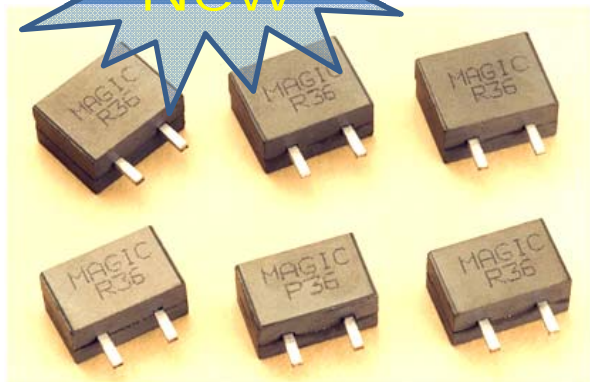


## Magic Techonlogy AI2C Series High Current Power Bead



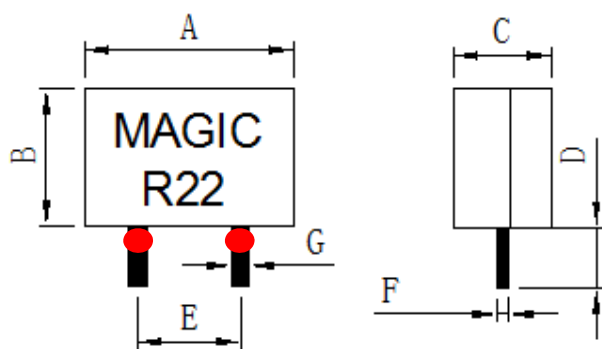
### ■ 產品優勢

1. Shielded construction.
2. High current rating up to DC 40 Amp.
3. High frequency range up to 3.0 MHz.
4. Very small PCB layout area requested.
5. Ultra low DC resistance and precisely tolerance control.
6. All lead-free. (RoHS)

### ■ 產品應用

1. Motherboards for desktop and all in one computers.
2. DC/DC converter in distributed power systems or VRM applications.
3. Inductor for general purpose use.

### ■ 產品機構尺寸

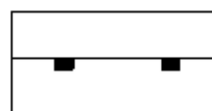


● DCR measur point

Unit: mm



產品上視圖



產品下視圖

Series Name	A	B	C	D	E	F	G
AI2C0904	開模設計中						
AI2C110506	12 max.	6.3 max.	5.3 max.	3.5 ± 0.5	5.7 ± 0.3	0.7 ± 0.05	1.1 ± 0.05
AI2C110508		8.3 max.					
AI2C110510		10.3 max.					
AI2C110512		12.3 max.					
AI2C130606	13.2 max.	6.3 max.	6.3 max.	3.5 ± 0.5	6.4 ± 0.3	0.7 ± 0.05	1.1 ± 0.05
AI2C130608		8.3 max.					
AI2C130610		10.3 max.					
AI2C130612		12.3 max.					
AI2C130615		15.3 max.					

※ 所有的高度可依照設計需求隨時被客製化

**■ Electrical Characteristics / AI2C1105 12mm x 5.3mm max.**

Part Number	Inductance @ 0ADC	Inductance @ I-rated	DCR @ 25°C	I-rated	I-sat	I-rms
	± 15%	Typ	± 8%	Min	Min	Min
AI2C110506-R16L-R48	160nH	160nH	0.48mΩ	37Amps	50Amps	37Amps
AI2C110506-R20L-R48	195nH	195nH		37Amps	41Amps	
AI2C110506-R25L-R48	250nH	200nH		32Amps	32Amps	
AI2C110506-R32L-R48	320nH	260nH		25Amps	25Amps	
AI2C110506-R38L-R48	380nH	310nH		21Amps	21Amps	
AI2C110508-R22L-R51	220nH	220nH	0.51mΩ	38Amps	50Amps	38Amps
AI2C110508-R32L-R51	320nH	260nH		35Amps	35Amps	
AI2C110508-R43L-R51	430nH	350nH		27Amps	27Amps	
AI2C110508-R50L-R51	500nH	400nH		22Amps	22Amps	
AI2C110508-R58L-R51	580nH	470nH		18Amps	18Amps	
AI2C110510-R28L-R61	280nH	280nH	0.61mΩ	35Amps	53Amps	35Amps
AI2C110510-R32L-R61	315nH	315nH		35Amps	42Amps	
AI2C110510-R40L-R61	405nH	330nH		35Amps	35Amps	
AI2C110510-R47L-R61	470nH	380nH		31Amps	31Amps	
AI2C110510-R56L-R61	555nH	450nH		24Amps	24Amps	
AI2C110510-R62L-R61	620nH	500nH		21Amps	21Amps	
AI2C110512-R34L-R72	340nH	340nH	0.72mΩ	33Amps	53Amps	33Amps
AI2C110512-R40L-R72	400nH	400nH		33Amps	42Amps	
AI2C110512-R50L-R72	500nH	500nH		33Amps	35Amps	
AI2C110512-R58L-R72	580nH	470nH		30Amps	30Amps	
AI2C110512-R66L-R72	660nH	530nH		25Amps	25Amps	
AI2C110512-R76L-R72	760nH	610nH		22Amps	22Amps	

