Low Profile, High Current Inductors TL3232SG11

FEATURES:

- Shielded construction
- Frequency range 1.0 MHz to 2.0 MHz
- Operating temperature up to 125°C
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzzing noise, due to composite construction

APPLICATIONS:

- PDA/notebook/desktop/server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array(FPGA)

Electrical Specifications@25°C

PART NUMBER (1)	INDUCTANCE (2) AT 100 kHz, 0.25 V 0 A (µH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) (3)	SATURATION CURRENT DC TYP. (A) (4)	SRF TYP. (MHz)
TL3232SG11-R22M	0.22	1.26	1.35	34.0	22.0	117
TL3232SG11-R33M	0.33	2.01	2.15	27.5	16.0	108
TL3232SG11-R47M	0.47	2.22	2.38	25.0	14.0	80
TL3232SG11-R68M	0.68	3.01	3.22	22.2	14.5	62
TL3232SG11-R82M	0.82	3.63	3.88	19.5	15.0	57
TL3232SG11-1R0M	1.0	4.33	4.63	18.2	12.0	49
TL3232SG11-2R2M	2.2	8.8	9.41	14.5	10.2	25
TL3232SG11-3R3M	3.3	14.0	14.9	10.5	9.7	22
TL3232SG11-4R7M	4.7	21.1	22.6	8.0	8.7	17
TL3232SG11-5R6M	5.6	26.7	28.6	7.4	7.6	15
TL3232SG11-6R8M	6.8	31.2	33.4	7.0	6.7	13
TL3232SG11-8R2M	8.2	42.1	45.0	5.7	6.6	12.6
TL3232SG11-100M	10.0	48.4	51.8	5.4	6.4	12
TL3232SG11-150M	15.0	61.0	65.3	4.9	3.7	10.3
TL3232SG11-220M	22.0	88.0	94.2	4.3	3.3	8.2
TL3232SG11-330M	33.0	135	144	3.2	3.2	6.7

Tolerance : M = ±20%

Notes

1. See page 2 for part numbering
2. Operating temperature range - 55 °C to + 125 °C
3. DC current (A) that will cause an approximate △T of 40°C
4. DC current (A) that will cause initial to drop approximately 20%
5. The part temperature (ambient + temp. rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

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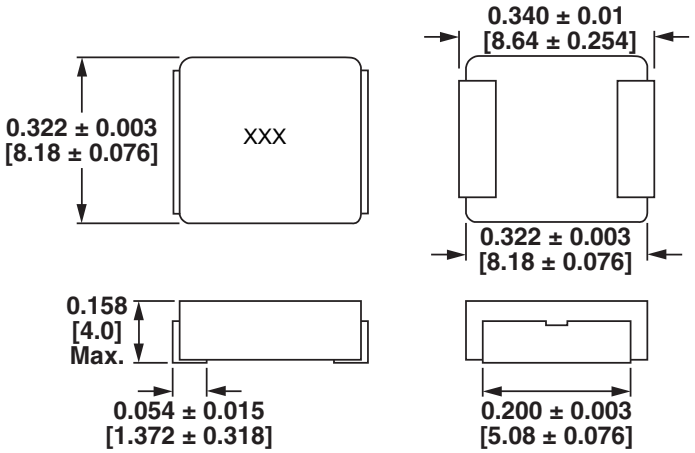
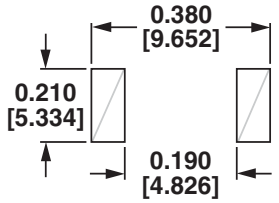
DIMENSIONS [Unit : inch/mm]

Marking : XXX, Inductance in µH
R10 : 0.10 µH
1R5 : 1.5 µH
100 : 10 µH



Typical Pad Layout



Part numbering:

TL3232SG11-2R2MD
TL- Inductor code, 3232- Series code, SG- SMD Green, 2R2 - 2.2 µH, M - Tolerance = ±20%

Packaging:

B= Less than full reel machine ready

D= 13" machine ready. EIA-481embossed plastic tape (500 parts)

Termination:

