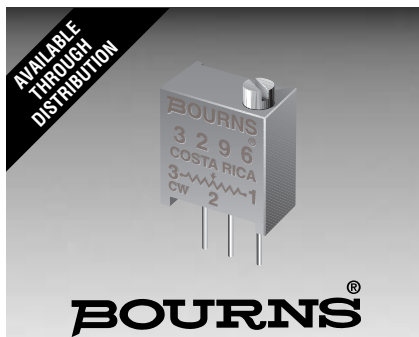




Features

- Multiturn / Cermet / Industrial / Sealed
- Standoffs
- Patent #4427966 drive mechanism
- Listed on the QPL for style RJ24 per MIL-R-22097 and RJR24 per High-Rel Mil-R-39035

RJ24/RJR24 - 3/8" Square Trimming Potentiometer

Electrical Characteristics

Standard Resistance Range

.....10 to 1 megohm
(see standard resistance table)

Resistance Tolerance±10% std.

Absolute Minimum Resistance

.....1 ohm max.

Contact Resistance Variation

.....3.0% or 3 ohms max.
(whichever is greater)

Adjustability

Voltage±0.01%

Resistance±0.05%

Resolution.....Infinite

Insulation Resistance500 vdc.
1,000 megohms min.

Dielectric Strength

Sea Level1,000 vac

80,000 Feet.....400 vac

Effective Travel.....25 turns nom.

Environmental Characteristics

Power Rating (300 volts max.)

85°C0.5 watt

150°C0 watt

Temperature Range

.....-55°C to +150°C

Temperature Coefficient

.....±100ppm/°C

Seal Test85°C Fluorinert*

Humidity.....MIL-STD-202 Method 106

RJ2496 hours
(1% ΔTR, 10 Megohms IR)

RJR24.....96 hours
(1% ΔTR, 100 Megohms IR)

Vibration.....20G (1% ΔTR; 1% ΔVR)

Shock.....100G (1% ΔTR; 1% ΔVR)

Load Life

RJ241,000 hours 0.5 watt @ 85°C
(2% ΔTR; 10% ΔVR)

RJR24...10,000 hours 0.5 watt @ 85°C
(3% ΔTR)

Rotational Life.....200 cycles (2% ΔTR)

Physical Characteristics

Torque5.0 oz-in. max.

Mechanical Stops.....Wiper idles

TerminalsMIL-STD 202, Method 208

Weight0.025 oz.

MarkingMil-spec part number,
date code

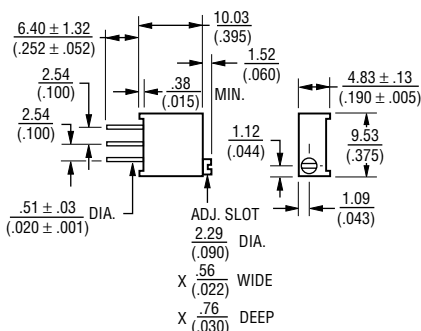
WiperPositioned at 50% nominal

FlammabilityU.L. 94V-0

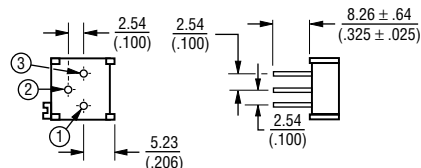
Standard Packaging50 pcs. per tube

Adjustment ToolH-90

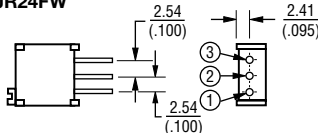
Common Dimensions



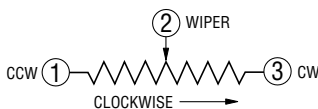
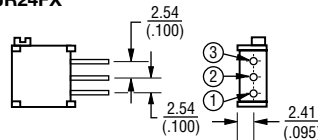
RJ24/RJR24FP



RJ24/RJR24FW



RJ24/RJR24FX



TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

DIMENSIONS ARE: $\frac{\text{METRIC}}{\text{(INCHES)}}$

Standard Resistance Table

Resistance (Ohms)	Resistance Code
10	100
20	200
50	500
100	101
200	201
500	501
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
25,000	253
50,000	503
100,000	104
200,000	204
250,000	254
500,000	504
1,000,000	105

Popular values listed in boldface. Special resistances available.

How To Order

See page 81 for Model RJ24, and page 82 for Model RJR24.

