



Features

- Surface Mount / Single-Turn Cermet / Process Sealed
- Elastomer seal allows multiple adjustments (5 rotations)
- Compatible with all surface mount manufacturing processes
- Recommended for reflow processing only

- Cross-slot rotor design suitable for automatic adjustment equipment
- Supplied in 12mm embossed tape, compatible with automatic pick-and-place assembly equipment
- Patent #5,095,298
- Plastic rotor minimizes RF & ESD concerns

3374 - 4mm Square Trimming Potentiometer

Electrical Characteristics

Standard Resistance Range10 to 2 megohms
 (see standard resistance table)
 Resistance Tolerance±20% std.
 End Resistance.....1% or 2 ohms max.
 (whichever is greater)
 Contact Resistance Variation
3% or 3 ohms max.
 (whichever is greater)
 Resolution.....Infinite
 Adjustment Angle240° nom.
 Maximum Voltage200V

Environmental Characteristics

Power Rating
 70°C.....0.25 watt
 125°C.....0 watt
 Operating Temperature Range
-55°C to +125°C
 Temperature Coefficient
 <500K ohms.....±100ppm/°C
 ≥500K ohms.....±150ppm/°C
 Seal5 turns min.
 HumidityMIL-STD 202 Method 100
 Vibration20G; TRS ±1%, VRS ±1%
 Shock.....100G; TRS ±1%, VRS ±1%
 Load Life (@70°C Rated Power
 1000 hours)3
 Rotational Life100 cycles TRS ±1%
 Thermal Shock5 cycles
 TRS ±2%, VRS ±1%

Physical Characteristics

Torque.....18 - 180 mN-c
 Mechanical AngleContinuous
 MarkingManufacturer's trademark
 and part marking code
 WiperPositioned at 50% nominal
 Standard Packaging750 pcs./7" reel
 Adjustment ToolH-90

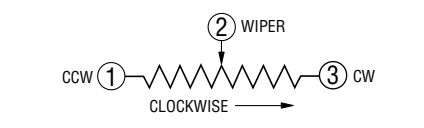
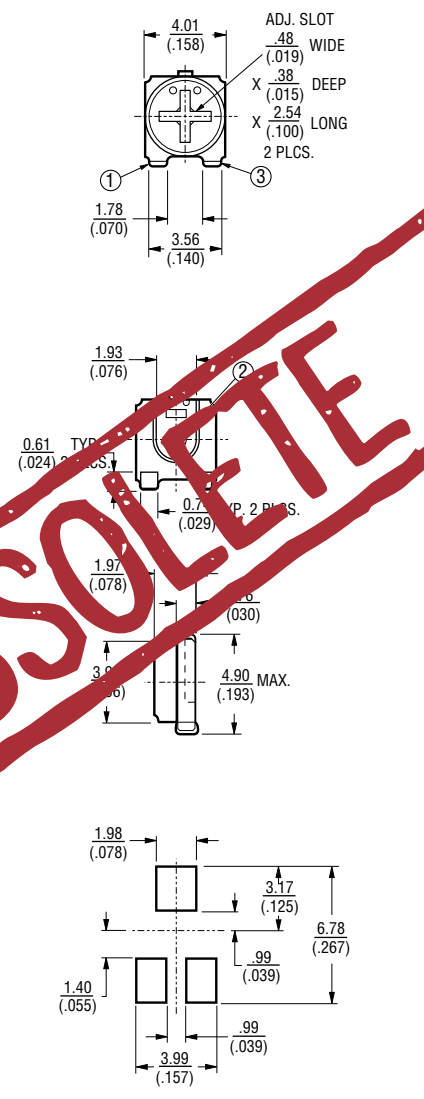
How To Order

3374 X - 1 - 502 E

Model _____
 Style _____
 Orientation of Parts in Tape:
 Style W - Terminals Toward
 Sprocket Holes
 Standard or Modified
 Product Indicator
 -1 = Standard Product
 Resistance Code _____
 Embossed Tape
 750 pcs./7" reel (standard)

Consult factory for other available options.

