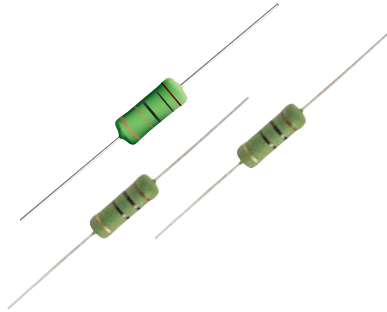


Product Change Notification

FIXED RESISTORS



August, 2015

Bourns® Model FW, W, and WS Series Fixed Resistors

Change to Packaging Dimensions/Tolerances of the Carrier Tape and Packaging Box

The Bourns® Model [FW](#), [W](#), and [WS](#) Series Fixed Resistors packaging dimensions/tolerances of the carrier tape and packaging box have changed. The specific dimensional changes and affected part numbers are listed on pages 2-5 of this notice.

The changes occurred as follows:

First date code using the above changes: 1518

*Date that deliveries of modified
packaging began:*

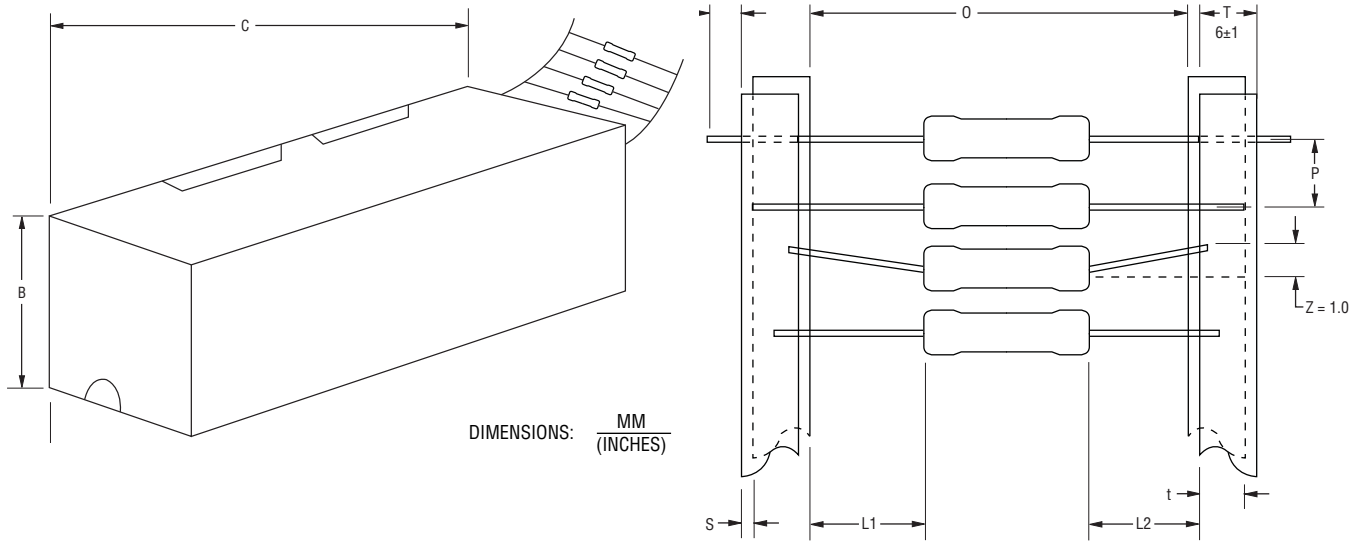
FW Series: May 14, 2015

W Series: June 11, 2015

WS Series: May 28, 2015

Should you have any questions or need additional information, please feel free to contact [Customer Service/Inside Sales](#).

