

High Power Resistors



Type ER/ERV Series

Type ER/ERV Series



A tough silicone coated power resistor. The coating and marking are resistant to Trichloroethene VG, Genklene LV Hot and Cold, Freon TE, Arklone A, Flourosil E, Freon TMS, Arklone L Hot and Cold and Arklone F Hot. If the resistor is in contact with the PCB the maximum dissipation to avoid damage to the PCB may be ascertained by reference to the hot spot graph. temperature Vertical mounting style is available. The ER series is suited to a wide range of industrial, control, medical and consumer applications.

Key Features

- High Power Dissipation
- Tough Silicone Coating
- Special Pulse Styles . Available
- 0.5% Tolerance Available
- **Resistant to Most** Solvents
- Vertical Mount Styles Available
- Custom Designs Welcomed
- Widely Available via Distribution

Characteristics - ER Series Electrical

	ER74	ER58	ER16	ER17
Power Rating (W) at 40°C:	3W	7W	11W	14W
Power Rating (W) at 70°C:	2.5W	6W	9W	12W
Resistance Range:	R03-10K	R05 - 20K	R13-68K	R20-100K
Maximum Element Volts:	100V	200V	500V	750V

Characteristics - ERV Series Electrical

	ERV74	ERV58	ERV16
Power Rating (W) at 20°C*:	3W	7W	11W
Power Rating (W) at 70°C*:	1.5W	3W	5W
Resistance Range:	R10-3K9	R10-6K8	R15-27K
Maximum Element Volts:	100V	200V	500V

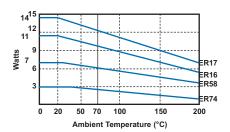
^{*} When mounted in the horizontal and vertical plane only - inverted mounting may result in heat damage of the PCB - Consult Technical Department

Characteristics -Environmental

Temperature Category:	-55°C to 200°C				
Humidity Classification:	56 days				
Standard Tolerances:	ER Series < 1 ohm ± 10% ~ > 1 ohm ± 5% ERV Series E24 - 5% ~ E12 10%				
Tolerances of down to:	± 0.5% are available				
Load Life Stability:	± 5%				
Temperature Coefficient*:	< 1 ohm 0 ± 200ppm/°C maximum				
	> 1 ohm 0 + 60 ppm/°C typical				
*Very low temperature coefficients to	*Very low temperature coefficients to ± 20ppm/°C are available to special order				
Solderability conforms to:	BS 2011 Test 2.1 Ta Solder bath method (IEC 68-2-20) Wets in < 2 seconds				
Termination Robustness:	BS 2011 Test 2.1 Ua withstands 0.5 kg tensile load and double bend with 0.25 kg load				
Endurance - 1000hrs @ 200°C:	ΔR -0 +2%				
Overload:	10 time rated dissipation for 5 seconds $\Delta R \pm 0.5\%$				
Humidity:	56 days/95% R.H./ +_45°C -0 +5%				
Temperature Rapid Change:	$\Delta R \pm 0.03\%$				

Power Ratings Dissipation / Ambient Temperature

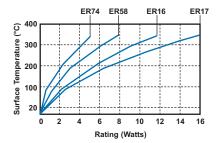
Power Ratings Hot Spot Temperature @ 40°C



Dimensions are in

millimetres unless

otherwise specified.

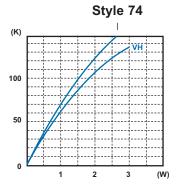


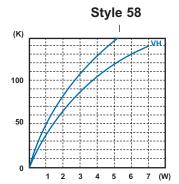


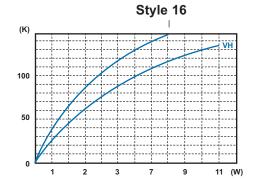


Type ER/ERV Series

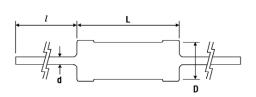
Power Ratings (continued)

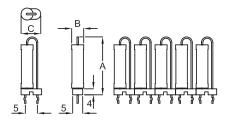






Dimensions





Type	L	D	I	d
ER74	13.5	6.0	38.0	0.8
ER58	22.2	8.0	38.0	0.8
ER16	38.1	8.0	38.0	0.8
ER17	53.5	8.0	38.0	0.8

Dimensions are in

millimetres unless

Type	Α	В	С
ERV74	19.0	5.6	9.7
ERV58	29.0	8.0	10.6
ERV16	43.0	8.0	10.6

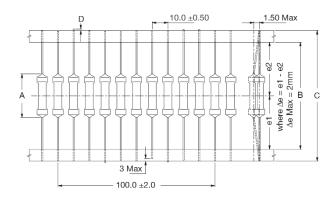
- Resistance measured 6mm either side of body.
- Supplied in standard packs in arrays of 5 resistors with snap links for handling.





Type ER/ERV Series

Taping Specification



Type	A Max	B ± 2.0	C ± 2.0	D Max
ER74	13.50	76.00	88.00	1.00
ER58	22.20	86.00	98.00	1.00
ER16	38.10	82.50	100.50	-
ER17	53.50	97.00	115.00	-