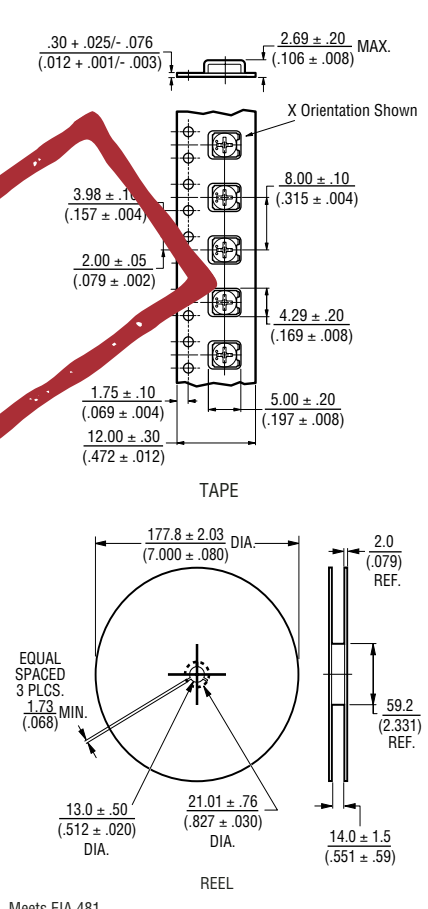
3374X/W



TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

DIMENSIONS ARE: METRIC (INCHES)

Packaging Specifications



Meets EIA 481

Standard Resistance Table

Resistance (Ohms)	Part Marking Code	Resistance Code
10	A1	100
20	21	200
50	51	500
100	A2	101
200	22	201
500	52	501
1,000	A3	102
2,000	23	202
5,000	53	502
10,000	A4	103
20,000	24	203
50,000	54	503
100,000	A5	104
200,000	25	204
500,000	55	504
1,000,000	A6	105
2,000,000	26	205

Popular values listed in boldface. Special resistances available.

SHADED AREAS TYPICALLY NOT STOCKED BY DISTRIBUTORS AND NOT RECOMMENDED FOR NEW DESIGNS.

Specifications are subject to change without notice.

SUBSTITUTION GUIDE

A summary of Bourns® Trimpot® alternatives for models not available or out of stock.

SQUARE MULTITURNS

Customer Requesting	1st Alternative Model/Pin Style	2nd Alternative Model/Pin Style
3223W	None	None
3214G	3224G ¹¹	None
3214J	3224J ¹¹	None
3214W	3224W ¹¹	None
3214X	3224X ¹¹	None
3224G	3214G ¹²	None
3224J	3214J ¹²	None
3224W	3214W ¹²	None
3224X	3214X ¹²	None
3250L	RT22C2L	RTR22DL
3250P	RT22C2P	RTR22DP
3250W	RT22C2W	RTR22DW
3250W-66	RT22C2X	RTR22DX
*3251L	3252L ⁹	None
*3251P	3252P ⁹	3296P ^{1,2,9}
*3251W	3252W ⁹	3296W ^{1,2,9}
*3251W-66	3252X ⁹	3296X ^{1,2,9}
3252L	RJ22FL	None
3252P	RJ22FP	3296P ^{1,2}
3252W	RJ22FW	3296W ^{1,2}
3252X	RJ22FX	3296X ^{1,2}
*3255L	3250L	None
*3255P	3250P	3290P ^{2,14}
*3255W	3250W	3290W ^{2,14}
*3255W-66	3250W-66	3290H ^{2,14}
3260H	RT26C2X	3266X ^{6,8}
3260W	RT26C2W	3266W ^{6,8}
3262P	RJ26FP	3266P
3262W	RJ26FW	3266W ⁶
3262X	RJ26FX	3266X ⁶
3266P	3262P	RJ26FP
3266W	3262W	RJ26FW
3266X	3262X	RJ26FX
3266Y ¹⁰	None	None
3266X ¹⁰	None	None
3269P	None	None
3269W	None	None
3269X	None	None
*3272A	None	None
*3272C	None	None
*3279W	3266W ³	3262W ³
*3279X	3266X ³	3262X ³
*3280L	None	None
*3280P	3290P	3296P ^{8,13}
*3280W	3290W	3296W ^{8,13}
*3280W-66	3290H	3296X ^{8,13}