Matte tin over nickel over phospher bronze

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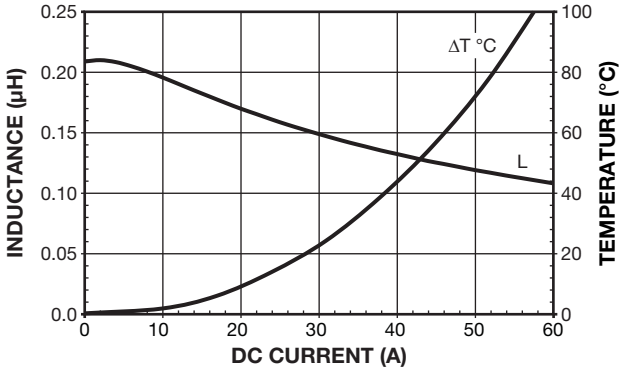
Change in Inductance and Temperature with DC Bias

TL3232SG11-R22M



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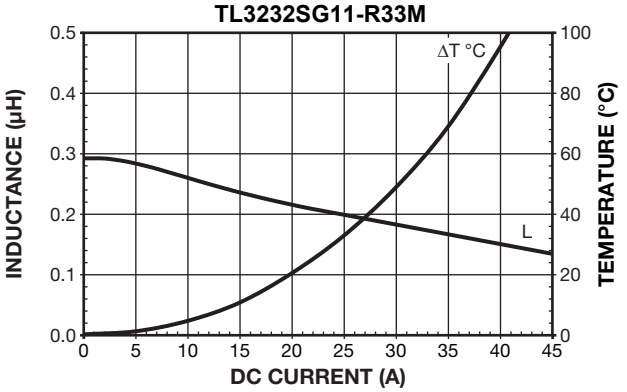

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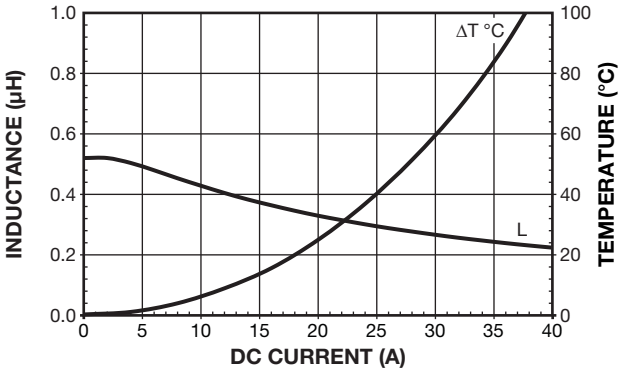

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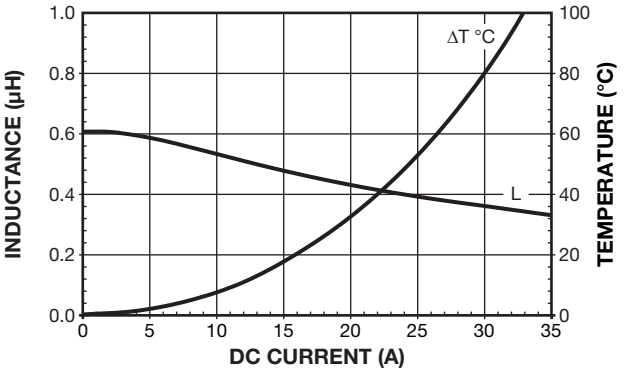

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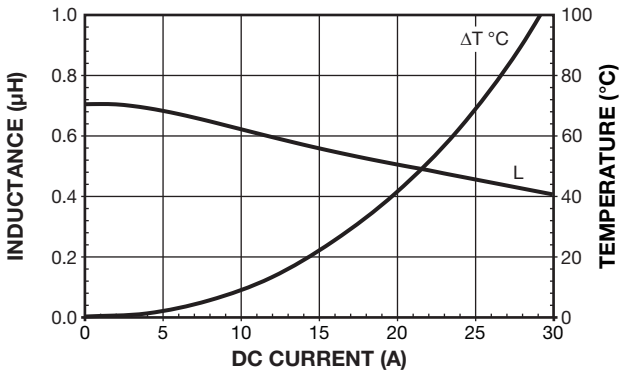

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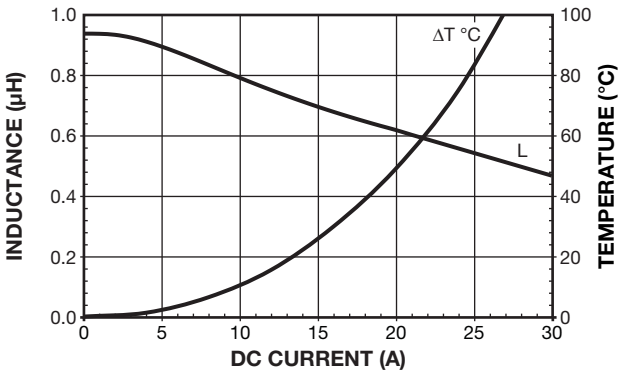