Product Packaging Specifications



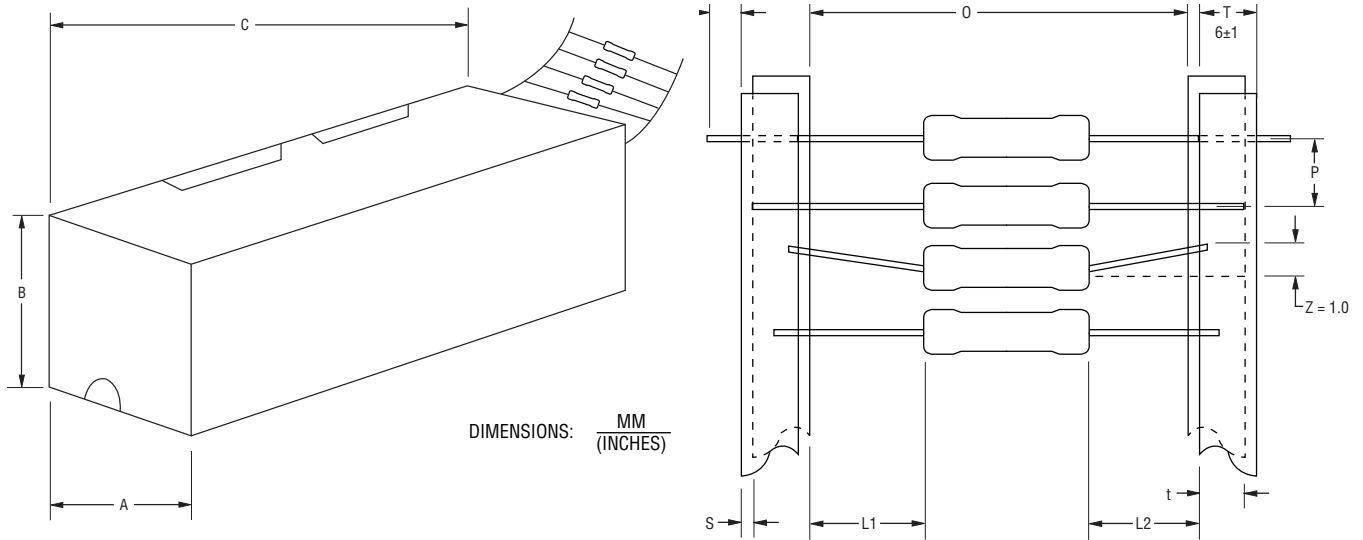
Original Dimensions - FW Series

| Model | O | P | A | B | C | Qty./Box |
|----------------|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|---------------------------------------|------------|
| FW10A (1 W) | $\frac{52 \pm 1}{(2.047 \pm .039)}$ | $\frac{5 \pm 0.3}{(.197 \pm .112)}$ | $\frac{75 \pm 5}{(2.953 \pm .197)}$ | $\frac{70 \pm 5}{(2.756 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| FW20A (2 W) | $\frac{58 \pm 1}{(2.283 \pm .039)}$ | $\frac{5 \pm 0.3}{(.197 \pm .112)}$ | $\frac{80 \pm 5}{(3.150 \pm .197)}$ | $\frac{82 \pm 5}{(3.228 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| FW30A (3 W) | $\frac{65 \pm 1}{(2.559 \pm .039)}$ | $\frac{10 \pm 0.3}{(.393 \pm .112)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{119 \pm 5}{(4.685 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| FW50A (5 W) | $\frac{65 \pm 1}{(2.559 \pm .039)}$ | $\frac{10 \pm 0.3}{(.393 \pm .112)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{88 \pm 5}{(3.465 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 500 pcs. |
| FW70A (7 W) | $\frac{65 \pm 1}{(2.559 \pm .039)}$ | $\frac{10 \pm 0.3}{(.393 \pm .112)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{88 \pm 5}{(3.465 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 500 pcs. |