*"FLUORINERT" IS A REGISTERED TRADEMARK OF 3M CO.

Mil-Spec Numbering System - How To Order



Bourns High Reliability Mil-Spec Part Numbers

Order By	Process By*	Marked With	Terminal Types	Failure Rates
M39015/2-003(TS)(FR) M39015/2-004(TS)(FR) M39015/2-005(TS)(FR)	RTR22D(TS)501(FR) RTR22D(TS)102(FR) RTR22D(TS)202(FR)	JM39015/2-003(TS)(FR) JM39015/2-004(TS)(FR) JM39015/2-005(TS)(FR)	L, P, W, X	M
M39015/2-006(TS)(FR) M39015/2-007(TS)(FR) M39015/2-008(TS)(FR)	RTR22D(TS)502(FR) RTR22D(TS)103(FR) RTR22D(TS)203(FR)	JM39015/2-006(TS)(FR) JM39015/2-007(TS)(FR) JM39015/2-008(TS)(FR)		
M39015/3-006(TS)(FR)	RTR24D(TS)501(FR)	JM39015/3-006(TS)(FR)	P, W, X	M
M39015/3-007(TS)(FR) M39015/3-008(TS)(FR)	RTR24D(TS)102(FR) RTR24D(TS)202(FR)	JM39015/3-007(TS)(FR) JM39015/3-008(TS)(FR)	P, W, X	M
M39015/3-009(TS)(FR) M39015/3-010(TS)(FR)	RTR24D(TS)502(FR) RTR24D(TS)103(FR)	JM39015/3-009(TS)(FR) JM39015/3-010(TS)(FR)		

*May also order using this part number.

Qualified Part Numbers

Bourns reserves the right per MIL-R-39035 to substitute a higher grade temperature characteristic or failure rate (QPL) than requested.

RT/RTR22 (Commercial Model 3250)

STD. VALUES OHMS	RT22C2_____				RTR22D_____				NOMINAL RESOLUTION (PERCENT)
	L	P	W	X	L	P	W	X	
10	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-
50	RT22C2L500	RT22C2P500	RT22C2W500	RT22C2X500	-	-	-	-	0.80
100	RT22C2L101	RT22C2P101	RT22C2W101	RT22C2X101	-	-	-	-	0.90
200	RT22C2L201	RT22C2P201	RT22C2W201	RT22C2X201	-	-	-	-	0.70
500	RT22C2L501	RT22C2P501	RT22C2W501	RT22C2X501	RTR22DL501M	RTR22DP501M	RTR22DW501M	RTR22DX501M	0.60
1K	RT22C2L102	RT22C2P102	RT22C2W102	RT22C2X102	RTR22DL102M	RTR22DP100M	RTR22DW102M	RTR22DX102M	0.40
2K	RT22C2L202	RT22C2P202	RT22C2W202	RT22C2X202	RTR22DL202M	RTR22DP202M	RTR22DW202M	RTR22DX202M	0.30
5K	RT22C2L502	RT22C2P502	RT22C2W502	RT22C2X502	RTR22DL502M	RTR22DP502M	RTR22DW502M	RTR22DX502M	0.25
10K	RT22C2L103	RT22C2P103	RT22C2W103	RT22C2X103	RTR22DL103M	RTR22DP103M	RTR22DW103M	RTR22DX103M	0.19
20K	RT22C2L203	RT22C2P203	RT22C2W203	RT22C2X203	RTR22DL203M	RTR22DP203M	RTR22DW203M	RTR22DX203M	0.16

Specifications are subject to change without notice.

Qualified Part Numbers



Bourns reserves the right per MIL-R-39035 to substitute a higher grade temperature characteristic or failure rate (QPL) than requested.

RT/RTR24 (Commercial Model 3290)

