

## SMD Unshielded Power Inductors -WDR Series



欣腾辉电子  
XINTENGHUI ELECTRONICS

### WDR Series



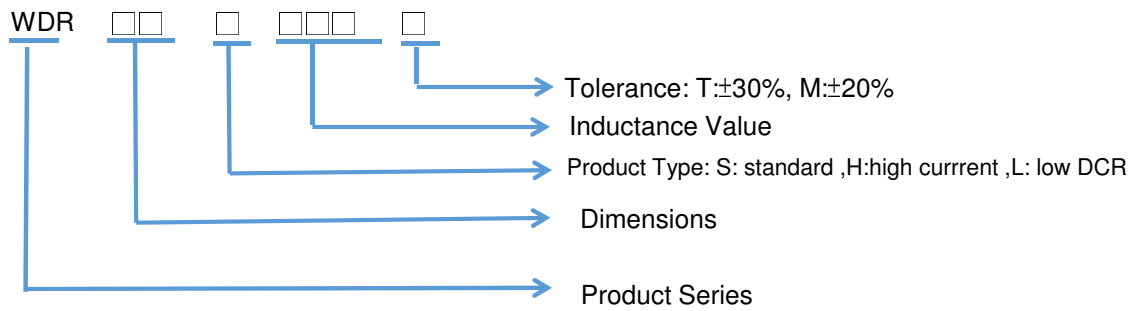
#### Description:

- RoHS, Halogen Free and REACH Compliance
- Unshielded power inductor
- Various package size and wide inductance range

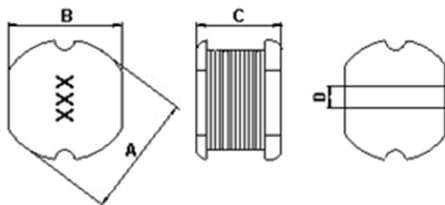
#### Applications:

- Graphic cards.
- DC/DC converters

#### Product Identification



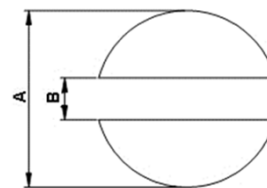
#### Dimensions-mm



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TYPE	A	B	C	D
WDR54	5.8±0.3	5.2±0.3	4.5±0.4	1.3

