

Features

- Formerly J. W. Miller® model
- Height of 3.0 mm max.
- Current rating up to 3.1 A
- RoHS compliant*

Applications

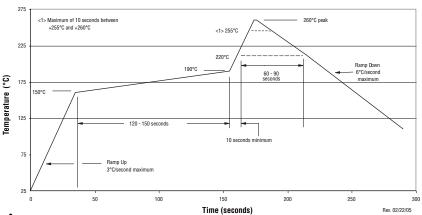
- Input/output of DC/DC converters
- Power supplies for:
 - Portable communication equipment
 - Camcorders
 - LCD TVs

PM428S Series - Shielded SMD Power Inductor

Electrical Specifications

Bourns Part No. (μH) Tol. % Ref. (MHz) (MHz) (mΩ) (A) PM428S-1R2-RC 1.2 ±30 9.34 7.96 176 20 3.10 PM428S-1R8-RC 1.8 ±30 9.18 7.96 146 25 2.70 PM428S-2R7-RC 2.2 ±30 9.24 7.96 111 28 2.50 PM428S-2R7-RC 2.7 ±30 8.64 7.96 92 30 2.35 PM428S-3R3-RC 3.3 ±30 7.72 7.96 76 35 2.15 PM428S-3R9-RC 3.9 ±30 8.58 7.96 56 60 1.72 PM428S-4R7-RC 4.7 ±30 8.12 7.96 55 70 1.55 PM428S-6R8-RC 5.6 ±30 9.56 7.96 69 85 1.38 PM428S-8R2-RC 8.2 ±30 8.24 7.96 77 90 1.30 PM428S-100-RC <	(A)
PM428S-1R8-RC 1.8 ±30 9.18 7.96 146 25 2.70 PM428S-2R2-RC 2.2 ±30 9.24 7.96 111 28 2.50 PM428S-2R7-RC 2.7 ±30 8.64 7.96 92 30 2.35 PM428S-3R3-RC 3.3 ±30 7.72 7.96 76 35 2.15 PM428S-3R9-RC 3.9 ±30 8.58 7.96 56 60 1.72 PM428S-4R7-RC 4.7 ±30 8.12 7.96 55 70 1.55 PM428S-5R6-RC 5.6 ±30 9.56 7.96 69 85 1.38 PM428S-6R8-RC 6.8 ±30 9.624 7.96 77 90 1.30 PM428S-8R2-RC 8.2 ±30 8.24 7.96 45 100 1.25 PM428S-100-RC 10 ±30 11.26 2.52 34 110 1.19 PM428S-150-RC 15	0 -0
PM428S-2R2-RC 2.2 ±30 9.24 7.96 111 28 2.50 PM428S-2R7-RC 2.7 ±30 8.64 7.96 92 30 2.35 PM428S-3R3-RC 3.3 ±30 7.72 7.96 76 35 2.15 PM428S-3R9-RC 3.9 ±30 8.58 7.96 56 60 1.72 PM428S-4R7-RC 4.7 ±30 8.12 7.96 55 70 1.55 PM428S-5R6-RC 5.6 ±30 9.56 7.96 69 85 1.38 PM428S-6R8-RC 6.8 ±30 9.624 7.96 77 90 1.30 PM428S-8R2-RC 8.2 ±30 8.24 7.96 45 100 1.25 PM428S-100-RC 10 ±30 11.26 2.52 34 110 1.19 PM428S-150-RC 12 ±30 11.62 2.52 25 125 1.12 PM428S-20-RC 18	2.56
PM428S-2R7-RC 2.7 ±30 8.64 7.96 92 30 2.35 PM428S-3R3-RC 3.3 ±30 7.72 7.96 76 35 2.15 PM428S-3R9-RC 3.9 ±30 8.58 7.96 56 60 1.72 PM428S-4R7-RC 4.7 ±30 8.12 7.96 55 70 1.55 PM428S-5R6-RC 5.6 ±30 9.56 7.96 69 85 1.38 PM428S-6R8-RC 6.8 ±30 9.624 7.96 77 90 1.30 PM428S-8R2-RC 8.2 ±30 8.24 7.96 45 100 1.25 PM428S-100-RC 10 ±30 11.26 2.52 34 110 1.19 PM428S-120-RC 12 ±30 11.26 2.52 25 125 1.12 PM428S-150-RC 15 ±30 9.66 2.52 27 150 1.03 PM428S-20-RC 22	2.20
PM428S-3R3-RC 3.3 ±30 7.72 7.96 76 35 2.15 PM428S-3R9-RC 3.9 ±30 8.58 7.96 56 60 1.72 PM428S-4R7-RC 4.7 ±30 8.12 7.96 55 70 1.55 PM428S-5R6-RC 5.6 ±30 9.56 7.96 69 85 1.38 PM428S-6R8-RC 6.8 ±30 9.624 7.96 77 90 1.30 PM428S-8R2-RC 8.2 ±30 8.24 7.96 45 100 1.25 PM428S-100-RC 10 ±30 11.26 2.52 34 110 1.19 PM428S-120-RC 12 ±30 11.26 2.52 25 125 1.12 PM428S-150-RC 15 ±30 9.66 2.52 27 150 1.03 PM428S-180-RC 18 ±30 11.64 2.52 25 160 0.98 PM428S-270-RC 27	2.05
