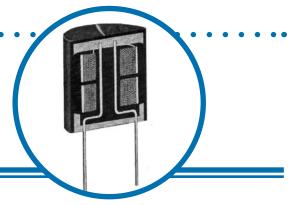
# Radial Lead Precision Wirewound Resistors



#### RB / RBR, HR / 4000, PC Series

- 0.1 to 0.6 watts
- Tolerance to ±.01%
- 0.1 ohm to 3 meg ohms
- Approved to M, P, & R levels
- TCR's from ±2 ppm/°C to +6000 ppm/°C
- Meets or exceeds all applicable MIL-R-93 & MIL-R-39005 ratings



Miniature printed circuit resistors incorporate an uncommon number of production and design refinements to assure excellent resistance stability, close resistance tolerances, low TCR capabilities and high structural strength. To assure their high quality standards, premium grade selected wire is reverse pi wound with miniumum stress on high temperature epoxy bobbins, permeated with a resilient inner cushion coat, and isolated from the external protection shell by a special dry air chamber.

To promote additional resistance stability and accurate initial calibrations all resistors are subjected to an extensive accelerated aging program. Weldable and/or solderable leads (a choice of lead material is available) are firmly anchored and bonded inside the bobbin for maximum structural strength. All resistor markings are impervious to printed circuit board cleaning solvents and lead spacing is sufficiently well controlled for automatic insertion on standard grid boards.

#### Special Screening / Acceptance Test:

Special tests can be performed on a 100% or sample basis, to meet individual customer requirements. Some of the available non-destructive tests include:

- Short Time Overload
- Thermal Shock
- Mechanical Shock

- Vibration
- Temperature Coefficient of Resistance
- Radiographic Inspection

Each of these tests is designed to detect a spectrum of potential resistor defects. Consult the factory for recommendations and a quotation on special screening or acceptance tests to meet your needs.

#### TCR and Temperature Data

Style	Resistance Range ( $\Omega$ )	Absolute TCR (ppm/°C)	Operating Temperature Range (°C)
	0.1 - 0.9	±90	
All	1.0 - 9.9	±30	CE to 11/E
Styles	10 - 99.9	±15	-65 to +145
	100 - 12M	±10	

**General Note** 

IRC reserves the right to make changes in product specification without notice or liability. All information is subject to IRC's own data and is considered accurate at time of going to print.

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#### **Electrical Specifications**

IRC / Shallcross Style		Wattage		Resistance (ohms)				
	MIL-R-93 / MIL-R-39005 Style	MIL	Comm.	MIL		Comm.	Maximum Working Voltage	
		125°C	85°C	Min.	Max.	Max.		
HR-8	RBR 71	0.125		0.1	150 K		300	
4060 / PC8	RB 71	0.125	0.25	0.1	100 K	500 K	300	
4065	RB 70	0.25	0.33	0.1	301 K	1.5 M	150	
4061			0.25			800 K	300	
HR 340	RBR 81*	0.100		10	250 K		300	
HR 341	RBR 80**	0.100		10	120 K		150	

\* Discontinued by DSCC, replaced with 09008

\*\* Approved to M and P level only

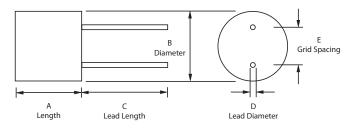
## Physical Dimensions (inches and (mm)):

IRC /	MIL-R-93 /	А	В	С	D	E	
Shallcross Style	MIL-R-39005 Style	Inches (mm) ± 0.032 (± 0.8)	Inches (mm) ± 0.025 (± 0.6)	Inches (mm) Minimum	Inches (mm) ± 0.002 (± 0.05)	Inches (mm) ± 0.010 (± 0.25)	
HR-8	RBR 71	0.312 (7.9)	0.250 (6.3)	1.0 (25.4)	0.025 (0.6)	0.200 (5.0)	
4060 / PC8	RB 71	0.312 (7.9)	0.250 (6.3)	1.0 (25.4)	0.025 (0.6)	0.200 (5.0)	
4065	RB 70	0.500 (12.7)	0.375 (9.5)	1.0 (25.4)	0.032 (0.8)	0.200 (5.0)	
4061		0.375 (9.5)	0.250 (6.3)	1.0 (25.4)	0.025 (0.6)	0.200 (5.0)	
HR 340*	RBR 81	0.500 (12.7)	0.160 (4.0)	1.0 (25.4)	0.020 (0.5)	0.406 (10.3)	
HR 341*	RBR 80	0.325 (9.3)	0.160 (4.0)	1.0 (25.4)	0.020 (0.5)	0.225 (5.7)	

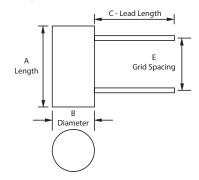
Standard Lead Material - Tinned copper weld

Note: Optional temperature coefficients available. Consult factory for details.

### Figure 1. (Round)



### Figure 1. (Round)



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# Axial Lead Precision Wirewound Resistors



## Ordering Data

#### **RBR Product Description**

Sample Part No.	RBR71 L	12601 B R
Style		
Terminal L = Solderability, U = Weldable	·····	
Resistance · · · · · · · · · · · · · · · · · · ·		
Tolerance · · · · · · · · · · · · · · · · · · ·		
Failure Rate ••••••		·····

### **RB** Product Description

Sample Part No	••••• <b>R</b>	B70	c	E	12601	В
Style	•••••••				•	
<b>Terminal</b>		• • • • • • •		•	•	
Resistance Temperatur	e Characteristic		••••	:		
Resistance		• • • • • • • •	••••	••••	:	
Tolerance						:

### **Commercial Product Description**

(HR / 4000, PC)

Sample Part No	HR340	2	24000	1
Style		•	•	•
TCR (ppm) • · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • •			•
Resistance 24 kohm (24,000 ohm)	•••••	• • • • •		
Tolerance • • • • • • • • • • • • • • • • • • •	••••••	• • • • •	• • • • • • • • •	:

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