#### Recommended Pad Layout



#### Dimensions-mm

TYPE	A	B
WDR54	6.8	1.3

## SMD Unshielded Power Inductors -WDR Series

### Electrical Characteristics

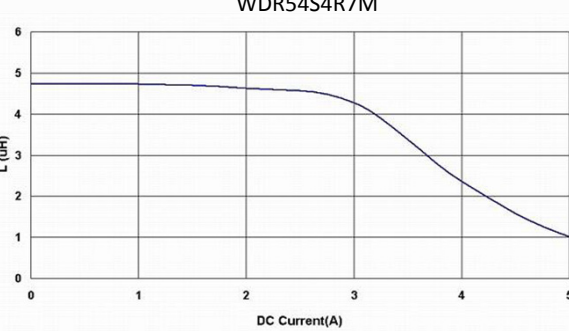
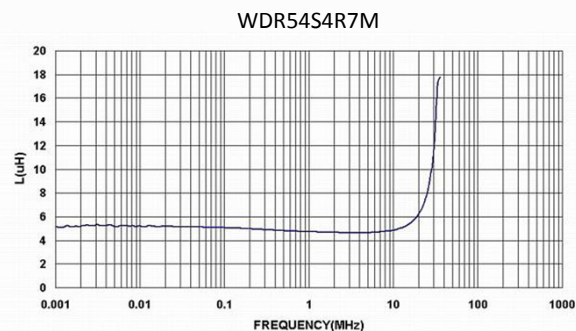
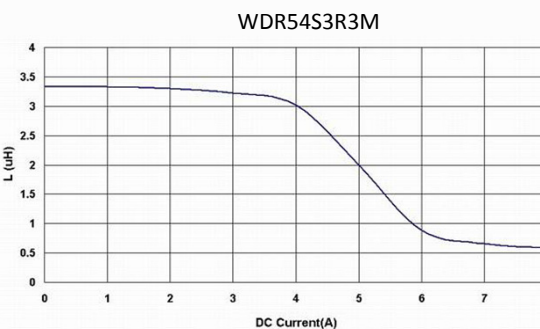
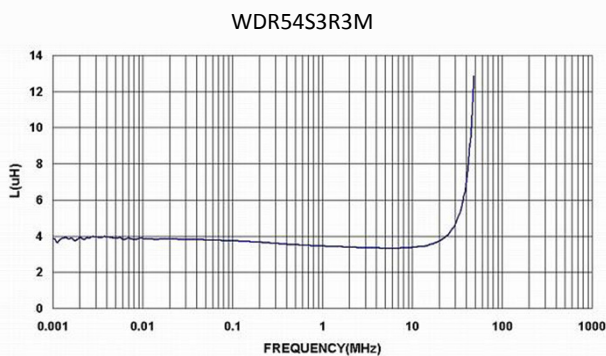
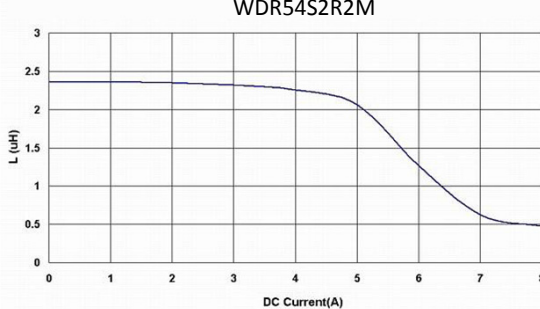
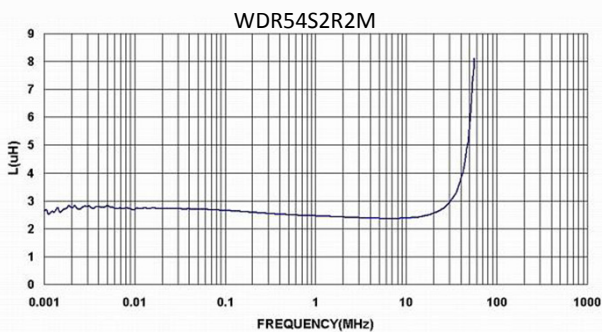
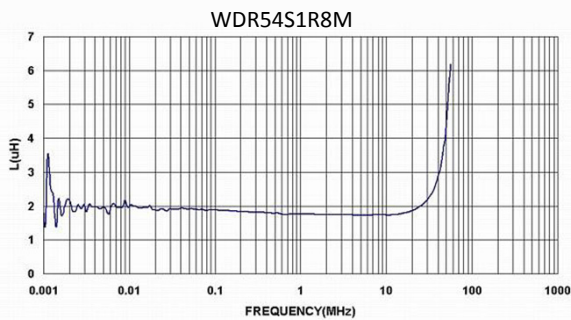
Part No.	Inductance ( $\mu\text{H}$ )	Test Freq.	RDC ( $\Omega$ )Max.	Isat (A)	Tolerance ( $\pm\%$ )
WDR54S1R8M	1.8	7.96 MHz,1 V	0.02	3.5	20
WDR54S2R2M	2.2	7.96 MHz,1 V	0.023	3.2	20
WDR54S3R3M	3.3	7.96 MHz,1 V	0.0314	2.59	10,20
WDR54S3R5M	3.5	7.96 MHz,1 V	0.03	2.4	20
WDR54S4R7M	4.7	7.96 MHz,1 V	0.0372	2.3	10,20
WDR54S6R8M	6.8	7.96 MHz,1 V	0.057	1.8	20
WDR54S8R2M	8.2	7.96 MHz,1 V	0.0594	1.7	20
WDR54S100M	10	2.52 MHz,1 V	0.10	1.44	10,20
WDR54S120M	12	2.52 MHz,1 V	0.12	1.4	20
WDR54S150M	15	2.52 MHz,1 V	0.14	1.3	10,20
WDR54S180M	18	2.52 MHz,1 V	0.15	1.23	20
WDR54S220M	22	2.52 MHz,1 V	0.18	1.11	20
WDR54S270M	27	2.52 MHz,1 V	0.2	0.97	20
WDR54S330M	33	2.52 MHz,1 V	0.23	0.88	10,20
WDR54S390M	39	2.52 MHz,1 V	0.32	0.80	10,20
WDR54S470M	47	2.52 MHz,1 V	0.37	0.72	10,20
WDR54S560M	56	2.52 MHz,1 V	0.42	0.68	10,20
WDR54S680M	68	2.52 MHz,1 V	0.46	0.61	10,20
WDR54S820M	82	2.52 MHz,1 V	0.6	0.58	10,20
WDR54S101M	100	1 kHz,1 V	0.7	0.52	10,20
WDR54S121M	120	1 kHz,1 V	0.93	0.48	10,20
WDR54S151M	150	1 kHz,1 V	1.1	0.4	10,20
WDR54S181M	180	1 kHz,1 V	1.38	0.38	10,20
WDR54S221M	220	1 kHz,1 V	1.57	0.35	10,20
WDR54S271M	270	1 kHz,1 V	1.85	0.29	10,20
WDR54S331M	330	1 kHz,1 V	2	0.28	10,20
WDR54S391M	390	1 kHz,1 V	2.6	0.26	10,20
WDR54S471M	470	1 kHz,1 V	3.0	0.12	10,20
WDR54S561M	560	1 kHz,1 V	4.19	0.10	10,20
WDR54S681M	680	1 kHz,1 V	4.44	0.08	10,20
WDR54S821M	820	1 kHz,1 V	5.12	0.05	10,20
WDR54S102M	1000	1 kHz,1 V	10	0.03	10,20

