MODEL 91

3/8" Diameter
Single Turn
Cermet Trimming
Potentiometer
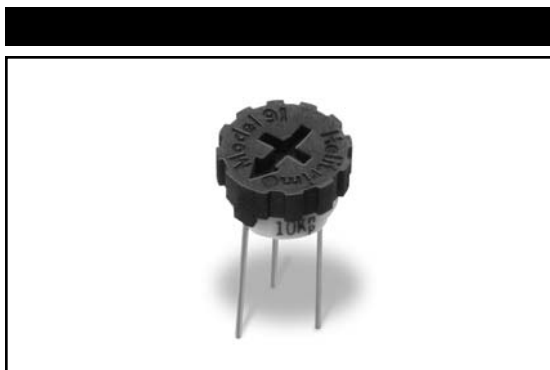
ELECTRICAL

Standard Resistance Range, Ohms	10 to 2Meg
Standard Resistance Tolerance	±20%
Input Voltage, Maximum	250 Vdc or rms not to exceed power rating
Slider Current, Maximum	100mA or within rated power, whichever is less
Power Rating, Watts	0.5 at 70°C derating to 0 at 125°C
End Resistance, Maximum	2 Ohms
Actual Electrical Travel, Nominal	174°
Dielectric Strength	500 Vrms
Insulation Resistance, Minimum	1,000 Megohms
Resolution	Essentially infinite
Contact Resistance Variation, Maximum	1% or 1 Ohm, whichever is greater

ENVIRONMENTAL

Temperature Coefficient, Maximum	±100ppm/°C
Operating Temperature Range	−55°C to +125°C
Thermal Shock	5 cycles, −55°C to +125°C (1% ΔRT, 1% ΔVR)
Moisture Resistance	Ten 24 hour cycles (1% ΔRT, IR 100 Megohms Min.)
Shock, 6ms Sawtooth	100G's (1% ΔRT, 1% ΔVR)
Vibration	20G's, 10 to 2,000 Hz (1% ΔRT, 1% ΔVR)
High Temperature Exposure	250 hours at 125°C (2% ΔRT, 2% ΔVR)
Rotational Life	200 cycles (3% ΔRT)
Load Life at 0.5 Watts	1,000 hours at 70°C (2% ΔRT)
Resistance to Solder Heat	260°C for 10 sec. (1% ΔRT)

MECHANICAL

|	
Mechanical Stops	Solid
Stop Strength	12 oz.-in. (0.085 N-m)
Torque, Starting Maximum	5oz.-in. (0.042 N-m)
Weight, Nominal	.03 oz. (0.85 grams)

Specifications subject to change without notice.

BI technologies

1-83

Model 91

Model 91A

.375
9.525
Max. Dia.

.20
5.08

Arrow Indicates Slider Position. Electrical Adjustments
May Be Made With A Phillips Or Blade Screwdriver And Is Fingertip Adjustable.

Slot: $\frac{.034}{0.864}$ Wide X $\frac{.050}{1.270}$ Deep

For Blade
Screwdriver

$\frac{.15}{3.81}$ For Phillips
Screwdriver

.20
5.08

.18
4.57 Min.

(2)
(1) (3)

.10
2.54

.20
5.08

.385
9.779
Max.

.20
5.08

Model Number
Marked On This Surface

Standoffs (2)

Resistance Value
Marked On This Surface

$\frac{.020 \pm .005}{0.508 \pm 0.127}$ Dia.
Solderable
Terminals

.10
2.54

Model 91B

(3) (1)

(2)

.10
2.54

.20
5.08

.25
6.35
Max.

.18
4.57
Min.

.10
2.54

Model 91C

(3) (1)

(2)

.172
4.369

.344
8.738

.25
6.35
Max.

.18
4.57
Min.

.156
3.962

.10
2.54

Model 91E

(2)

(3) (1)

.10
2.54

.20
5.08

.18
4.57 Min.

.25
6.35
Max.

.20
5.08

.40
10.2

$\frac{.015 \pm .005}{0.381 \pm 0.127}$
True Radius (Typ.)

Bi technologies

1-84

Model 91

SIDE ADJUSTMENT (Inch/mm)

1

Model 91T

.345
8.763
Max.

(2)
(1) (3)
.10
2.54
.20
5.08

.18
4.57 Min.
.10
2.54

Model 91V

.40
10.2
Max.

(2)
(1) (3)
.172
4.369
.344
8.738

.18
4.57 Min.
.156
3.962

Model 91W

.25
6.35
Max.

(2)
(1) (3)
.10
2.54
.20
5.08

.18
4.57 Min.

Model 91X

.345
8.763
Max.

(2)
(1) (3)
.10
2.54
.20
5.08

.18
4.57 Min.
.10
2.54

BI technologies

1-85

Model 91

STANDARD RESISTANCE VALUES, OHMS

10	200	5K	50K	500K
20	500	10K	100K	1Meg
50	1K	20K	200K	2Meg
100	2K	25K	250K	

PACKAGING

Standard: Boxes

Capacity = 100 Units

ORDERING INFORMATION

Standard:

91 A R 10K LF

Model Series ──────────────

Pin Style ──────────────

RoHS Compliant Product Code - Optional

Resistance Value

Resistance Prefix

CIRCUIT DIAGRAM

(1) ──/\/\/\/\/\/\── (3)

(2)

→ CW
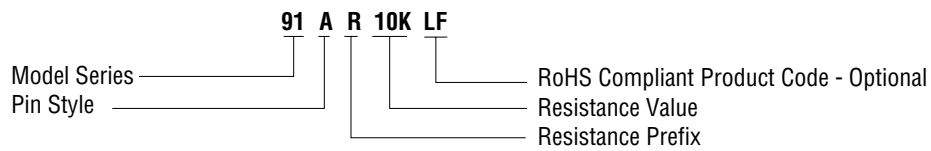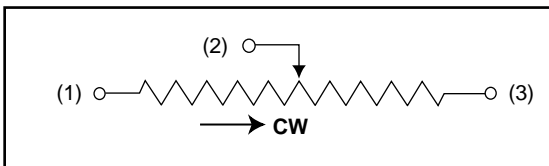
NOTES

Metric equivalents, based on 1 inch = 25.4mm are rounded to the same number of significant figures as in the original English units and are provided for general information only.

Tolerances unless otherwise specified:
Linear = ± .01 inches (.25mm)
Angular = ± 2 degrees

DIMENSIONS
INCH
mm

THIRD ANGLE
PROJECTION