Customer Requesting	1st Alternative Model/Pin Style	2nd Alternative Model/Pin Style
*3281L	None	3292L ^{9,13}
*3281P	3296P ^{9,13}	3292P ^{9,13}
*3281W	3296W ^{9,13}	3292W ^{9,13}
*3281W-66	3296X ^{9,13}	3292X ^{9,13}
*3282L	None	3292L
*3282H	3296X	3292X
*3282P	3296P	3292P
*3282W	3296W	3292W
*3290L	None	3292L ⁸
3290H	3296X ^{4,8}	3292X ⁸
3290P	3296P ^{4,8}	3292P ⁸
3290W	3296W ^{4,8}	3292W ⁸
3292L	None	RJ24FL
3292P	3296P ⁴	RJ24FP ⁴
3292W	3296W ⁴	RJ24FW ⁴
3292X	3296X ⁴	RJ24FX ⁴
3296P	3292P	RJ24FP
3296W	3292W	RJ24FW
3296X	3292X	RJ24FX
3296Y ¹⁰	3299Y ^{7,10}	None
3296Z ¹⁰	3299Z ^{7,10}	None
3299P	3296P	3292P
3299W	3296W	3292W
3299X	3296X	3292X
3299Y ¹⁰	3296Y ¹⁰	None
3299Z ¹⁰	3296Z ¹⁰	None

NOTES SHOWING VARIATION OF ALTERNATIVES:

- ¹ Part is smaller (3/8 " x 3/8 " sq. x .19 " in lieu of 1/2 " x 1/2 " sq. x .22 ").
- ² Power rating is lower (0.5 watt at 85 °C in lieu of 1.0 watt at 85 °C).
- ³ Adjust counterclockwise instead of clockwise.
- ⁴ Part is thicker (.190 " in lieu of .150 ").
- ⁵ Part is taller (.395 " in lieu of .375 ").
- ⁶ Part is taller (.270 " in lieu of .250 ").
- ⁷ Part is thicker (.240 " in lieu of .190 ").
- ⁸ Cermet element in lieu of wirewound element.
- ⁹ Cermet element in lieu of carbon element.
- ¹⁰ Available on tape and reel.
- ¹¹ 11 turns vs. 5 turns.
- ¹² 5 turns vs. 11 turns.
- ¹³ No center hole.
- ¹⁴ Part is smaller (3/8 " x 3/8 " sq. x .15 " in lieu of 1/2 " sq. x .22 ").

*Obsolete model.
 Not recommended for new designs.

Refer to Bourns® product data sheets for specifications of alternate models.