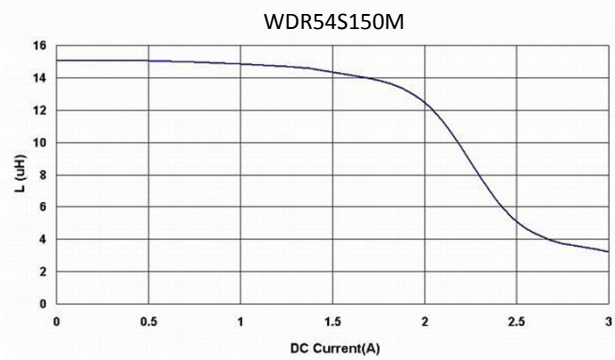
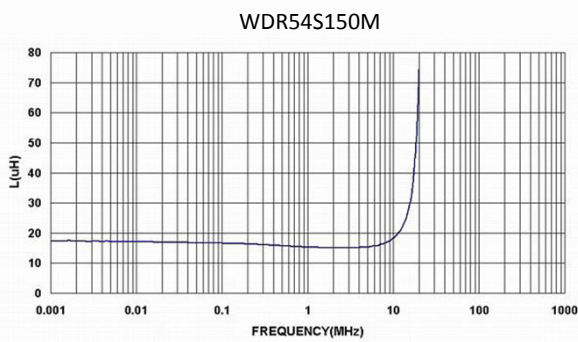
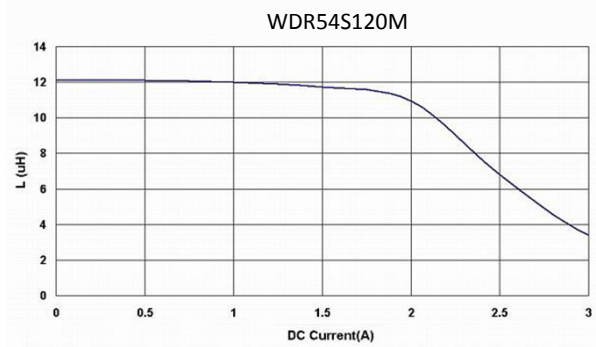
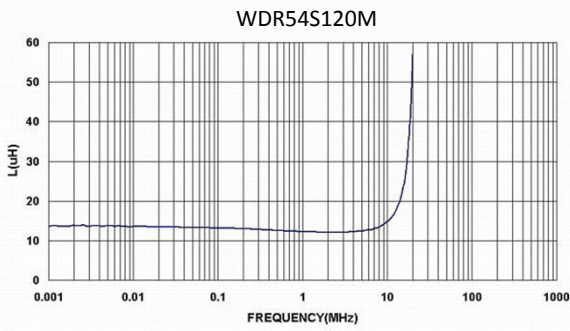
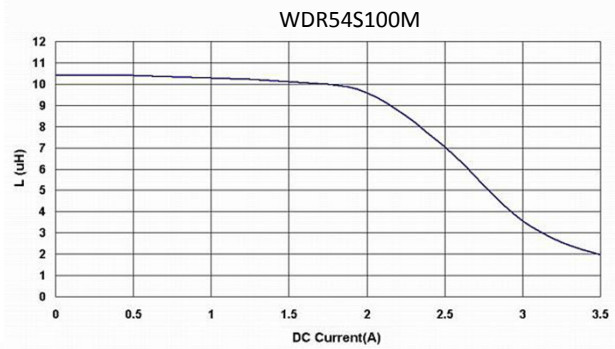
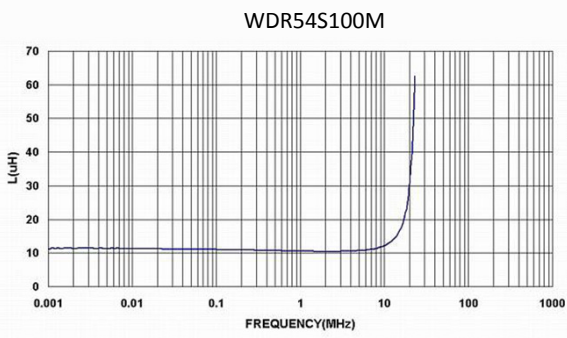
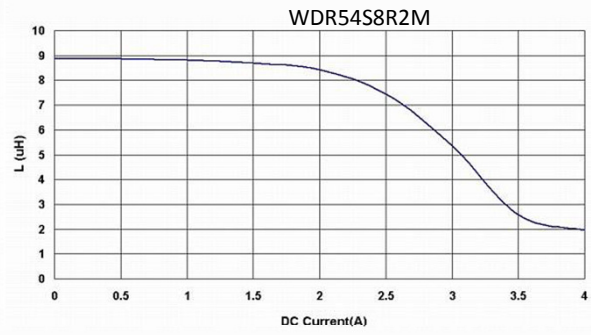
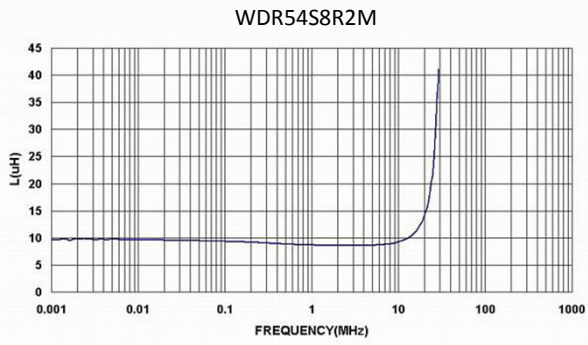
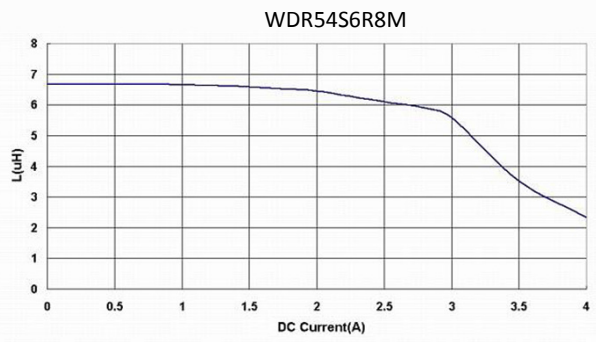
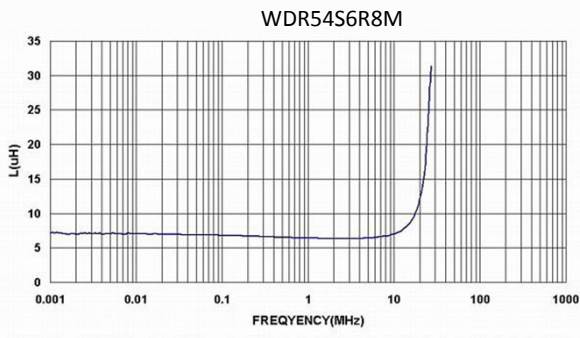
**Notes:**

- 1.tolerance  $K=\pm 10\%$  /  $M=\pm 20\%$  /  $T=\pm 30\%$
- 2.All test data is referenced to 25°C ambient.
- 3.Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- 4.Isat for Inductance drop 10% from its value without current.
- 5. Measure Equipment :  
L : Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)  
RDC : Chroma 16502  
Isat : HP4284+42841A or WK3260B+WK3265B
- 6.Test Condition:  
Temperature:  $26\pm 3^{\circ}\text{C}$   
Humidity:  $<70\%$  RH

