K2	800V
10W	8.5	53.0	33.0	0.80	R10-3K3	1000V

Resistance Value Marking



Surface Temperature Vs Power



How to Order

ES2W	R10	J
Common Part	Resistance Value	Tolerance
ES05W - 1/2W ES1W - 1W ES2W - 2W ES3W - 3W ES3WY - 3W ES5W - 5W ES6W - 6W ES7W - 7W ES8W - 8W ES10W - 10W	0.1 ohm (100 milliohms) R10 1 ohm (1000 milliohms) 1R0 1K ohm (1000 ohms) 1K0	J - ±5%