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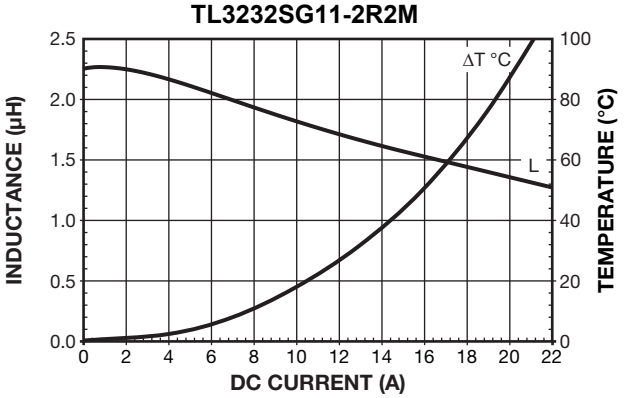

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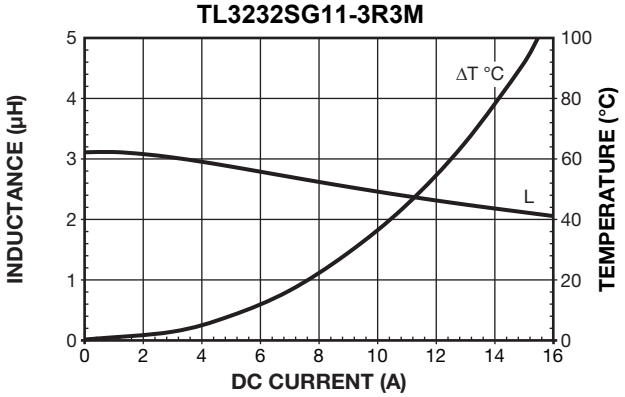

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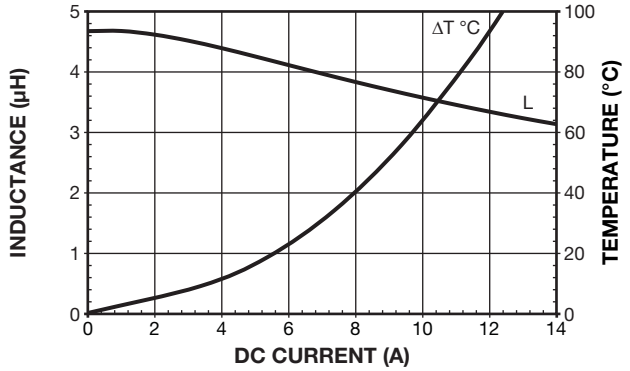
Change in Inductance and Temperature with DC Bias

TL3232SG11-4R7M



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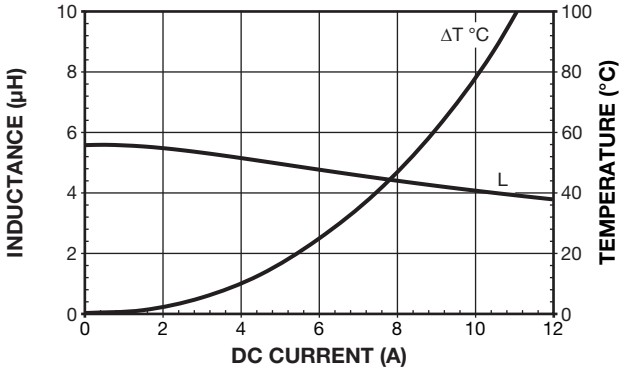

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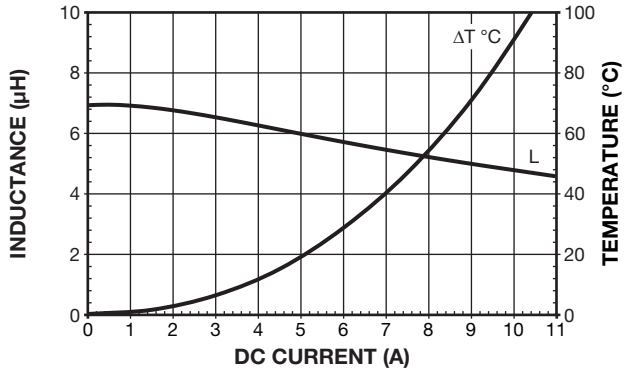

