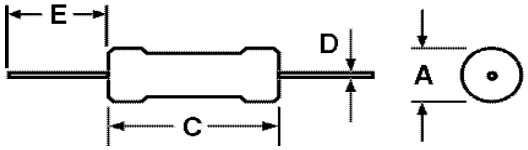
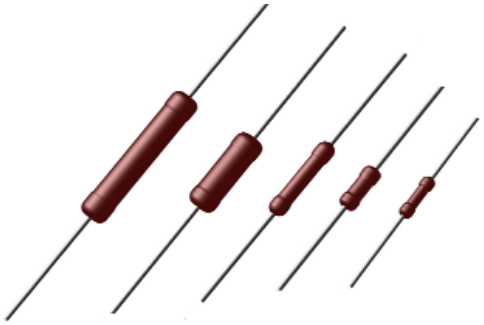
ALVR
ALSR

AXIAL LEAD WIREWOUND RESISTORS

H.E.I. Axial Lead Resistors are constructed with steatite ceramic cores or alumina, terminated with welded cap and lead assemblies and wound with the finest alloy resistance wires welded to the cap and lead assemblies. Our special formula of vitreous enamel (**ALVR**) or silicone (**ALSR**) coatings are then used to insulate the resistors. This construction insures long life, durability, and reliability.



1 WATT THRU 10 WATT



H.E.I. Axial lead resistors are especially suited for printed circuitry applications and wherever miniaturization is required.

DIMENSION INFORMATION

TYPE	WATT	A ± .032 (0.8)	C MAX	D Typ.	E Typ.
ALVR-1	1	.125 (3.2)	.437 (11.1)	.020 (0.5)	1.5 (38)
ALSR-1	1	.110 (2.8)	.385 (9.8)	.020 (0.5)	1.5 (38)
ALVR-3	3	.218 (5.5)	.563 (14.3)	.032 (0.8)	1.5 (38)
ALSR-3	3	.200 (5.1)	.530 (13.5)	.032 (0.8)	1.5 (38)
ALVR-5A	5	.218 (5.5)	1.031 (26.2)	.032 (0.8)	1.5 (38)
ALSR-5A	5	.200 (5.1)	.937 (23.8)	.032 (0.8)	1.5 (38)
ALVR-5	5/7	.343 (8.7)	1.031 (26.2)	.032 (0.8)	1.5 (38)
ALSR-5	5/7	.312 (7.9)	.937 (23.8)	.032 (0.8)	1.5 (38)
ALVR-10	10	.343 (8.7)	1.843 (46.8)	.032 (0.8)	1.5 (38)
ALSR-10	10	.312 (7.9)	1.800 (45.7)	.032 (0.8)	1.5 (38)

ALVR - VITREOUS ALSR - SILICONE inches (mm)

ENVIRONMENTAL SPECIFICATIONS

TEST	MIL-R-26
Load Life	± (3% + .05Ω)>ΔR
Moisture Resistance	± (2%+.05Ω)>ΔR
Temp. Coefficient	± 90 PPM/°C below 1Ω ± 50 PPM/°C 1Ω to 9.9Ω ± 30 PPM/°C 10Ω and above
Thermal Shock	± (2% + .05Ω) >R
Short Time Overload	± (2% + .05Ω) >R
Dielectric	± (.1% + .05Ω) >R
Low Temp. Storage	± (2% + .05Ω) >R
High Temp. Storage	± (2% + .05Ω) >R
Shock	± (.2% + .05Ω) >R
Vibration	± (.2% + .05Ω) >R
Terminal Strength	± (1% + .05Ω) >R
Mechanical Terminal Strength	10 lb. pull Test

ORDER INFORMATION

ALVR - 10 - 100 - 3% - NI

- ALVR: TYPE V=VITREOUS S=SILICON
- 10: RESISTANCE VALUE
- 100: RESISTANCE VALUE
- 3%: ADD FOR SPECIAL TOLERANCE
- NI: ADD FOR NON-INDUCTIVE

RESISTANCE VALUE CHART

.10	.75	10	30	68	125	300	600	1.1K	3.0K	6.8K
.13	1.0	12	33	75	150	330	680	1.2K	3.5K	7.5K
.15	1.5	15	35	82	180	350	700	1.5K	3.9K	8.0K
.20	2.0	18	39	100	200	390	750	1.8K	4.0K	8.2K
.25	3.0	20	40	120	220	400	800	2.0K	4.7K	10.0K
.30	4.0	22	47	125	225	470	820	2.2K	5.0K	12.5K
.33	5.0	25	50	150	250	500	900	2.5K	5.6K	15.0K
.50	7.5	27	56	180	270	560	1.0K	2.7K	6.0K	20.0K

ENGINEERING DATA AND ORDER OPTIONS

RESISTANCE TOLERANCE: Standard tolerance is ±5% for 1 Ohm, and greater and ±10% for less than 1 ohm. If other than stan dard tolerance is required add this to part number.

NON-INDUCTIVE: Ayrton-Perry type non-inductive winding is available. When required add "NI" to the part number.

LEADS: Hot tin-dipped leads with dimensions as shown in the above chart are standard. However, special lead lengths and diameters are available. For further information please contact our sales office.

TEMPERATURE TOLERANCE: ±30 PPM/°C > 10 Ohms, ±50 PPM/°C 1 to 10 Ohms, ±90 PPM/°C < 1 Ohm
(Special TC's are availalbe, consult factory.)

OVERLOAD: 10 times rated wattage for 5 seconds 5 Watt and above, 5 times rated wattage for 5 seconds < 5 Watt

DIELECTRIC W/STAND VOLTAGE: 1000 VAC, (500 VAC for 1 Watt size)

WATTAGE DERATING CHART FOR HIGHER AMBIENT TEMPERATURES