SUBSTITUTION GUIDE

RECTANGULAR MULTITURNS

Customer Requesting	1st Alternative Model/Pin Style	2nd Alternative Model/Pin Style
20P	None	None
*200L	3057L ^{1,9}	3059L ^{4,9}
*200P	3057Y ⁹	3059Y ^{4,9}
*200S	3057J ⁹	3059J ^{4,9}
*215L	3059L ^{1,9,10}	None
*215P	3059Y ^{9,10}	None
*215S	3059J ^{9,10}	None
*220L	None	None
*220P	None	None
*220W	None	None
*224L	3057L ¹	3059L ^{1,4}
*224P	3057P	3059P ⁴
*224S	3057J ²	3059J ^{2,4}
*235L	3059L ^{1,9,10}	None
*235P	3059Y ^{9,10}	None
*235S	3059J ^{3,9,10}	None
*236L	3057L ^{1,9}	3059L ^{1,4,9}
*236P	3057Y ⁹	3059Y ^{4,9}
*236S	3057J ^{3,9}	3059J ^{3,4,9}
*260L	3057L ^{1,9}	3059L ^{1,4,9}
*260P	3057Y ⁹	3059Y ^{4,9}
*260S	3057J ^{3,9}	3059J ^{3,4,9}
*271	3057L ^{1,9}	3059L ^{1,4,9}
*273	3057J ⁹	3059J ^{4,9}
*275	3057Y ⁹	3059Y ^{4,9}
*272	3059L ^{1,9,10}	None
*274	3059Y ^{9,10}	None
*276	3059J ^{9,10}	None
3005P	3006P ⁴	None
3006P	3009P ⁵	None
3006W	None	None
3006Y	3009Y ⁵	None
*3007P	3005P	3006P ⁴
3009P	3006P ⁶	None
3009Y	3006Y ⁶	None
*3010L	3057L ^{1,9}	None
*3010P	3057Y ⁹	None
*3011L	3059L ^{1,9,10}	None
*3011P	3059Y ^{9,10}	None
*3012L	3059L ^{1,9}	None
*3012P	3059Y ⁹	None
*3020L	None	None
*3051L	3059L ^{1,10}	None
*3051P	3059P ¹⁰	None
*3051S	3059J ^{2,10}	None
*3052L	3059L ¹	None
*3052P	3059P	None
*3052S	3059J ²	None
*3052Y	3059Y	None

Customer Requesting	1st Alternative Model/Pin Style	2nd Alternative Model/Pin Style
3057L	3059L ⁴	None
3057J	3059J ⁴	None
3057P	3059P ⁴	None
3057Y	3059Y ⁴	None
3059L	3057L ¹²	None
3059J	3057J ¹²	None
3059P	3057P ¹²	None
3059Y	3057Y ¹²	None
*3065P	3006W ^{4,6,8}	None
*3066P	3006W ^{6,8,10}	None
*3067P	3006W ^{4,6,8}	None
*3067S	None	None
*3068P	None	None
*3068S	None	None
*3069P	3006W ⁶	None
3082P	None	None
3082P-45	None	None
*3095P	None	None
*3099P	None	None

NOTES SHOWING VARIATION OF ALTERNATIVES:

- ¹ Leads are shorter (6 " min. in lieu of 11.5 " min.).
- ² Solder hooks located on bottom of part in lieu of end.
- ³ Solder hooks in lieu of solder terminals.
- ⁴ Cermet element in lieu of wirewound element.
- ⁵ Part height is higher (.350 " in lieu of .250 ").
- ⁶ Part height is lower (.250 " in lieu of .350 ").
- ⁷ Part width is larger (.28 " in lieu of .19 ").
- ⁸ Part is shorter (.75 " in lieu of 1.0 " long).
- ⁹ Part width is smaller (.19 " in lieu of .28 ").
- ¹⁰ Cermet element in lieu of carbon element.
- ¹¹ Pin spacing and body size not identical.
- ¹² Wirewound element in lieu of cermet element.

*Obsolete model.

Not recommended for new designs.

Refer to Bourns® product data sheets for specifications of alternate models.