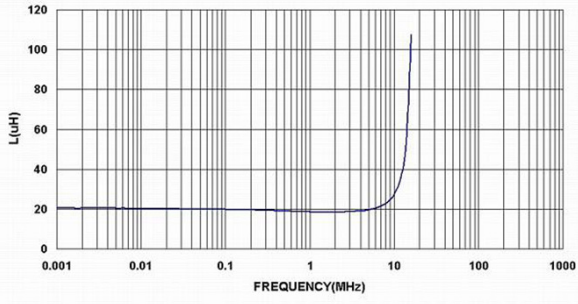
**SMD Unshielded Power Inductors -WDR Series**

**Curve:**

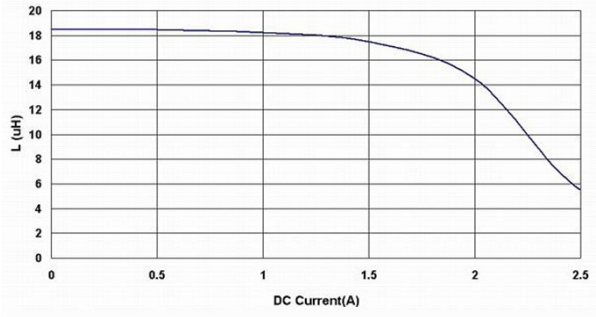




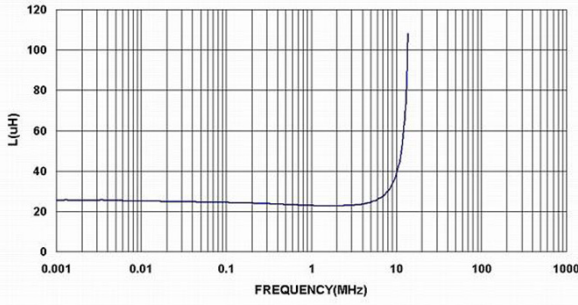
WDR54S180M



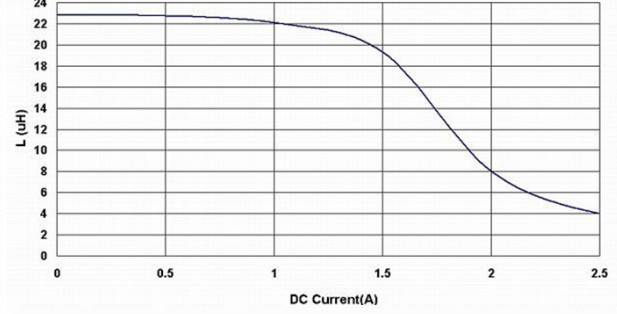
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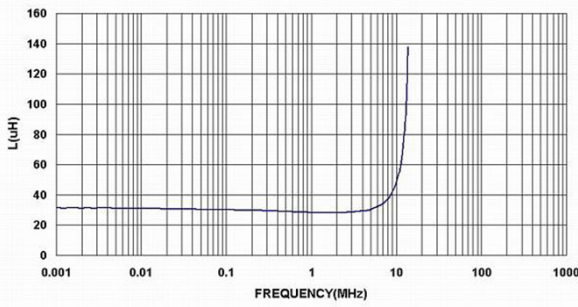
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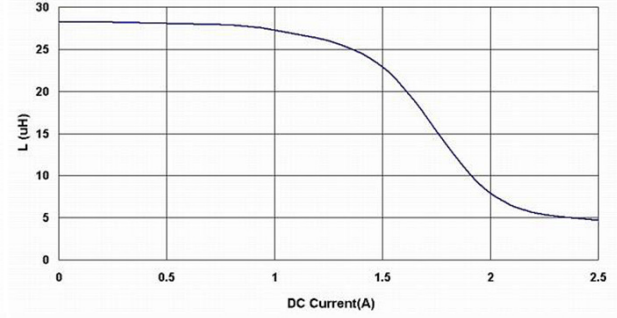
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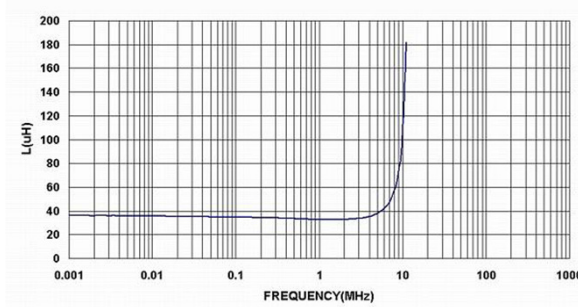
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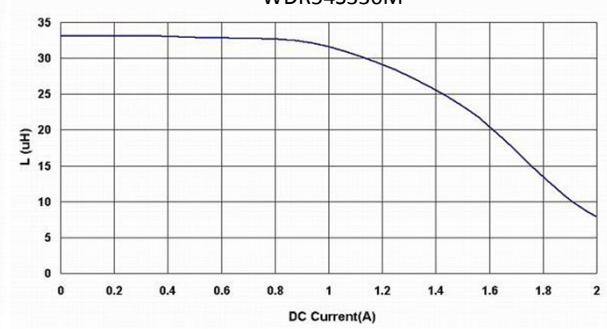
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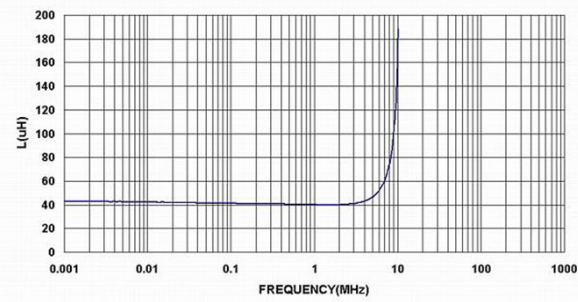
WDR54S330M