New Dimensions - FW Series

| Model | O | P | A | B | C | Qty./Box |
|----------------|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|---------------------------------------|------------|
| FW10A (1 W) | $\frac{52 \pm 1}{(2.047 \pm .039)}$ | $\frac{5 \pm 0.3}{(.197 \pm .012)}$ | $\frac{75 \pm 5}{(2.953 \pm .197)}$ | $\frac{70 \pm 5}{(2.756 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| FW20A (2 W) | $\frac{58 \pm 1}{(2.283 \pm .039)}$ | $\frac{10 \pm 0.5}{(.394 \pm .020)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{119 \pm 5}{(4.685 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| FW30A (3 W) | $\frac{65 \pm 5}{(2.559 \pm .197)}$ | $\frac{10 \pm 0.5}{(.394 \pm .020)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{119 \pm 5}{(4.685 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| FW50A (5 W) | $\frac{65 \pm 5}{(2.559 \pm .197)}$ | $\frac{10 \pm 0.5}{(.394 \pm .020)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{88 \pm 5}{(3.465 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 500 pcs. |
| FW70A (7 W) | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{10 \pm 0.5}{(.394 \pm .020)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{124 \pm 5}{(4.882 \pm .197)}$ | $\frac{500 \pm 5}{(19.685 \pm .197)}$ | 500 pcs. |

Product Packaging Specifications



Original Dimensions - W Series

| Model | O | P | A | B | C | Qty./Box |
|-------|-------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------|------------|
| W1M | $\frac{58 \pm 1}{(2.283 \pm .039)}$ | $\frac{5 \pm 0.3}{(.197 \pm .112)}$ | $\frac{75 \pm 5}{(2.953 \pm .197)}$ | $\frac{70 \pm 5}{(2.756 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| W2M | $\frac{58 \pm 1}{(2.283 \pm .039)}$ | $\frac{5 \pm 0.3}{(.197 \pm .112)}$ | $\frac{80 \pm 5}{(3.150 \pm .197)}$ | $\frac{82 \pm 5}{(3.228 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| W3M | $\frac{65 \pm 5}{(2.559 \pm .197)}$ | $\frac{10 \pm 0.3}{(.393 \pm .112)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{119 \pm 5}{(4.685 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| W5M | $\frac{65 \pm 5}{(2.559 \pm .197)}$ | $\frac{10 \pm 0.3}{(.393 \pm .112)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{88 \pm 5}{(3.465 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 500 pcs. |
| W7M | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{10 \pm 0.3}{(.393 \pm .112)}$ | $\frac{115 \pm 5}{(4.528 \pm .197)}$ | $\frac{124 \pm 5}{(4.882 \pm .197)}$ | $\frac{500 \pm 5}{(19.685 \pm .197)}$ | 500 pcs. |

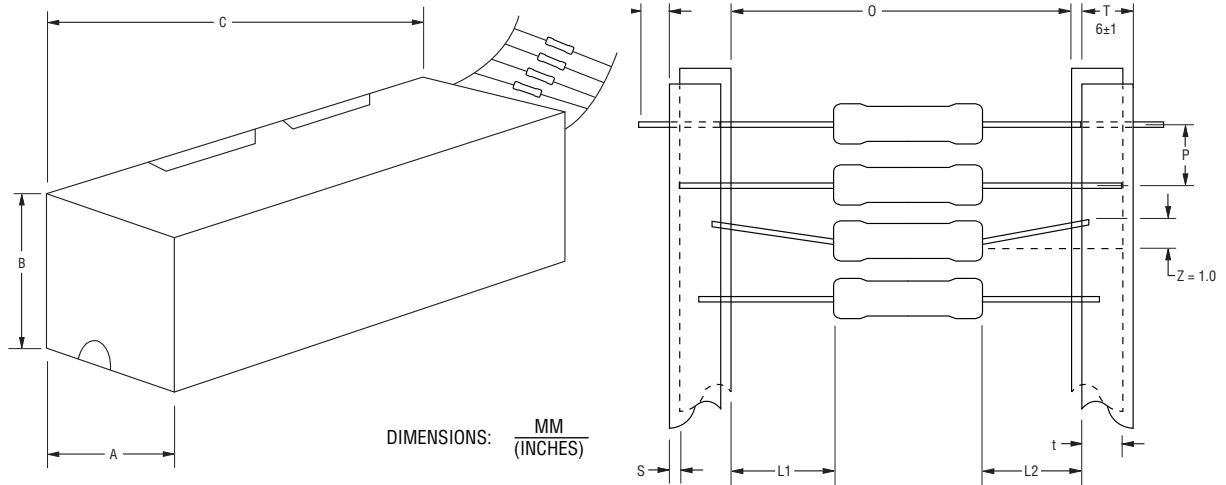
For W9M and W10M packaging specifications, please contact factory.

