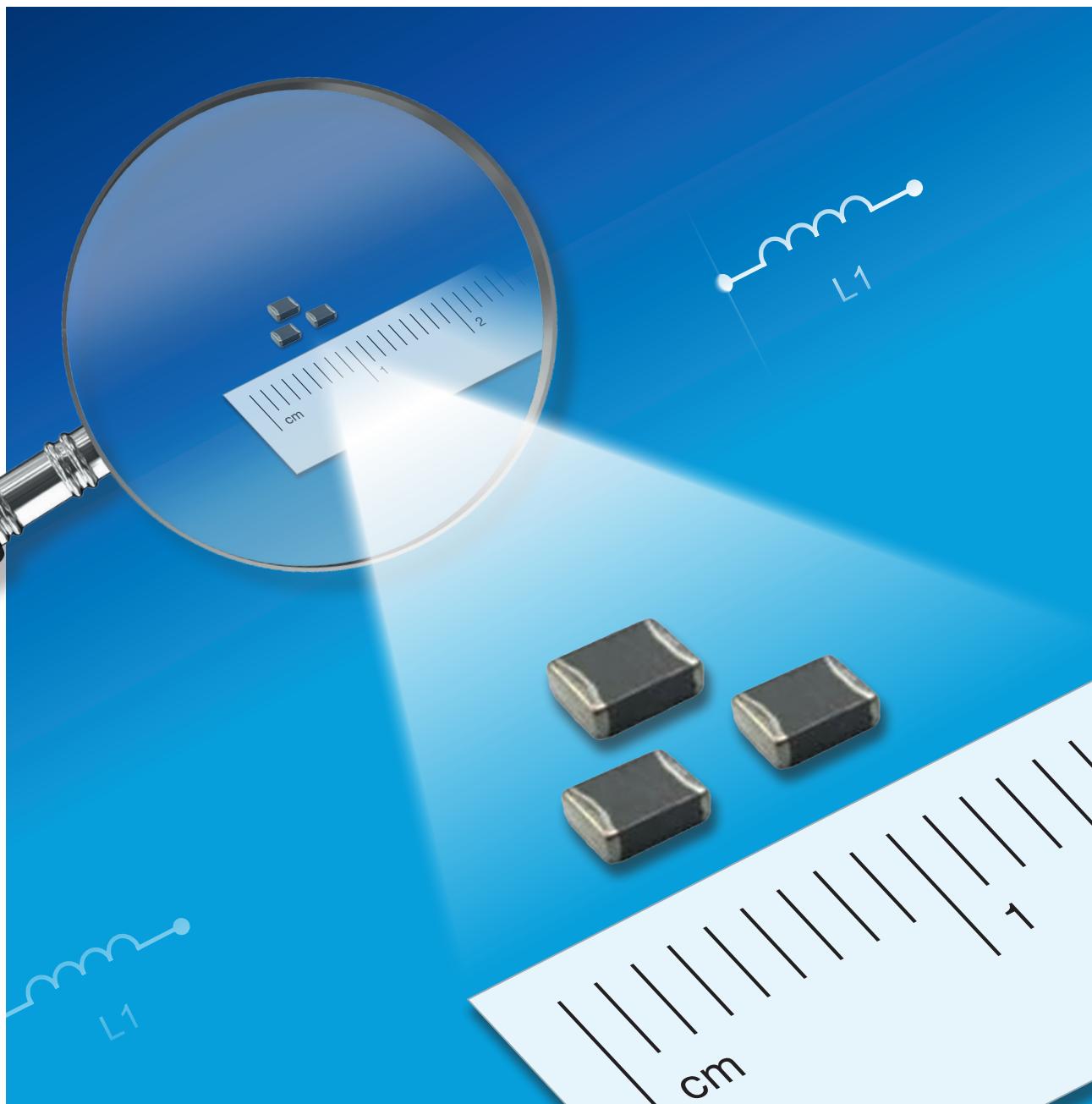


## METAL ALLOY MOLDING / WIRE WOUND POWER INDUCTOR WIP TYPE



**The new WIP series of Inpaq are wirewound power inductors in chip size.** The construction consists of enamelled copper wire spring coil, molded inside a metal alloy powder paste. Core material with best permeability and lowest core loss, combined with a highly efficient production method result in coils with excellent performance and best competitiveness.