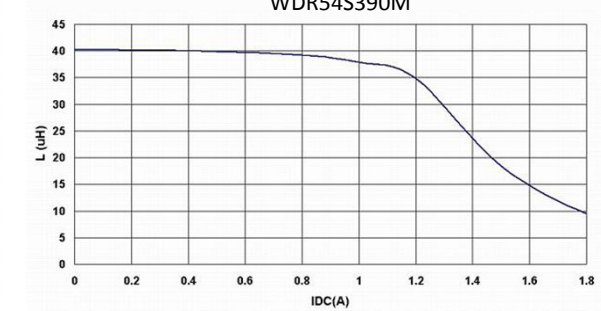
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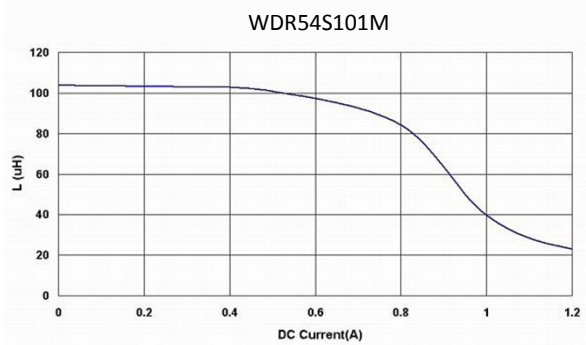
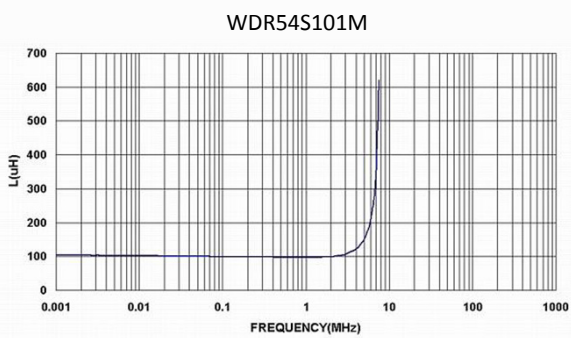
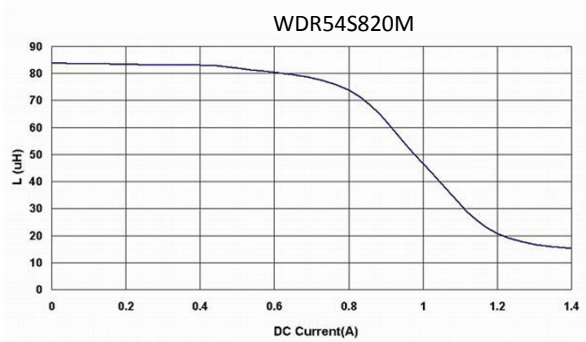
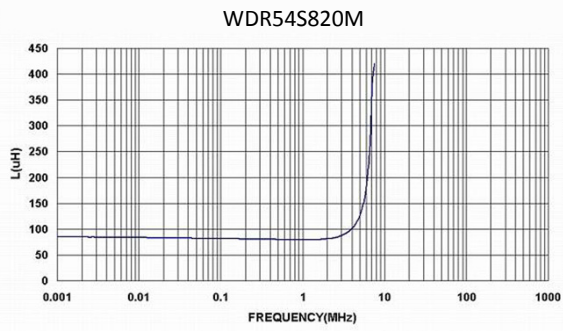
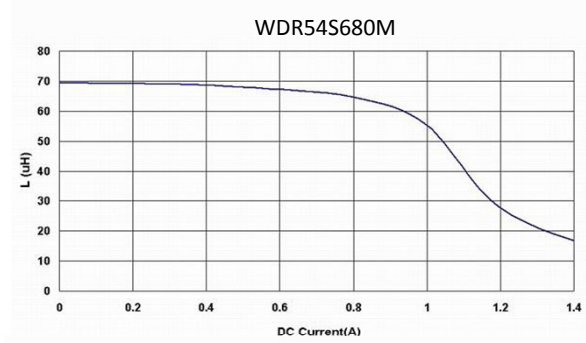
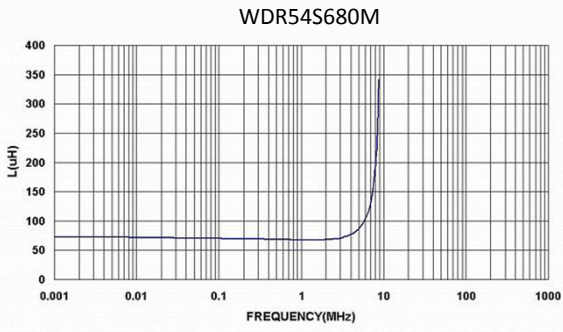
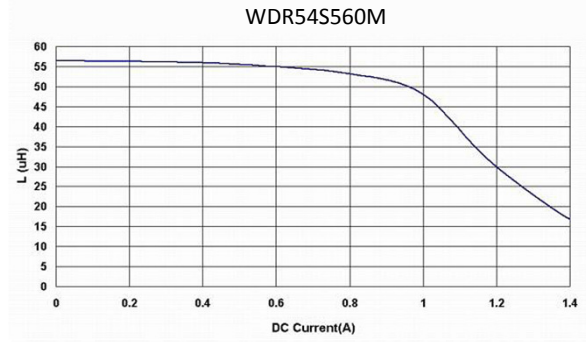
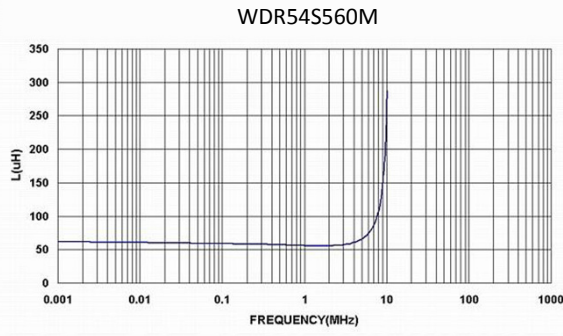
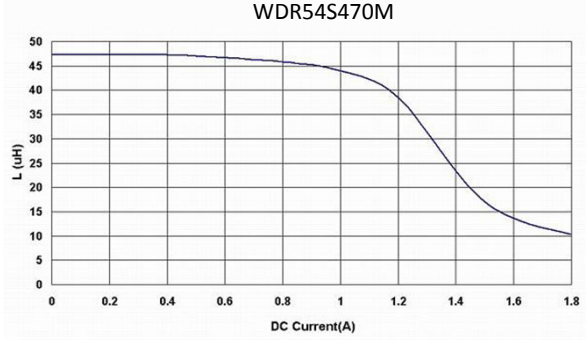
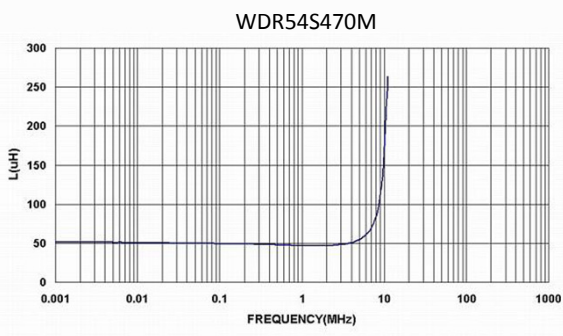