SUBSTITUTION GUIDE

SINGLE-TURNS (Continued on next page)

Customer Requesting	1st Alternative Model/Pin Style	2nd Alternative Model/Pin Style
*3300P	3345P ¹	3362P ¹¹
*3300S	None	None
*3300W	3345W ²	3362X ¹¹
*3301P	3329P ^{3,10}	3362P ^{3,10,17}
*3301S	None	None
*3301W	3329W ¹⁰	3362W ^{10,17}
*3302W-1	3302W-3	None
*3302X-1	3302X-3	None
*3302W-2	3302W-3	None
*3302X-2	3302X-3	None
3302W-3	None	None
3302X-3	None	None
*3303W-1	3303W-3	None
*3303X-1	3303X-3	None
*3303W-2	3303W-3	None
*3303X-2	3303X-3	TC03X
3303W-3	None	None
3303X-3	TC33X	TC03X
3303W-4	None	None
3303X-4	None	None
3303C-1	None	None
3303D-1	None	None
*3304A	3364A	None
*3304B	3364B	None
*3304C	None	None
*3304D	None	None
*3304W	3364W	None
*3304X	3364X	None
*3305P	3345P ¹	3362P ¹¹
*3305W	3345W ²	3362X ¹¹
3306F	3318P ¹⁶	None
3306K	3318B ¹⁶	None
3306P	3362P	None
3306W	3318S ¹⁶	None
*3307P	3345P ¹	3362P ¹¹
*3307W	3345W ²	3362X ¹¹
3309P	3386G	3319P ¹⁶
3309W	3386V	3319W ¹⁶
3313J	TC33X ^{3,8}	3303W ^{3,8}
3313S	None	None
3314G	None	None
3314H	None	None
3314J	None	None
3314Z	None	None
*3314S	3314Z	None
*3316F	3318P	3306F ¹⁰
*3316K	3318B	3306K ¹⁰
*3316P	3362P ^{10,12}	3306P ¹⁰
*3316W	3318S	3306W ¹⁰
3318F	3318P	3306F ¹⁰
3318K	3318S	3306K ¹⁰
3318P	3318F	3306F ¹⁰
3318S	3318K	3306K ¹⁰
3318B	None	None
3318G(A) ¹⁴	None	None
3318S(A) ¹⁴	None	None
3318B(A)	None	None

Customer Requesting	1st Alternative Model/Pin Style	2nd Alternative Model/Pin Style
3319P	3309P ¹⁰	3386G ^{10,17}
3319W	3309W ¹⁰	3386V ^{10,17}
*3322P	3329P	3362P ¹⁷
*3323P	3362P	3329P ¹⁸
*3323S	3362S	3329S ¹⁸
*3323U	3362U	None
*3323W	3362W	3329W ¹⁸
*3223X	3362X	3329X ¹⁸
*3324G	3314G	None
*3324J	3314J	None
*3325P	3361P ¹⁵	None
*3325W	3361S ¹⁵	None
*3325X	3361S ¹⁵	None
*3326H	3329H	3362H ¹⁷
*3326P	3329P	3362P ¹⁷
*3328P	3319P ¹⁹	3386G ¹⁹
*3328W	3319W ¹⁹	3386V ¹⁹
3329H	3362H ¹⁷	3339H
3329M(R) ¹³	3362M(R) ^{13,17}	None
3329P	3362P ¹⁷	None
3329S	3362S ¹⁷	None
3329U(R) ¹³	3362U(R) ^{13,17}	None
3329W	3362W ¹⁷	None
3329X	3362X ¹⁷	None
3329P-DK9	3362P ¹⁷	None
*3335A	None	None
*3335B	None	None
*3335C	None	None
*3335W	None	None
*3335X	None	None

NOTES SHOWING VARIATION OF ALTERNATIVES:

- Part is larger (1/2 " dia. in lieu of 5/16 " dia.).
- Part is larger (.450 " L x .285 " W x .450 " H in lieu of .321 " L x .250 " W x .370 " H).
- Pins 1 and 3 are reversed.
- Part is larger (.300 " dia. in lieu of .250 " dia.).
- 4 turns in lieu of 1 turn.
- 1 turn in lieu of 4 turns.
- Part is larger (.38 " L x .40 " W x .24 " H in lieu of .35 " L x .375 " W x .21 " H).
- Unsealed in lieu of sealed.
- Power rating is lower.
- Cermet element in lieu of carbon element.
- Cermet element in lieu of wirewound element.
- Sealed in lieu of open frame construction.
- (R) Available on tape and reel.
- (A) Available on ammo pack.
- Different pad layout. Consult with Application Engineer.
- Carbon element in lieu of cermet element.
- Part is square vs. round.
- Part is round vs. square.
- Cermet element in lieu of conductive plastic element.