## METAL ALLOY MOLDING / WIRE WOUND POWER INDUCTOR WIP TYPE

### FEATURES

- High saturation current, up to 6.8 A
- Low DCR, down to 16 mΩ
- Very low core loss
- Suitable for frequency up to 10 MHz
- Excellent EMI
- **Referenced by Qualcomm / Snapdragon**

### APPLICATIONS

- DC/DC converters with high switching frequency
- Portable devices
- Industrial application
- Automotive electronics
- Consumer products

SERIES	TYPE	INDUCTANCE ( $\mu$ H)	RDC (mΩ) TYP.	Isat (A) TYP.	SIZE L×W×H (mm)
<b>ELECTRICAL CHARACTERISTICS (<math>T_{op}=25^\circ C</math>)</b>					
<b>WIP201610PL</b>	WIP-P (standard)	0.33 ... 2.2	24 ... 135	1.9 ... 5.0	$2.0 \pm 0.2 \times 1.6 \pm 0.2 \times 1.0$ max.
<b>WIP201610SL</b>	WIP-S (high performance)	0.33 ... 2.2	21 ... 117	2.6 ... 6.7	$2.0 \pm 0.2 \times 1.6 \pm 0.2 \times 1.0$ max.
<b>WIP252010PL</b>	WIP-P (standard)	0.22 ... 4.7	9 ... 220	1.8 ... 7.9	$2.5 \pm 0.2 \times 2.0 \pm 0.2 \times 1.0$ max.
<b>WIP252010SL</b>	WIP-S (high performance)	0.33 ... 2.2	17 ... 88	3.3 ... 7.8	$2.5 \pm 0.2 \times 2.0 \pm 0.2 \times 1.0$ max.
<b>WIP252012PL</b>	WIP-P (standard)	0.47 ... 4.7	21 ... 196	1.9 ... 5.3	$2.5 \pm 0.2 \times 2.0 \pm 0.2 \times 1.2$ max.
<b>WIP252012SL</b>	WIP-S (high performance)	0.47 ... 2.2	16 ... 74	3.5 ... 6.8	$2.5 \pm 0.2 \times 2.0 \pm 0.2 \times 1.2$ max.

INDUCTANCE L ( $\mu$ H)	2,0x1,6x1,0 [mm]	2,5x2,0x1 [mm]	2,5x2,0x1,2 [mm]
<b>(TYPE) RDC / ISAT / IDC (MAX)</b>			
<b>0,22</b>		(P) 12,5 mΩ / 7,2 A / 5,3 A	
<b>0,33</b>	(P) 29 mΩ / 4,5 A / 3,69 A (S) 26 mΩ / 6,1 A / 4,0 A	(P) 26 mΩ / 6 A / 4 A (S) 22 mΩ / 7,0 A / 4,8 A	
<b>0,47</b>	(P) 40 mΩ / 4,0 A / 3,15 A (S) 30 mΩ / 5,3 A / 4,05 A	(P) 32 mΩ / 4,5 A / 3,51 A (S) 29 mΩ / 6,0 A / 4,4 A	(P) 25 mΩ / 4,95 A / 4,18 A (S) 22 mΩ / 6,2 A / 4,9 A
<b>0,68</b>	(P) 49 mΩ / 3,33 A / 3,06 A	(P) 44 mΩ / 3,87 A / 3,06 A	(P) 35 mΩ / 4,63 A / 3,36 A
<b>1,0</b>	(P) 69 mΩ / 2,61 A / 2,26 A (S) 60 mΩ / 3,3 A / 3,0 A	(P) 54 mΩ / 3,15 A / 2,7 A (S) 52 mΩ / 4,0 A / 3,1 A	(P) 49 mΩ / 4,04 A / 3,18 A (S) 44 mΩ / 4,3 A / 3,3 A
<b>1,5</b>	(P) 129 mΩ / 2,25 A / 1,81 A (S) 99 mΩ / 3,1 A / 2,2 A	(P) 91 mΩ / 2,34 A / 2,25 A (S) 77 mΩ / 3,5 A / 2,3 A	(P) 77 mΩ / 2,91 A / 2,27 A
<b>2,2</b>	(P) 150 mΩ / 1,71 A / 1,50 A (S) 140 mΩ / 2,45 A / 2,0 A	(P) 119 mΩ / 2,16 A / 2,07 A (S) 110 mΩ / 3,0 A / 2,1 A	(P) 98 mΩ / 2,73 A / 2,06 A (S) 89 mΩ / 3,2 A / 2,2 A
<b>4,7</b>		(P) 262 mΩ / 1,62 A / 1,22 A	(P) 235 mΩ / 1,58 A / 1,4 A

P= standard, S= high performance, WIP= standard, WIPC= for automotive