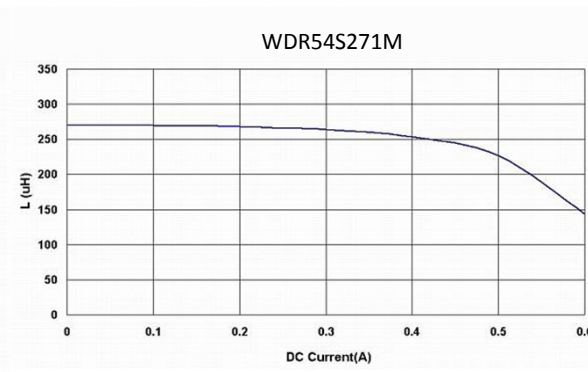
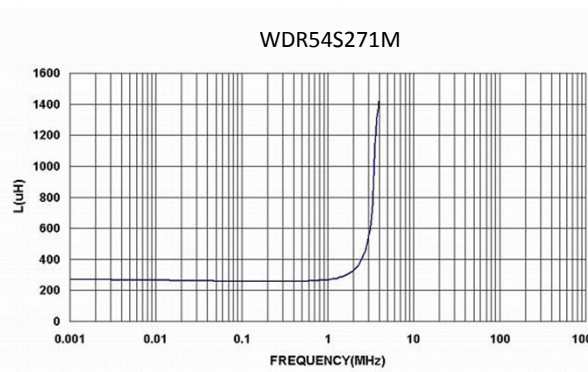
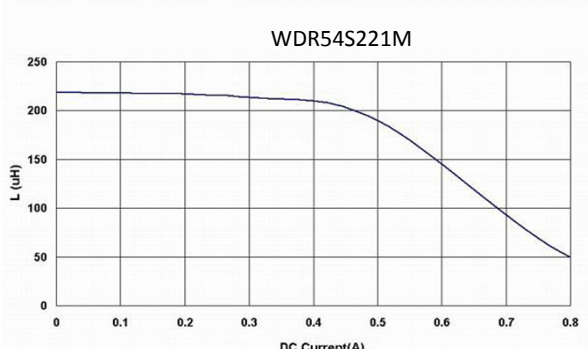
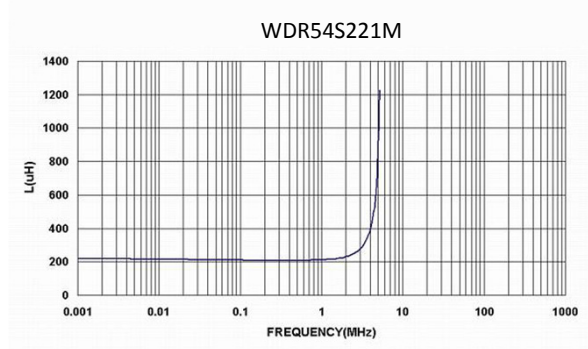
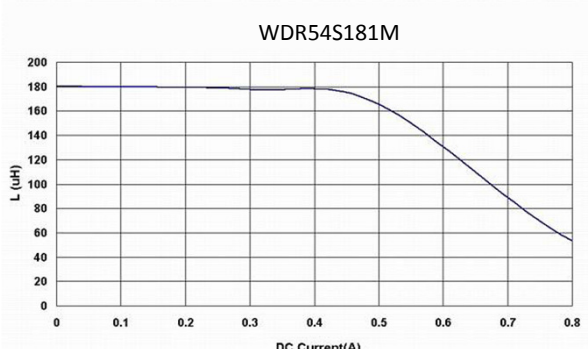
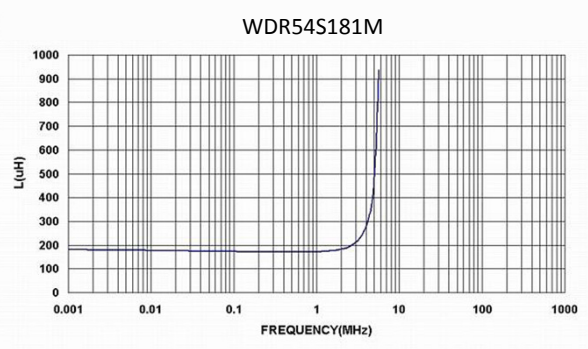
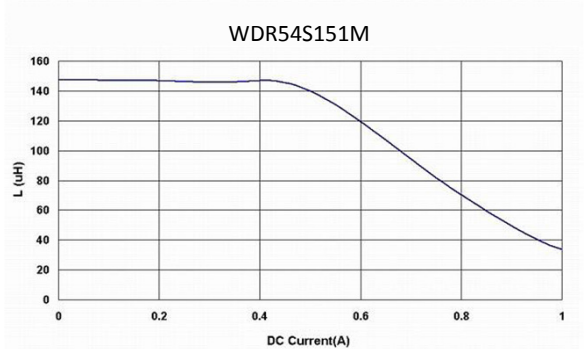
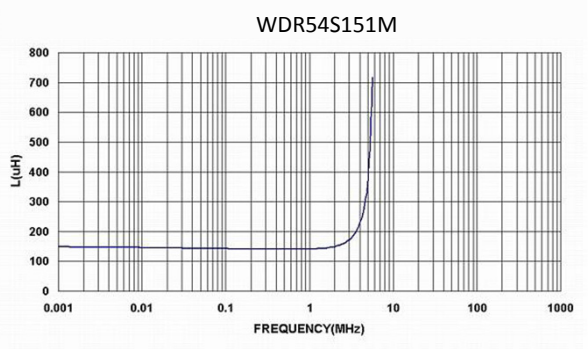
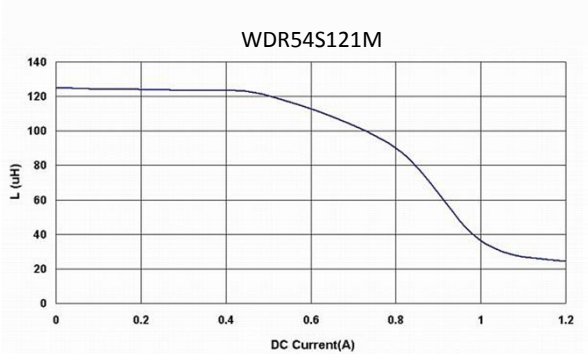
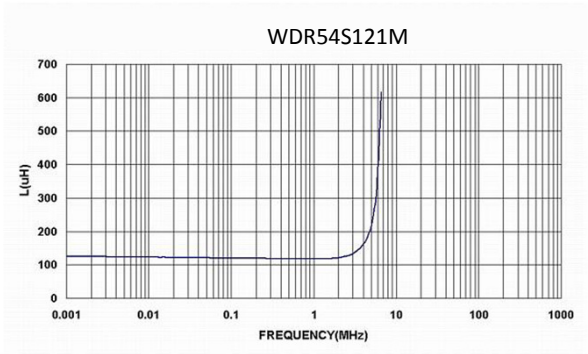
WDR54S390M