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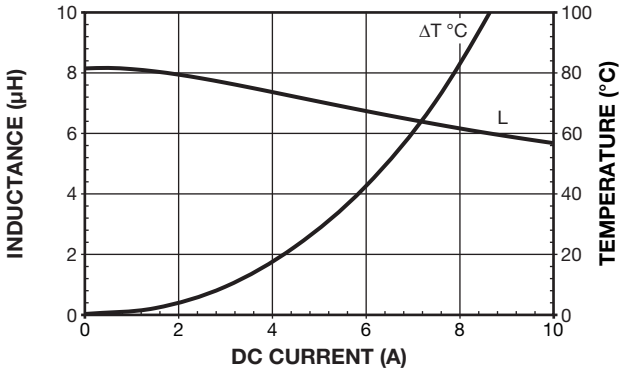

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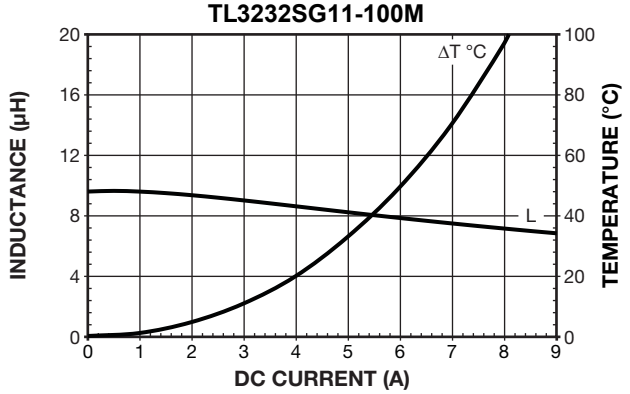

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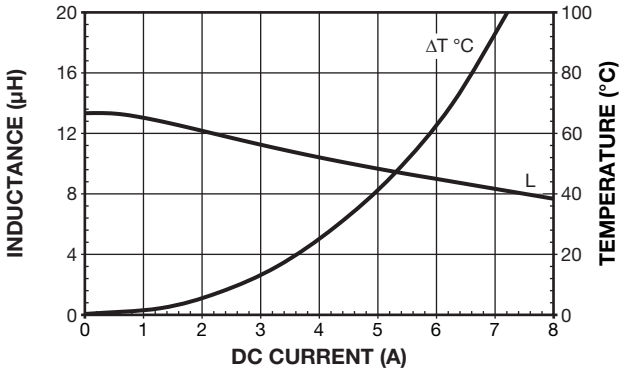

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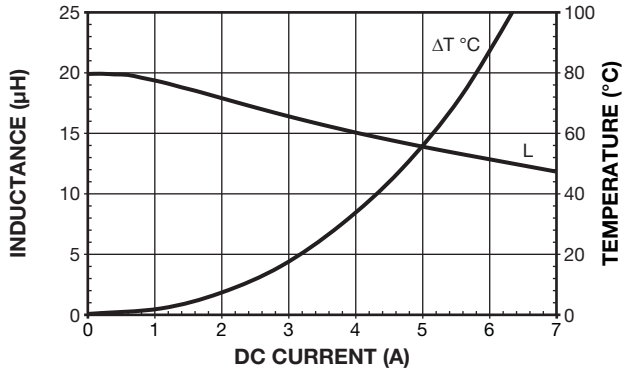

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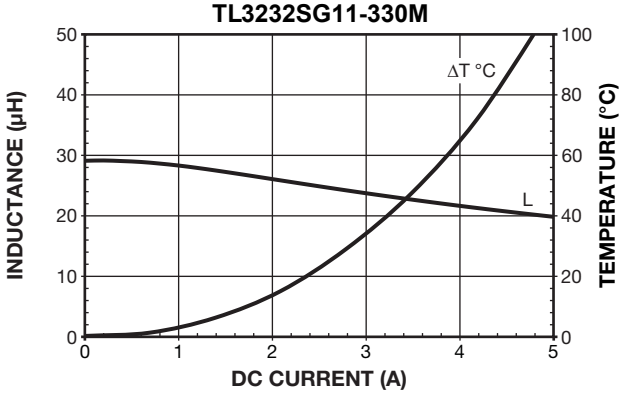