New Dimensions - W Series

| Model | O | P | A | B | C | Qty./Box |
|-------|-------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------|------------|
| W1M | $\frac{58 \pm 1}{(2.283 \pm .039)}$ | $\frac{5 \pm 0.3}{(.197 \pm .112)}$ | $\frac{75 \pm 5}{(2.953 \pm .197)}$ | $\frac{70 \pm 5}{(2.756 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| W2M | $\frac{58 \pm 1}{(2.283 \pm .039)}$ | $\frac{10 \pm 0.5}{(.394 \pm .020)}$ | $\frac{80 \pm 5}{(3.150 \pm .197)}$ | $\frac{82 \pm 5}{(3.228 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| W3M | $\frac{65 \pm 5}{(2.559 \pm .197)}$ | $\frac{10 \pm 0.5}{(.394 \pm .020)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{119 \pm 5}{(4.685 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 1,000 pcs. |
| W5M | $\frac{65 \pm 5}{(2.559 \pm .197)}$ | $\frac{10 \pm 0.5}{(.394 \pm .020)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{88 \pm 5}{(3.465 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | 500 pcs. |
| W7M | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{10 \pm 0.5}{(.394 \pm .020)}$ | $\frac{115 \pm 5}{(4.528 \pm .197)}$ | $\frac{124 \pm 5}{(4.882 \pm .197)}$ | $\frac{500 \pm 5}{(19.685 \pm .197)}$ | 500 pcs. |

For W9M and W10M packaging specifications, please contact factory.

Product Packaging Specifications



Original Dimensions - WS Series

| Model | O | P | A | B | C | Pkg. Style | Min. Order Qty. (Pcs.) | Pcs./ Box |
|------------|-------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------|------------|------------------------|------------|
| WS1M | $\frac{58 \pm 1}{(2.283 \pm .039)}$ | $\frac{5 \pm 0.3}{(.197 \pm .112)}$ | $\frac{75 \pm 5}{(2.953 \pm .197)}$ | $\frac{70 \pm 5}{(2.756 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | Ammo Pack | 5,000 | 1,000 pcs. |
| WS1A, WS2M | $\frac{58 \pm 1}{(2.283 \pm .039)}$ | $\frac{5 \pm 0.3}{(.197 \pm .112)}$ | $\frac{80 \pm 5}{(3.150 \pm .197)}$ | $\frac{82 \pm 5}{(3.228 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | | | |
| WS2A, WS3M | $\frac{65 \pm 5}{(2.559 \pm .197)}$ | $\frac{10 \pm 0.3}{(.393 \pm .112)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{119 \pm 5}{(4.685 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | | | |
| WS3A, WS5M | $\frac{65 \pm 5}{(2.559 \pm .197)}$ | $\frac{10 \pm 0.3}{(.393 \pm .112)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{88 \pm 5}{(3.465 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | | | |
| WS5A, WS7M | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{10 \pm 0.3}{(.393 \pm .112)}$ | $\frac{115 \pm 5}{(4.528 \pm .197)}$ | $\frac{124 \pm 5}{(4.882 \pm .197)}$ | $\frac{500 \pm 5}{(19.685 \pm .197)}$ | | 2,000 | 500 pcs. |

For WS7A and WS8M packaging specifications, please contact factory.