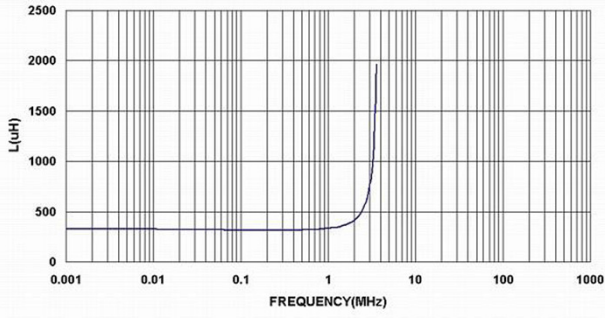
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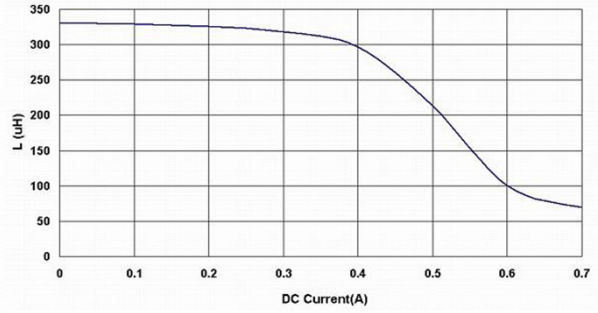