STD. VALUES OHMS	RT24C2 _____			RTR24D _____			NOMINAL RESOLUTION (PERCENT)
	P	W	X	P	W	X	
10	RT24C2P100	RT24C2W100	RT24C2X100	-	-	-	1.11
20	RT24C2P200	RT24C2W200	RT24C2X200	-	-	-	0.93
50	RT24C2P500	RT24C2W500	RT24C2X500	-	-	-	0.62
100	RT24C2P101	RT24C2W101	RT24C2X101	-	-	-	0.60
200	RT24C2P201	RT24C2W201	RT24C2X201	-	-	-	0.54
500	RT24C2P501	RT24C2W501	RT24C2X501	RTR24DP501M	RTR24DW501M	RTR24DX501M	0.42
1K	RT24C2P102	RT24C2W102	RT24C2X102	RTR24DP102M	RTR24DW102M	RTR24DX102M	0.33
2K	RT24C2P202	RT24C2W202	RT24C2X202	RTR24DP202M	RTR24DW202M	RTR24DX202M	0.26
5K	RT24C2P502	RT24C2W502	RT24C2X502	RTR24DP502M	RTR24DW502M	RTR24DX502M	0.20
10K	RT24C2P103	RT24C2W103	RT24C2X103	RTR24DP103M	RTR24DW103M	RTR24DX103M	0.17

RT26 (Commercial Model 3260)

STD. VALUES OHMS	RT26C2 _____		NOMINAL RESOLUTION (PERCENT)
	W	X	
10	RT26C2W100	RT26C2X100	1.90
20	RT26C2W200	RT26C2X200	1.50
50	RT26C2W500	RT26C2X500	1.25
100	RT26C2W101	RT26C2X101	1.00
200	RT26C2W201	RT26C2X201	0.94
500	RT26C2W501	RT26C2X501	0.58
1K	RT26C2W102	RT26C2X102	0.50
2K	RT26C2W202	RT26C2X202	0.45
5K	RT26C2W502	RT26C2X502	0.34

FAILURE RATE LEVEL M = 1.0%

RJ24 (Commercial Model 3296)

STD. VALUES OHMS	RJ24F _____		
	P	W	X
10	RJ24FP100	RJ24FW100	RJ24FX100
20	RJ24FP200	RJ24FW200	RJ24FX200
50	RJ24FP500	RJ24FW500	RJ24FX500
100	RJ24FP101	RJ24FW101	RJ24FX101
200	RJ24FP201	RJ24FW201	RJ24FX201
500	RJ24FP501	RJ24FW501	RJ24FX501
1K	RJ24FP102	RJ24FW102	RJ24FX102
2K	RJ24FP202	RJ24FW202	RJ24FX202
5K	RJ24FP502	RJ24FW502	RJ24FX502
10K	RJ24FP103	RJ24FW103	RJ24FX103
20K	RJ24FP203	RJ24FW203	RJ24FX203
25K	RJ24FP253	RJ24FW253	RJ24FX253
50K	RJ24FP503	RJ24FW503	RJ24FX503
100K	RJ24FP104	RJ24FW104	RJ24FX104
250K	RJ24FP254	RJ24FW254	RJ24FX254
500K	RJ24FP504	RJ24FW504	RJ24FX504
1 MEG	RJ24FP105	RJ24FW105	RJ24FX105

FAILURE RATE LEVEL M = 1.0%

RJ22 (Commercial Model 3252)

STD. VALUES OHMS	RJ22F _____			
	L	P	W	X
10	RJ22FL100	RJ22FP100	RJ22FW100	RJ22FX100
20	RJ22FL200	RJ22FP200	RJ22FW200	RJ22FX200
50	RJ22FL500	RJ22FP500	RJ22FW500	RJ22FX500
100	RJ22FL101	RJ22FP101	RJ22FW101	RJ22FX101
200	RJ22FL201	RJ22FP201	RJ22FW201	RJ22FX201
500	RJ22FL501	RJ22FP501	RJ22FW501	RJ22FX501
1K	RJ22FL102	RJ22FP102	RJ22FW102	RJ22FX102
2K	RJ22FL202	RJ22FP202	RJ22FW202	RJ22FX202
5K	RJ22FL502	RJ22FP502	RJ22FW502	RJ22FX502
10K	RJ22FL103	RJ22FP103	RJ22FW103	RJ22FX103
20K	RJ22FL203	RJ22FP203	RJ22FW203	RJ22FX203
25K	RJ22FL253	RJ22FP253	RJ22FW253	RJ22FX253
50K	RJ22FL503	RJ22FP503	RJ22FW503	RJ22FX503
100K	RJ22FL104	RJ22FP104	RJ22FW104	RJ22FX104
250K	RJ22FL254	RJ22FP254	RJ22FW254	RJ22FX254
500K	RJ22FL504	RJ22FP504	RJ22FW504	RJ22FX504
1 MEG	RJ22FL105	RJ22FP105	RJ22FW105	RJ22FX105