*Obsolete model.

Not recommended for new designs.

Refer to Bourns® product data sheets for specifications of alternate models.

SUBSTITUTION GUIDE

SINGLE-TURNS (Continued from previous page)

Customer Requesting	1st Alternative Model/Pin Style	2nd Alternative Model/Pin Style	Customer Requesting	1st Alternative Model/Pin Style	2nd Alternative Model/Pin Style
3339H	3329H ⁶	3362H ^{6,17}	3386B	None	None
3339P	3329P ⁶	3362P ^{6,17}	3386C	3362M	None
3339W	3329X ⁶	3362X ^{6,17}	3386H	3362X	3329X ¹⁸
3339S	3329S ⁶	3362S ^{6,17}	3386J	None	None
3345P	3329P ¹¹	3362P ^{11,17}	3386S	None	None
3345W	3329X ¹¹	3362X ^{11,17}	3386W	3362M	None
*3351P	None	None	3386X	3362W	3329W ¹⁸
*3351W	3352V ¹⁰	None	3386F	None	None
3352E	3309P	3386G ^{7,12}	3386K	3362H	3329H ¹⁸
3352H	3306W	3362X ¹²	3386M	None	None
3352K	3309W	3386V ^{7,12}	3386P	3362P	3329P ¹⁸
3352P	3306P ³	3362P ^{3,12}	3386R	None	None
3352T	3362U ¹²	None	3386T	None	None
3352V	None	None	3386U	3362U	None
3352W	3386W ^{7,12}	3362M ¹²	3386Y	None	None
*3353P	None	None	3386G	None	None
*3353W	3352V ¹⁰	None	3386V	None	None
*3355U	None	None	3386W(R) ¹³	3362M(R) ¹³	3329M(R) ^{13,18}
*3355W	3352V ¹⁰	None	3386U(R) ¹³	3362U(R) ¹³	3329U(R) ^{13,18}
*3359P	3386G	3309P	*3389D	None	None
*3359W	3386V	3309W	*3389H	3386H	3362X ³
3361P	None	None	*3389P	3386P	3362P
3361S	None	None	*3389R	3386R	None
3362H	3329H ¹⁸	None	*3389S	3386S	None
3362M(R)	3329M(U) ^{13,18}	None	*3389T	3386R-Y98	None
3362U(R)	3329U(R) ^{13,18}	None	*3389W	3386W	3362M
3362P	3329P ¹⁸	None			
3362S	3329S ¹⁸	None			
3362M	None	None			
3362U	None	None			
3362W	3329W ¹⁸	None			
3362X	3329X ¹⁸	None			
3362R	None	None			
3362Z	None	None			
*3363W	3303W-3	None			
*3363X	3303X-3	TC33X			
3364W	None	None			
3364X	3314J ^{3,12}	None			
3364A	None	None			
3364B	None	None			
*3365P	3345P	3362P ^{11,17}			
*3365W	3345W	3362X ^{11,17}			
*3367P	3345P	3362P ^{11,17}			
*3367S	None	None			
*3368P	None	None			
*3368S	None	None			
*3373J	3313J	3303W ^{3,8}			
*3374W	None	3364W ⁸			
*3374X	3314J ³	3364X ⁸			

NOTES SHOWING VARIATION OF ALTERNATIVES:

- ¹ Part is larger (1/2 " dia. in lieu of 5/16 " dia.).
- ² Part is larger (.450 " L x .285 " W x .450 " H in lieu of .321 " L x .250 " W x .370 " H).
- ³ Pins 1 and 3 are reversed.
- ⁴ Part is larger (.300 " dia. in lieu of .250 " dia.).
- ⁵ 4 turns in lieu of 1 turn.
- ⁶ 1 turn in lieu of 4 turns.
- ⁷ Part is larger (.38 " L x .40 " W x .24 " H in lieu of .35 " L x .375 " W x .21 " H).
- ⁸ Unsealed in lieu of sealed.
- ⁹ Power rating is lower.
- ¹⁰ Cermet element in lieu of carbon element.
- ¹¹ Cermet element in lieu of wirewound element.
- ¹² Sealed in lieu of open frame construction.
- ¹³ (R) Available on tape and reel.
- ¹⁴ (A) Available on ammo pack.
- ¹⁵ Different pad layout. Consult with Application Engineer.
- ¹⁶ Carbon element in lieu of cermet element.
- ¹⁷ Part is square vs. round.
- ¹⁸ Part is round vs. square.
- ¹⁹ Cermet element in lieu of conductive plastic element.

* Obsolete model.
 Not recommended for new designs.

Refer to Bourns® product data sheets for specifications of alternate models.

SUBSTITUTION GUIDE

SINGLE-TURNS (Continued from previous page)

Customer Requesting	1st Alternative Model/Pin Style	2nd Alternative Model/Pin Style
TC03X-2	3303X-2	TC33X-2 ²⁰
TC33X-2	TC03X-2 ²¹	3303X-2 ²¹
TC73X-1	TC33X-2	TC03X-2 ²¹
TC73X-2	TC03X-2	TC33X-2 ²⁰
*TC76W(A)	3318S(A)	None
*TC76W(R)	3318S(A)	None
*TC76N(A)	None	None
*TC76N(R)	None	None
*TC76G(A)	3318G(A)	None
*TC76G(R)	3318G(A)	None
*TC76B	3318S	None
*TC76Z	3318P	None
*TC76P	3362P	None
*TDB06-5	None	None
*TDB08-5	None	None
*TDB10-4	None	None
*TDB06-6	3318S	None
*TDB08-3	None	None
*TDB10-8	None	None

NOTES SHOWING VARIATION OF ALTERNATIVES:

- ¹ Part is larger (1/2 " dia. in lieu of 5/16 " dia.).
- ² Part is larger (.450 " L x .285 " W x .450 " H in lieu of .321 " L x .250 " W x .370 " H).
- ³ Pins 1 and 3 are reversed.
- ⁴ Part is larger (.300 " dia. in lieu of .250 " dia.).
- ⁵ 4 turns in lieu of 1 turn.
- ⁶ 1 turn in lieu of 4 turns.
- ⁷ Part is larger (.38 " L x .40 " W x .24 " H in lieu of .35 " L x .375 " W x .21 " H).
- ⁸ Unsealed in lieu of sealed.
- ⁹ Power rating is lower.
- ¹⁰ Cermet element in lieu of carbon element.
- ¹¹ Cermet element in lieu of wirewound element.
- ¹² Sealed in lieu of open frame construction.
- ¹³ (R) Available on tape and reel.
- ¹⁴ (A) Available on ammo pack.
- ¹⁵ Different pad layout. Consult with Application Engineer.
- ¹⁶ Carbon element in lieu of cermet element.
- ¹⁷ Part is square vs. round.
- ¹⁸ Part is round vs. square.
- ¹⁹ Cermet element in lieu of conductive plastic element.
- ²⁰ Rotational stop in lieu of no rotational stop.
- ²¹ No rotational stop in lieu of rotational stop.

*Obsolete model.

Not recommended for new designs.

Refer to Bourns® product data sheets for specifications of alternate models.



Reliable Electronic Solutions

Asia-Pacific: TEL +886-2 25624117
FAX +886-2 25624116

Europe: TEL +41-41 7685555
FAX +41-41 7685510

N. America: TEL +1-909 781-5500
FAX +1-909 781-5700

www.bourns.com