New Dimensions - WS Series

| Model | O | P | A | B | C | Pkg. Style | Min. Order Qty. (Pcs.) | Pcs./ Box |
|------------|-------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------|------------|------------------------|-----------|
| WS1M | $\frac{58 \pm 1}{(2.283 \pm .039)}$ | $\frac{5 \pm 0.3}{(.197 \pm .012)}$ | $\frac{75 \pm 5}{(2.953 \pm .197)}$ | $\frac{70 \pm 5}{(2.756 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | Ammo Pack | 5,000 | 1,000 |
| WS1A, WS2M | $\frac{58 \pm 1}{(2.283 \pm .039)}$ | $\frac{5 \pm 0.3}{(.197 \pm .012)}$ | $\frac{80 \pm 5}{(3.150 \pm .197)}$ | $\frac{82 \pm 5}{(3.228 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | | | |
| WS2A, WS3M | $\frac{65 \pm 5}{(2.559 \pm .197)}$ | $\frac{10 \pm 0.5}{(.394 \pm .020)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{119 \pm 5}{(4.685 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | | | |
| WS3A, WS5M | $\frac{65 \pm 5}{(2.559 \pm .197)}$ | $\frac{10 \pm 0.5}{(.394 \pm .020)}$ | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{88 \pm 5}{(3.465 \pm .197)}$ | $\frac{255 \pm 5}{(10.039 \pm .197)}$ | | | |
| WS5A, WS7M | $\frac{90 \pm 5}{(3.543 \pm .197)}$ | $\frac{10 \pm 0.5}{(.394 \pm .020)}$ | $\frac{115 \pm 5}{(4.528 \pm .197)}$ | $\frac{124 \pm 5}{(4.882 \pm .197)}$ | $\frac{500 \pm 5}{(19.685 \pm .197)}$ | | 2,000 | 500 |

For WS7A and WS8M packaging specifications, please contact factory.

Affected Part Numbers

FW Series

| | | | |
|------------------|------------------|-------------|-------------|
| FW10A1000JA | FW20A-DJ6-18R0JA | FW30A10R0JA | FW50A4R70JA |
| FW10A10R0AJA | FW20A1000JA | FW30A15R0JA | FW50A68R0JA |
| FW10A10R0JA | FW20A10R0JA | FW30A22R0JA | FW50A6R80JA |
| FW10A15R0JA | FW20A15R0JA | FW30A33R0JA | FW50A82R0JA |
| FW10A22R0JA | FW20A18R0JA | FW30A47R0JA | FW70A1000JA |
| FW10A33R0JA | FW20A20R0JA | FW30A4R70JA | FW70A10R0JA |
| FW10A47R0JA | FW20A22R0JA | FW30A5R10JA | FW70A15R0JA |
| FW10A4R70JA | FW20A27R0JA | FW30A5R60JA | FW70A22R0JA |
| FW10A5R10JA | FW20A33R0JA | FW30A68R0JA | FW70A33R0JA |
| FW10A5R60JA | FW20A47R0JA | FW30A6R80JA | FW70A47R0JA |
| FW10A68R0JA | FW20A4R70JA | FW30A82R0JA | FW70A4R70JA |
| FW10A6R20JA | FW20A5R60JA | FW30A8R20JA | FW70A68R0JA |
| FW10A6R80JA | FW20A68R0JA | FW50A1000JA | FW70A6R80JA |
| FW10A7R50JA | FW20A6R80JA | FW50A10R0JA | FW70A7R50JA |
| FW10A82R0JA | FW20A7R50JA | FW50A15R0JA | FW70A82R0JA |
| FW10A8R20JA | FW20A82R0JA | FW50A22R0JA | FW70A9R10JA |
| FW10A9R10JA | FW20A8R20JA | FW50A33R0JA | |
| FW20A-DJ5-27R0JA | FW30A1000JA | FW50A47R0JA | |

W Series

| |
|----------|
| W1M1000J |
| W1M22R0J |
| W1M33R0J |
| W2M1000J |
| W3M22R0J |

WS Series

| |
|-----------|
| WS1M1500J |
| WS1M33R0J |
| WS2M1500J |
| WS2M22R0J |
| WS2M33R0J |
| WS2M47R0J |
| WS2M68R0J |
| WS3M33R0J |
| WS5M1001J |
| WS5M3301J |