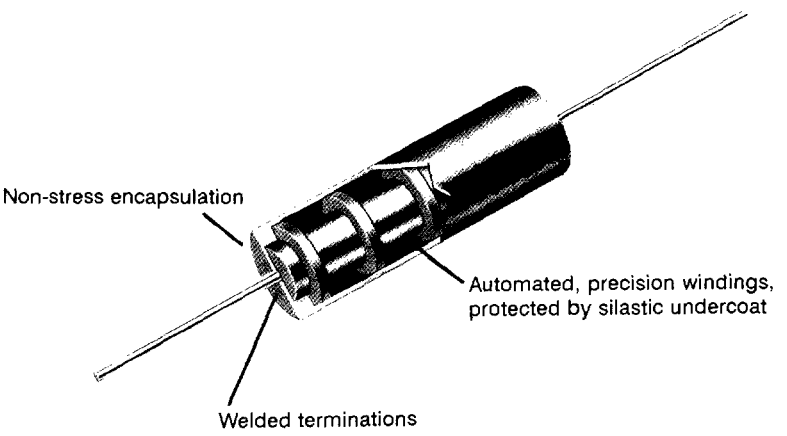
AXIAL LEAD
PRECISION WIREWOUND

MIL-R-93 (RB) &
MIL-R-39005 (RBR)
COMMERCIAL STYLES

- 0.1 to 1.0 watts
- Tolerance to ±.01%
- 0.1 ohm to 12 meg
- Meets or exceeds all applicable MIL-R-39005 & MIL-R-93 ratings
- Approved to M, P, & R levels
- TC's to ±2ppm/°C available



These ultra precision resistors are designed and produced for critical parameter applications. They are available for established reliability military and/or commercial applications requiring state of the art precision and stability.

Construction features may vary slightly between commercial and military styles, but both are produced under the same rigid quality control system required by the tightest military specifications. Both are produced in the same production line using the same highly trained operators required to produce the established reliability product.

Whether military or commercial, all resistors are carefully monitored during assembly, winding, coating, and stabilization procedures to assure high quality standards even when their prescribed parameters are non critical. Premium grade selected wire is control stress wound on special design bobbins. All terminations are welded to reduce contact noise and thermal EMF. Extensive accelerated aging programs both before and after calibration assure precise initial accuracy and high resistance stability.

Encapsulation is accomplished by transfer molding with special moisture resistant epoxy or by unique dry air chamber epoxy shell technique for established reliability parts. A resilient inner coating is used to minimize internal stresses on all parts.

The established reliability military parts are burned in 100 hours at 125°C ambient as part of group A acceptance testing. Documentation and special tests are available upon customer request to meet your unique requirements.

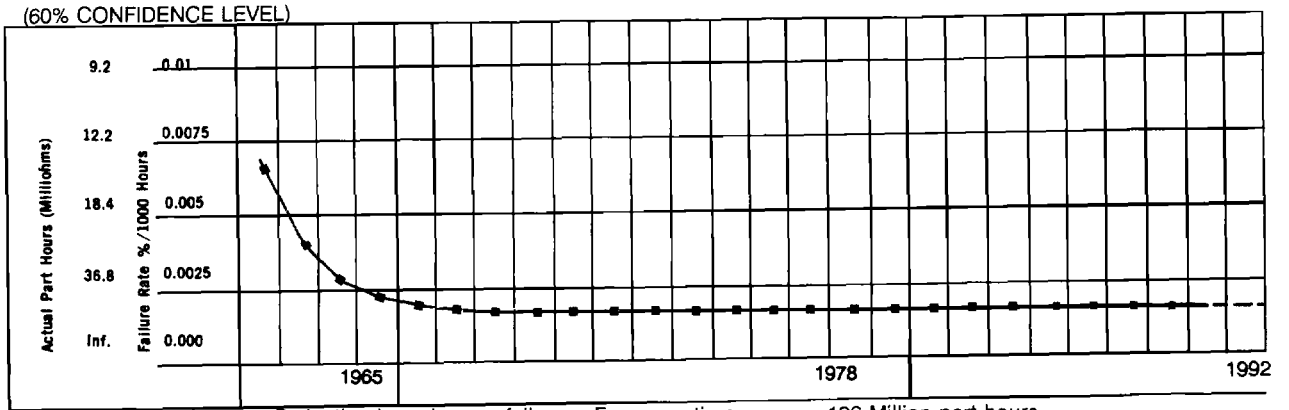
GENERAL SPECIFICATIONS:

Temperature Range	-65°C to +145°C
Standard Temperature Coefficient	±10 ppm/°C 100Ω up ±15 ppm/°C 10Ω to 100Ω ±30 ppm/°C 1Ω to 10Ω ±90 ppm/°C below 1Ω

Special temperature coefficients available

ACTUAL AND PROJECTED FAILURE RATES AT TEST CONDITIONS*:

(60% CONFIDENCE LEVEL)



*No acceleration factors. Projection based on no failures. For mean time between failure, in thousands of hours, take the reciprocal of the failure rate.

