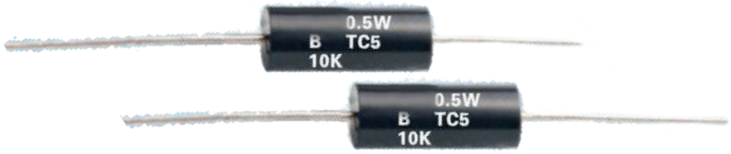
Precision Wirewound AXIAL LEAD SERIES



Construction

Controlled stress windings are reverse pi wound (non-inductive) on special high temperature epoxy bobbins and terminated using controlled welds. An extensive accelerated aging program provides the ultimate in stabilization. A resilient inner coating and dry air chamber isolate exterior protective epoxy shell from windings to increase moisture protection and stability. Leads are firmly anchored inside bobbin with a high temperature epoxy that assures excellent structural strength. Standard marking includes Trademark, part number, resistance value and resistance tolerance.

Features

Resistance Tolerances: To ±.005% (25°C)
Temperature range: -65°C to 150°C
Temperature coefficients of resistance to 0 ±1PPM/°C
Exceptional resistance stability.
All terminations made of controlled welds.
Fast rise time and minimum phase shift available on selected styles.
Temperature range: -65°C to 150°C
Extremely low noise.
New micro-miniature sizes available.
Marking impervious to most cleaning agents.
Exceed the applicable requirements of Mil-R-93.

Standard Tolerances

1%, 0.5%, 0.25%, 0.1%, 0.05%, 0.01% and 0.005% of marked resistance value (calibrated at +25°C ±1°C)
Special tolerances are available on request.

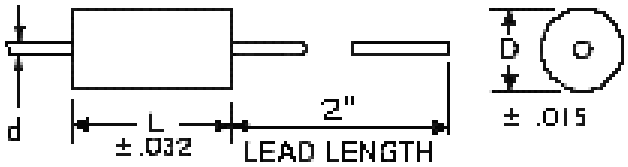
Standard Lead Material

Tinned Copper

Measurements are made with equipment calibrated to the absolute ohm standard. Since electrical limitations exist in terminating resistance wire, there are minimum tolerance limits applicable to various resistance ranges. These tolerances with corresponding resistance values as shown below.

Tolerance (%)	Resistance Value	Tolerance (%)	Resistance Value
0 ± .005	1000 Ω and over	0 ± .01	50 Ω and over
0 ± .05	5 Ω and over	0 ± .10	1 Ω and over
0 ± .25	.05 Ω and over	- -	- -

Standard Temperature Coefficient of Resistance			
PPM/° C	Resistance	PPM/° C	Resistance
0 ± 10	1000 Ω and over	0 ± 15	10 Ω to 100 Ω
0 ± 30	1 Ω to 10 Ω	0 ± 90	less than 1 Ω



Dimension Shown in Inches. Conversion to M.M. = Inch x 25.4

M-O P/N	Mil R-93 Equiv	Length (L) ±.032	Dia. (D) ±.015	Lead Awg (d)	Com'l Wattage	Max.DC Voltage	Max Resistance (.0006 wire)
133	RB74	.500	.200	22	.30	300	600K
139	n/a	.700	.200	22	.40	300	1.2M
144	RB75	.250	.250	22	.25	150	400K
115	n/a	.340	.275	22	.25	200	1M
156	RB56	.375	.250	20	.25	200	700K
143	RB55	.500	.250	20	.30	300	900K
137	RB54	.750	.250	20	.50	300	1.2M
136	n/a	.610	.375	20	.50	400	3M
132	RB53	.750	.375	20	.66	500	3M
138	RB52	1.00	.375	20	1.0	750	5M
134	n/a	.500	.500	20	.66	300	3M
170	n/a	.625	.500	20	.75	400	3M
146	RB57	1.00	.500	20	1.5	750	7M
180	RB58	1.50	.500	20	2.0	1000	15M
190	RB59	2.00	.500	20	2.5	1200	20M

For resistance values higher than shown please contact our engineering department.

Subminiatures

M-O P/N	Mil R-93 Equiv	Length (L) ±.032	Dia. (D) ±.015	Lead Awg (d)	Com'l Wattage	Max.DC Voltage	Max Resistance (.0006 wire)
140	n/a	.250	.125	24	.10	100	150K
112	n/a	.375	.125	24	.125	200	125K
113	n/a	.312	.160	22	.15	150	300K
150	n/a	.500	.160	22	.20	200	400K
114	n/a	.312	.187	22	.20	200	300K
135	n/a	.375	.187	22	.25	300	300K
160	n/a	.625	.187	20	.30	300	600K

For resistance values higher than shown please contact our engineering department.

Dimension Shown in Inches. Conversion to M.M. = Inch x 25.4

Micro-Miniatures							
M-O P/N	Mil R-93 Equiv	Length (L) ±.032	Dia. (D) ±.015	Lead Awg (d)	Com'l Wattage	Max.DC Voltage	Max Resistance (.0006 wire)
XP101	n/a	.375	.050	30	.02	50	10K
100	n/a	.110	.070	30	.03	50	11k
105	n/a	.115	.075	30	.04	50	11k
110	n/a	.200	.093	28	.05	75	30k
130	n/a	.312	.093	28	.06	100	60k
142	n/a	.185	.120	28	.06	100	30k
141	n/a	.160	.125	28	.06	100	30k
For resistance values higher than shown please contact our engineering department.							

ORDERING INFORMATION

Example: .25W 100ohm 5ppm .1%

156	100R0	C7	B
Type	Resistance	T.C.	Tolerance
	5 digit <100 ohm use R for decimal. >100 ohm 5th digit is multiplier.	C3 = 25 C6 = 10 C7 = 5 C10 = 2 C8 = 1	J = 5% L = 3% F = 1% D = .5% C = .25% B = .1% A = .05% P = .025% Q = .02% T = .01% V = .005%