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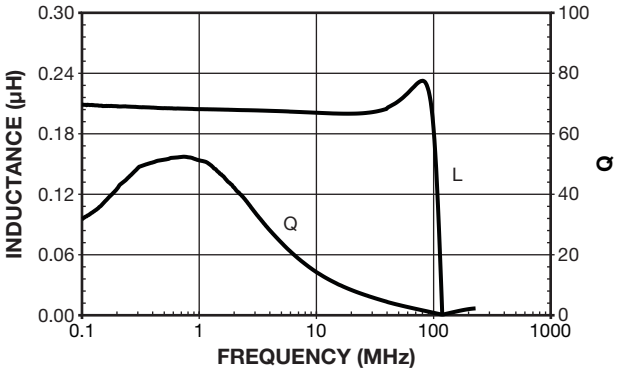
Inductance and Q

TL3232SG11-R22M



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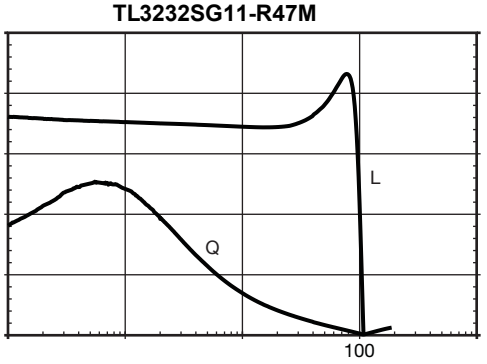

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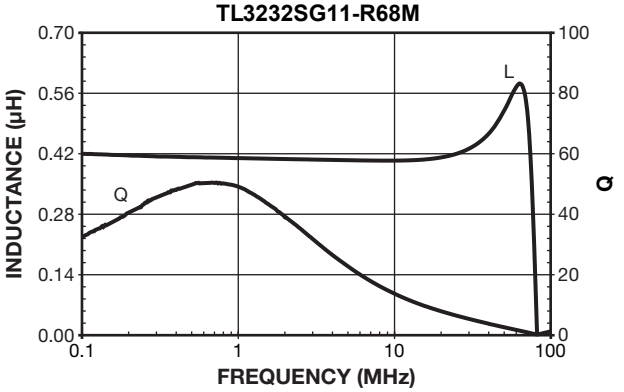

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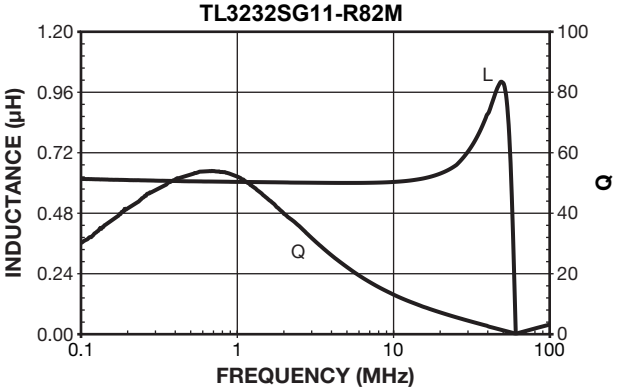

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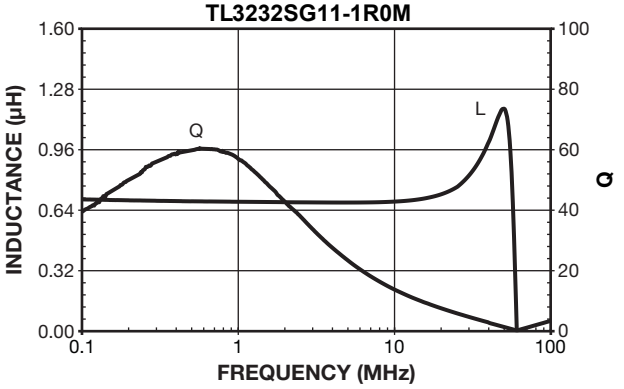

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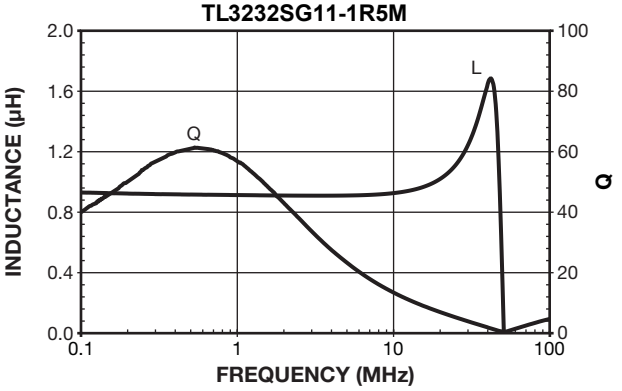