PM428S-3R9-RC 3.9 ±30 8.58 7.96 56 60 1.72 PM428S-4R7-RC 4.7 ±30 8.12 7.96 55 70 1.55 PM428S-5R6-RC 5.6 ±30 9.56 7.96 69 85 1.38 PM428S-6R8-RC 6.8 ±30 9.624 7.96 77 90 1.30 PM428S-8R2-RC 8.2 ±30 8.24 7.96 45 100 1.25 PM428S-100-RC 10 ±30 11.26 2.52 34 110 1.19 PM428S-120-RC 12 ±30 11.26 2.52 25 125 1.12 PM428S-150-RC 15 ±30 9.66 2.52 27 150 1.03 PM428S-180-RC 18 ±30 11.64 2.52 25 160 0.98 PM428S-20-RC 22 ±30 8.26 2.52 23 185 0.93 PM428S-330-RC 23	1.80
PM428S-4R7-RC 4.7 ±30 8.12 7.96 55 70 1.55 PM428S-5R6-RC 5.6 ±30 9.56 7.96 69 85 1.38 PM428S-6R8-RC 6.8 ±30 9.624 7.96 77 90 1.30 PM428S-8R2-RC 8.2 ±30 8.24 7.96 45 100 1.25 PM428S-100-RC 10 ±30 11.26 2.52 34 110 1.19 PM428S-120-RC 12 ±30 11.26 2.52 25 125 1.12 PM428S-150-RC 15 ±30 9.66 2.52 27 150 1.03 PM428S-180-RC 18 ±30 11.64 2.52 25 160 0.98 PM428S-220-RC 22 ±30 8.26 2.52 23 185 0.93 PM428S-390-RC 33 ±30 9.7 2.52 16 230 0.82 PM428S-390-RC 39	1.65
PM428S-5R6-RC 5.6 ±30 9.56 7.96 69 85 1.38 PM428S-6R8-RC 6.8 ±30 9.624 7.96 77 90 1.30 PM428S-8R2-RC 8.2 ±30 8.24 7.96 45 100 1.25 PM428S-100-RC 10 ±30 11.26 2.52 34 110 1.19 PM428S-120-RC 12 ±30 11.26 2.52 25 125 1.12 PM428S-150-RC 15 ±30 9.66 2.52 27 150 1.03 PM428S-180-RC 18 ±30 11.64 2.52 25 160 0.98 PM428S-220-RC 22 ±30 8.26 2.52 23 185 0.93 PM428S-270-RC 27 ±30 10.76 2.52 18 200 0.89 PM428S-390-RC 39 ±30 9.74 2.52 14 250 0.80 PM428S-470-RC 47 <td>1.50</td>	1.50
PM428S-6R8-RC 6.8 ±30 9.624 7.96 77 90 1.30 PM428S-8R2-RC 8.2 ±30 8.24 7.96 45 100 1.25 PM428S-100-RC 10 ±30 11.26 2.52 34 110 1.19 PM428S-120-RC 12 ±30 11.26 2.52 25 125 1.12 PM428S-150-RC 15 ±30 9.66 2.52 27 150 1.03 PM428S-180-RC 18 ±30 11.64 2.52 25 160 0.98 PM428S-220-RC 22 ±30 8.26 2.52 23 185 0.93 PM428S-270-RC 27 ±30 10.76 2.52 18 200 0.89 PM428S-330-RC 33 ±30 9.7 2.52 16 230 0.82 PM428S-470-RC 47 ±30 10.88 2.52 13 280 0.75 PM428S-560-RC 56 <td>1.30</td>	1.30
PM428S-8R2-RC 8.2 ±30 8.24 7.96 45 100 1.25 PM428S-100-RC 10 ±30 11.26 2.52 34 110 1.19 PM428S-120-RC 12 ±30 11.26 2.52 25 125 1.12 PM428S-150-RC 15 ±30 9.66 2.52 27 150 1.03 PM428S-180-RC 18 ±30 11.64 2.52 25 160 0.98 PM428S-220-RC 22 ±30 8.26 2.52 23 185 0.93 PM428S-270-RC 27 ±30 10.76 2.52 18 200 0.89 PM428S-330-RC 33 ±30 9.7 2.52 16 230 0.82 PM428S-390-RC 39 ±30 9.74 2.52 14 250 0.80 PM428S-470-RC 47 ±30 10.88 2.52 13 280 0.75 PM428S-560-RC 56	1.20