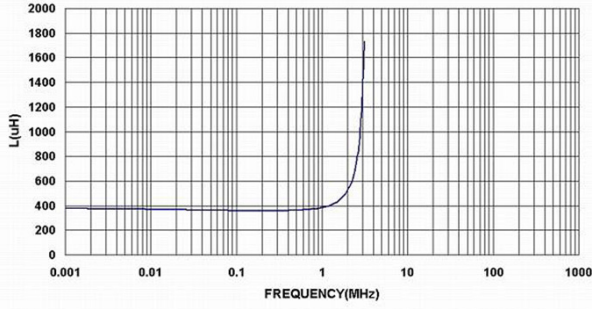
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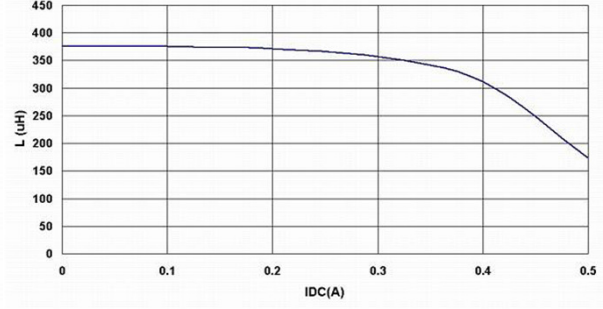
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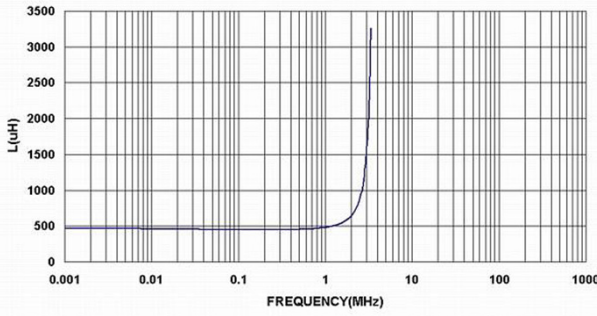
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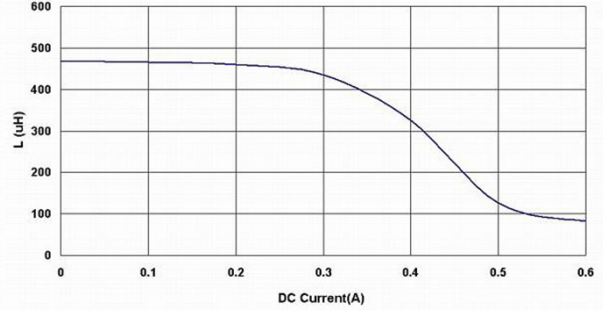
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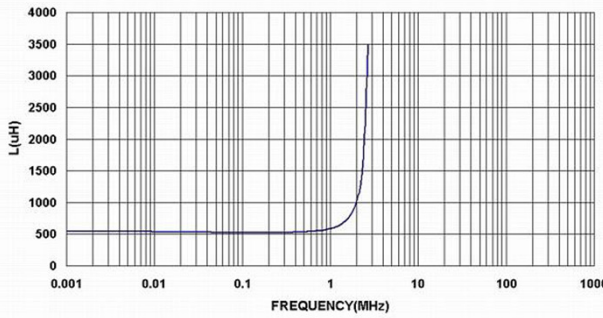
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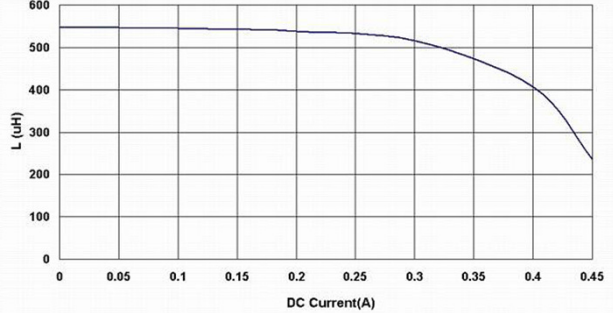
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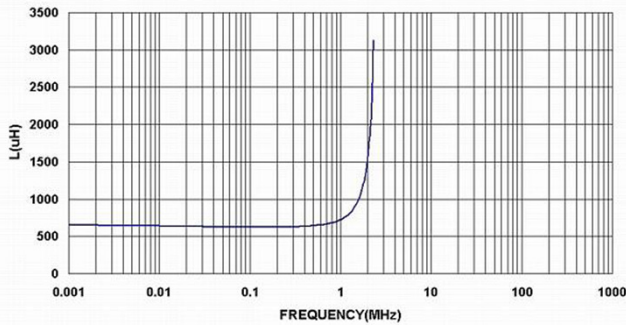
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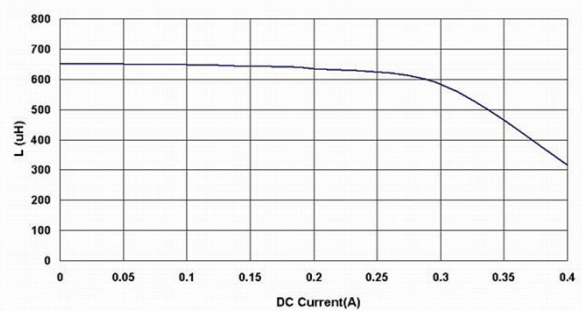
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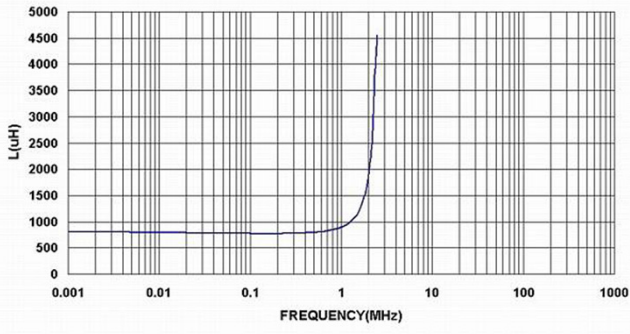
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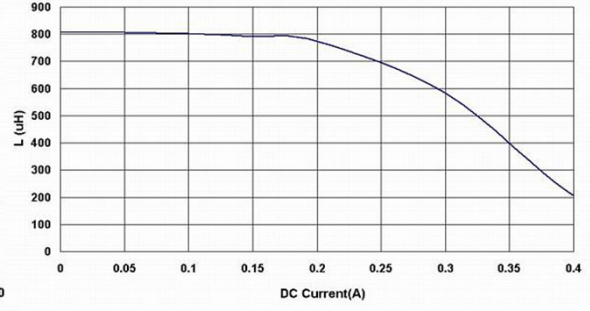
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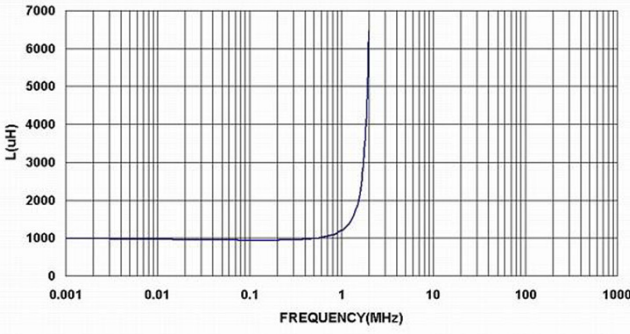
WDR54S821M



WDR54S821M



WDR54S102M



WDR54S102M