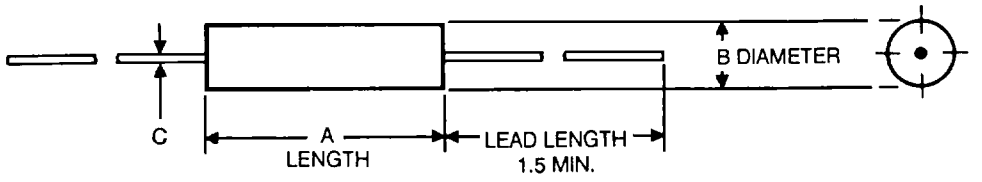
196 Million part hours
.00155% failure rate @ 60% confidence level

WIREWOUND

AXIAL LEAD SPECIFICATIONS:

RCL/ Shallcross Style	MIL-R-93/ 39005 Style	Wattage		Resistance			Max. Working Volt. (Comm.)	Dimensions		
		MIL 125°C	Comm 85°C	MIL Min	MIL Max	Comm Max		±.032A IN (mm)	±.015B IN (mm)	±.002C IN (mm)
7008	--	--	.150	--	--	1M	300	.250 (6.3)	.250 (6.3)	.025 (0.6)
7009	RB56	.125	.250	.1	127K	1.4M	200	.343 (8.7)	.250 (6.3)	.032 (0.8)
VA/HR10	RB/RBR56	.125	.250	.1	127K	840K	200	.343 (8.7)	.250 (6.3)	.032 (0.8)
VA/HR11	RB/RBR75	.125	.250	.1	316K	500K	150	.295 (7.5)	.250 (6.3)	.025 (0.6)
7010	RB55	.15	.33	.1	226K	3M	300	.500 (12.7)	.250 (6.3)	.032 (0.8)
VA/HR12	RB/RBR55	.15	.30	.1	332K	1M	300	.500 (12.7)	.250 (6.3)	.032 (0.8)
7020	RB54	.25	.50	.1	511K	4.4M	300	.750 (19.0)	.250 (6.3)	.032 (0.8)
VA/HR14	RB/RBR54	.25	.50	.1	562K	2M	300	.750 (19.0)	.250 (6.3)	.032 (0.8)
VA32	--	--	.50	--	--	2M	300	.500 (12.7)	.375 (9.5)	.032 (0.8)
7030	RB53	.33	.66	.1	750K	8M	500	.750 (19.0)	.375 (9.5)	.032 (0.8)
VA/HR34	RB/RBR53	.33	.66	.1	1.1M	3M	500	.750 (19.0)	.375 (9.5)	.032 (0.8)
7040	RB52	.50	1.00	.1	1.5M	12M	750	1.00 (25.4)	.375 (9.5)	.032 (0.8)
VA/HR36	RB52/RBR52	.50	1.00	.1	1.2M	3M	750	1.00 (25.4)	.375 (9.5)	.032 (0.8)
SUBMINIATURES										
7004	--	--	.05	--	--	250K	150	.30 (7.6)	.10 (2.5)	.020 (0.5)
7005	--	--	.10	--	--	300K	150	.25 (6.3)	.125(3.2)	.025 (0.6)
7006	--	--	.10	--	--	350K	200	.31 (7.9)	.125 (3.2)	.025 (0.6)
7007	--	--	.125	--	--	700K	300	.375 (9.5)	.188 (4.8)	.025 (0.6)
SP21	--	--	.250	--	--	200K	300	.375 (9.5)	.188 (4.8)	.025 (0.6)
SP41	--	--	.100	--	--	125K	100	.250 (6.3)	.125 (3.2)	.025 (0.6)
SP42	--	--	.125	--	--	200K	200	.375 (9.5)	.125 (3.2)	.025 (0.6)

*For all styles commercial ratings may be applied at 125°C provided 175°C max. operating temperature is permissible.
NOTE: Contact factory for availability of other styles and sizes of above product.



Standard lead material:
Tinned copperweld - 7000 Series
Tinned nickel - VR/HR/SP Series

WIREWOUND

HOW TO ORDER

Sample Part No.: **RBR52 L 12601 B R**

Style — RBR52
Terminal — L
L = Solderable
U = Weldable
Resistance — 12601
Tolerance — B
Failure Rate — R

Use RCL/Shallcross style if no MIL style is required