**Note:**

1. Inductance is measured at 100 KHz and 0.25 Vrms.
2. The nominal DCR tolerance is by design. The nominal DCR is measured as shown on the mechanical drawing.
3. The I-rated as listed is either the saturation current or the heating current depending on which value is lower.
4. The I-sat that will cause initial inductance value approximately 20% rolloff at 25°C ambient temperature.
5. The I-rms that will cause temperature rise approximate 40°C without core loss.

## Magic Techonlogy AI2C Series High Current Power Bead

### ■ Electrical Characteristics / AI2C1306 13.2mm x 6.3mm max.

Part Number	Inductance @ 0ADC	Inductance @ I-rated	DCR @ 25°C	I-rated	I-sat	I-rms
	± 15%	Typ	± 8%	Min	Min	Min
AI2C130606-R20L-R45	200nH	160nH	0.45mΩ	37Amps	50Amps	37Amps
AI2C130606-R25L-R45	250nH	195nH		37Amps	41Amps	
AI2C130606-R30L-R45	300nH	200nH		32Amps	32Amps	
AI2C130606-R34L-R45	195nH	195nH		37Amps	41Amps	
AI2C130606-R41L-R45	320nH	260nH		25Amps	25Amps	
AI2C130606-R47L-R45	380nH	310nH		21Amps	21Amps	
AI2C130608-R25L-R53	250nH	250nH	0.53mΩ	38Amps	55Amps	38Amps
AI2C130608-R32L-R53	320nH	320nH		38Amps	45Amps	
AI2C130608-R36L-R53	360nH	290nH		38Amps	38Amps	
AI2C130608-R44L-R53	440nH	350nH		31Amps	31Amps	
AI2C130608-R54L-R53	540nH	430nH		24Amps	24Amps	
AI2C130610-R31L-R64	310nH	310nH	0.64mΩ	39Amps	60Amps	39Amps
AI2C130610-R39L-R64	390nH	390nH		39Amps	50Amps	
AI2C130610-R50L-R64	500nH	400nH		38Amps	38Amps	
AI2C130610-R58L-R64	580nH	460nH		31Amps	31Amps	
AI2C130610-R70L-R64	700nH	560nH		24Amps	24Amps	
AI2C130612-R41L-R74	410nH	410nH	0.74mΩ	36Amps	55Amps	36Amps
AI2C130612-R51L-R74	510nH	510nH		36Amps	52Amps	
AI2C130612-R63L-R74	630nH	630nH		36Amps	43Amps	
AI2C130612-R70L-R74	700nH	560nH		34Amps	34Amps	
AI2C130612-R85L-R74	850nH	680nH		24Amps	24Amps	
AI2C130615-R50L-R89	500nH	500nH	0.89mΩ	32Amps	60Amps	32Amps
AI2C130615-R63L-R89	630nH	630nH		32Amps	52Amps	
AI2C130615-R72L-R89	720nH	710nH		32Amps	43Amps	
AI2C130615-R86L-R89	860nH	680nH		32Amps	34Amps	
AI2C130615-1R0L-R89	1000nH	800nH		24Amps	24Amps	

#### Note:

1. Inductance is measured at 100 KHz and 0.25 Vrms.
2. The nominal DCR tolerance is by design. The nominal DCR is measured as shown on the mechanical drawing.
3. The I-rated as listed is either the saturation current or the heating current depending on which value is lower.
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