PM428S-100-RC 10 ±30 11.26 2.52 34 110 1.19 PM428S-120-RC 12 ±30 11.26 2.52 25 125 1.12 PM428S-150-RC 15 ±30 9.66 2.52 27 150 1.03 PM428S-180-RC 18 ±30 11.64 2.52 25 160 0.98 PM428S-220-RC 22 ±30 8.26 2.52 23 185 0.93 PM428S-270-RC 27 ±30 10.76 2.52 18 200 0.89 PM428S-330-RC 33 ±30 9.7 2.52 16 230 0.82 PM428S-390-RC 39 ±30 9.74 2.52 14 250 0.80 PM428S-470-RC 47 ±30 10.88 2.52 13 280 0.75 PM428S-560-RC 56 ±30 9 2.52 13 320 0.70	1.15
PM428S-120-RC 12 ±30 11.26 2.52 25 125 1.12 PM428S-150-RC 15 ±30 9.66 2.52 27 150 1.03 PM428S-180-RC 18 ±30 11.64 2.52 25 160 0.98 PM428S-220-RC 22 ±30 8.26 2.52 23 185 0.93 PM428S-270-RC 27 ±30 10.76 2.52 18 200 0.89 PM428S-330-RC 33 ±30 9.7 2.52 16 230 0.82 PM428S-390-RC 39 ±30 9.74 2.52 14 250 0.80 PM428S-470-RC 47 ±30 10.88 2.52 13 280 0.75 PM428S-560-RC 56 ±30 9 2.52 13 320 0.70	1.05
PM428S-150-RC 15 ±30 9.66 2.52 27 150 1.03 PM428S-180-RC 18 ±30 11.64 2.52 25 160 0.98 PM428S-220-RC 22 ±30 8.26 2.52 23 185 0.93 PM428S-270-RC 27 ±30 10.76 2.52 18 200 0.89 PM428S-330-RC 33 ±30 9.7 2.52 16 230 0.82 PM428S-390-RC 39 ±30 9.74 2.52 14 250 0.80 PM428S-470-RC 47 ±30 10.88 2.52 13 280 0.75 PM428S-560-RC 56 ±30 9 2.52 13 320 0.70	1.00
PM428S-180-RC 18 ±30 11.64 2.52 25 160 0.98 PM428S-220-RC 22 ±30 8.26 2.52 23 185 0.93 PM428S-270-RC 27 ±30 10.76 2.52 18 200 0.89 PM428S-330-RC 33 ±30 9.7 2.52 16 230 0.82 PM428S-390-RC 39 ±30 9.74 2.52 14 250 0.80 PM428S-470-RC 47 ±30 10.88 2.52 13 280 0.75 PM428S-560-RC 56 ±30 9 2.52 13 320 0.70	0.85
PM428S-220-RC 22 ±30 8.26 2.52 23 185 0.93 PM428S-270-RC 27 ±30 10.76 2.52 18 200 0.89 PM428S-330-RC 33 ±30 9.7 2.52 16 230 0.82 PM428S-390-RC 39 ±30 9.74 2.52 14 250 0.80 PM428S-470-RC 47 ±30 10.88 2.52 13 280 0.75 PM428S-560-RC 56 ±30 9 2.52 13 320 0.70	0.78
PM428S-270-RC 27 ±30 10.76 2.52 18 200 0.89 PM428S-330-RC 33 ±30 9.7 2.52 16 230 0.82 PM428S-390-RC 39 ±30 9.74 2.52 14 250 0.80 PM428S-470-RC 47 ±30 10.88 2.52 13 280 0.75 PM428S-560-RC 56 ±30 9 2.52 13 320 0.70	0.75
PM428S-330-RC 33 ±30 9.7 2.52 16 230 0.82 PM428S-390-RC 39 ±30 9.74 2.52 14 250 0.80 PM428S-470-RC 47 ±30 10.88 2.52 13 280 0.75 PM428S-560-RC 56 ±30 9 2.52 13 320 0.70	0.72
PM428S-390-RC 39 ±30 9.74 2.52 14 250 0.80 PM428S-470-RC 47 ±30 10.88 2.52 13 280 0.75 PM428S-560-RC 56 ±30 9 2.52 13 320 0.70	0.60
PM428S-470-RC 47 ±30 10.88 2.52 13 280 0.75 PM428S-560-RC 56 ±30 9 2.52 13 320 0.70	0.58
PM428S-560-RC 56 ±30 9 2.52 13 320 0.70	0.50
	0.48
	0.41
PM428S-680-RC 68 ±30 8.42 2.52 11 400 0.63	0.36
PM428S-820-RC 82 ±30 8.6 2.52 8 520 0.56	0.32
PM428S-101-RC 100 ±30 8.78 0.796 9 600 0.51	0.30
PM428S-121-RC 120 ±30 13.32 0.796 8 700 0.47	0.28
PM428S-151-RC 150 ±30 11.72 0.796 6 860 0.42	0.26
PM428S-181-RC 180 ±30 13.86 0.796 7 1000 0.39	0.23