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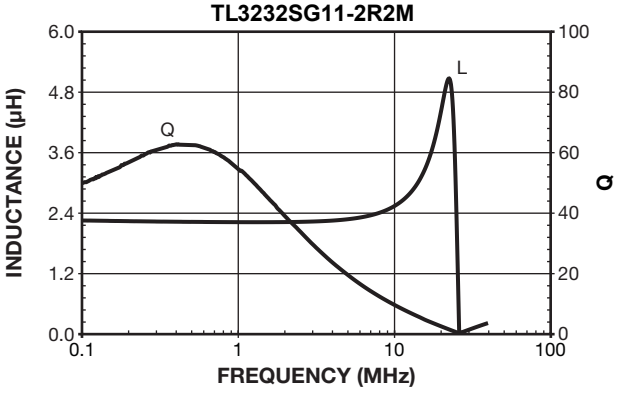

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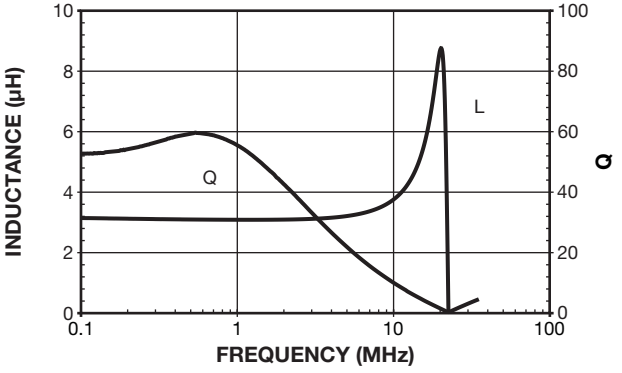

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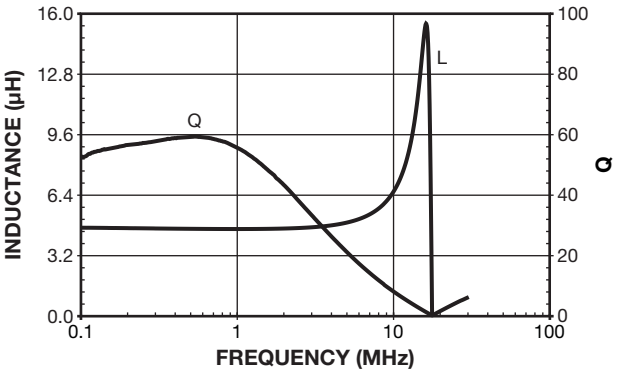
Inductance and Q

TL3232SG11-4R7M



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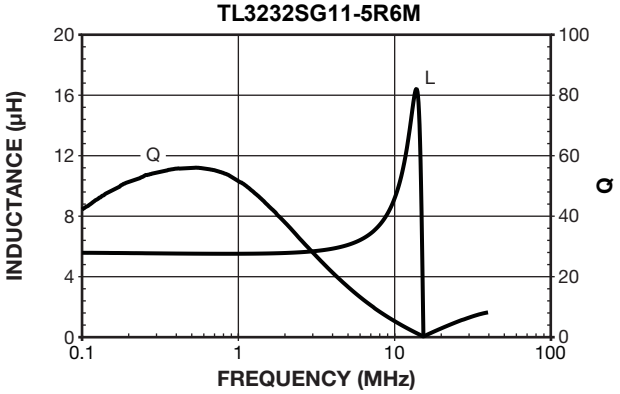
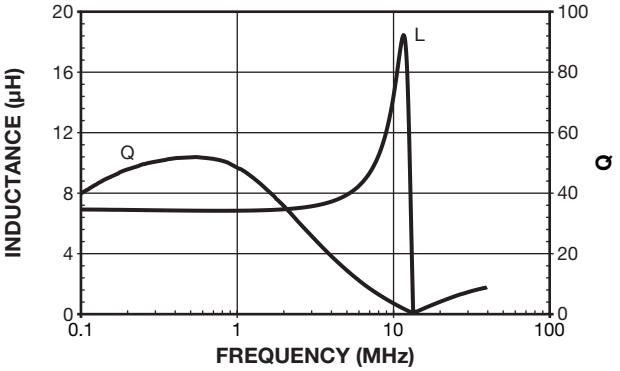
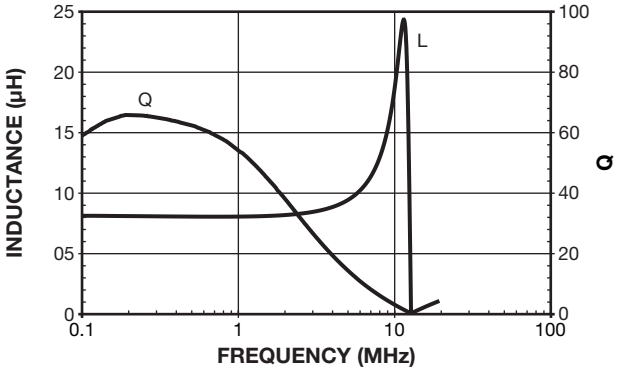