Soldering Profile





WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf

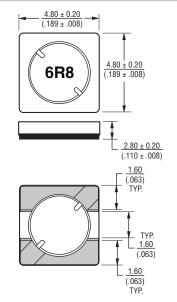
General Specifications

Storage Temperature .. -40 °C to +125 °C Resistance to Soldering Heat

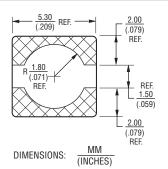
Materials

Core MaterialFerrite
WireEnameled Copper
AdhesiveEpoxy Resin
TerminalAg/Ni/Sn
Rated CurrentInd. drop of 35 % typ.
at Isat
Temperature Rise30 °C typ. at Irms

Product Dimensions

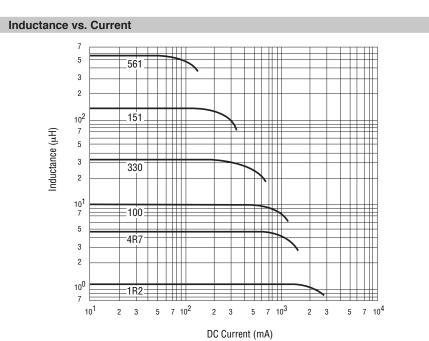


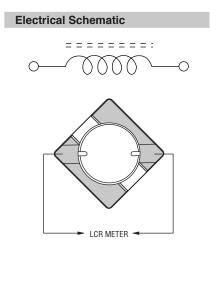
Recommended Layout



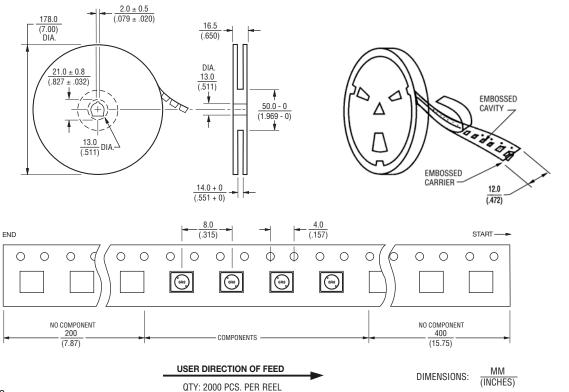
PM428S Series - Shielded SMD Power Inductor

BOURNS®





Packaging Specifications



REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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