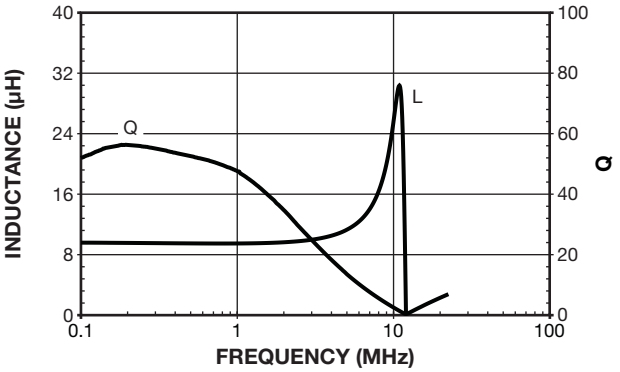
TL3232SG11-6R8M



TL3232SG11-8R2M



TL3232SG11-100M



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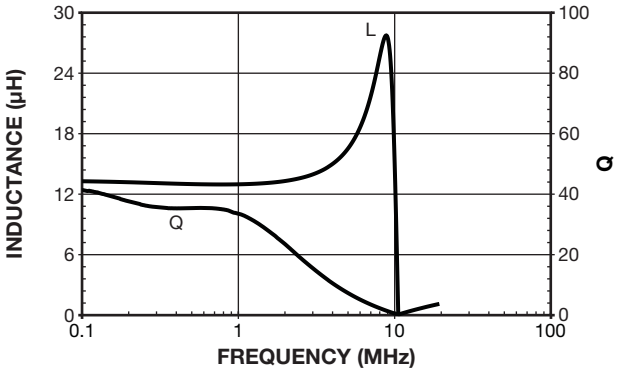

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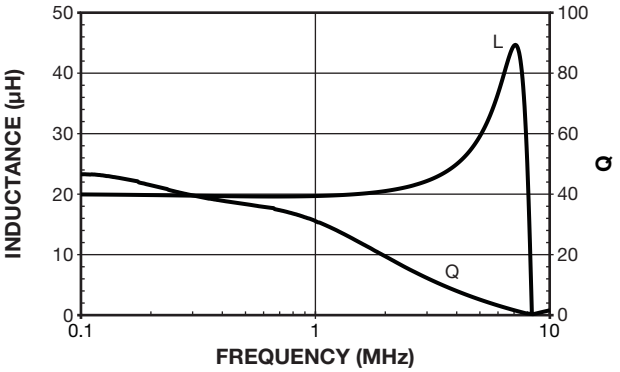

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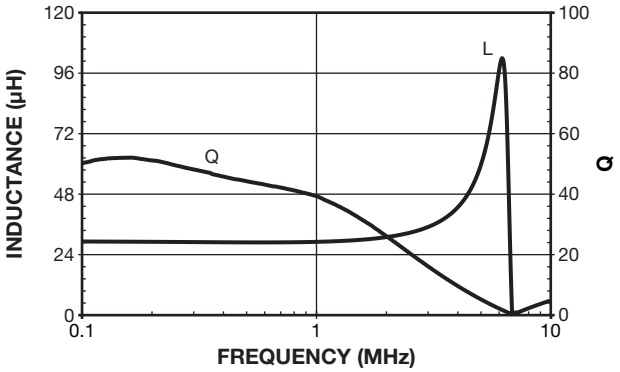
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