

1. Features

1. Low loss realized with low DCR.
2. High performance realized by metal dust core.
3. Ultra low buzz noise, due to composite construction.
4. 100% Lead(Pb)-Free and RoHS compliant.

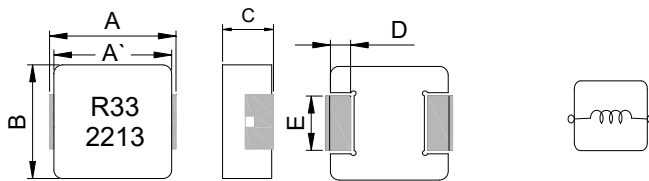


2. Applications

Commercial applications

3. Dimensions

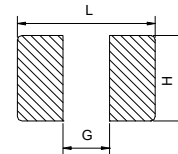
leadframe



Series	A	A'	B	C	D	E
TMPA0604	7.1±0.3	6.4±0.3	6.6±0.2	3.8±0.2	1.6±0.3	3.0±0.2

Unit:mm

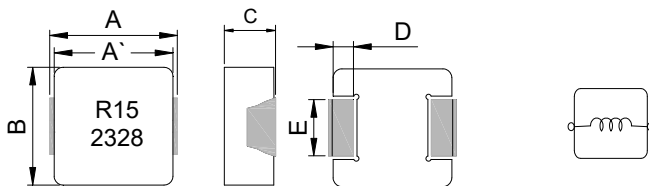
Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
8.0	3.7	3.4

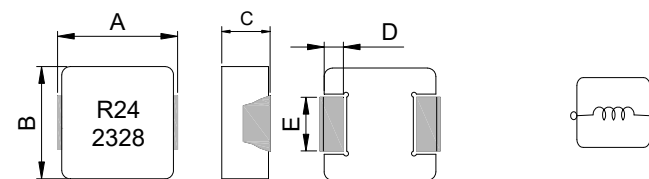
Note: 1.PCB layout is referred to standard IPC-7351B
 2. The above PCB layout reference only.
 3. Recommend solder paste thickness at 0.15mm and above.

non-leadframe



Series	A	A'	B	C	D	E
TMPA0604S-R15MN-R6607-D	7.3±0.3	6.4±0.3	6.6±0.2	3.8±0.2	1.6±0.3	2.8±0.3

Unit:mm



Series	A	B	C	D	E
TMPA0604S-R24MN-1R007-D	7.3±0.3	6.6±0.2	3.8±0.2	1.6±0.3	2.7±0.3

Unit:mm

4. Part Numbering



- A: Series
- B: Dimension
- C: Type
- D: Inductance
- E: Inductance Tolerance
- F: Date Code
- BxC
- Standard.
- R33=0.33uH
- M=±20%
- Marking: Black.R33 and 2213(22YY, 13 WW, follow production date).

5. Specification

Part Number	Inductance L0 A(uH) ±20%	Heat Rating Current DC I _{rms} (A)		Saturation Current DC I _{sat} (A)		DCR (mΩ)Typ	DCR (mΩ)Max	Type
		Typ	Max	Typ	Max			
TMPA0604S-R15MN-D	0.15	35	30	45	40	1.4	1.68	leadframe
TMPA0604S-R33MN-D	0.33	25	23	28	25	2.2	2.5	leadframe
TMPA0604S-R56MN-D	0.56	19	16	20	17	3.4	3.7	leadframe
TMPA0604S-1R0MN-D	1.00	15	13	15	13.5	5.6	6.2	leadframe

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately Δ T of 40°C
5. Saturation Current (I_{sat}) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Special inquiries besides the above common used types can be met on your requirement.
8. Rated DC current: The lower value of I_{rms} and I_{sat}.

Part Number	Inductance L0 A(uH) ±20%	I _{rms} (A)		I _{sat} (A)		DCR (mΩ) ±7%	Type
		Typ	Typ	Typ	Typ		
TMPA0604S-R15MN-R6607-D	0.15	40	50	0.66	non-leadframe		

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Testing Instrument(or equ) : Agilent 4284A,E4991A,4339B,KEYSIGHT E4980A/AL,chroma3302,3250,16502.
4. Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately Δ T of 40°C
5. Saturation Current (I_{sat}) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. I_{rms} Testing : Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
8. Rated DC current: The lower value of I_{rms} and I_{sat}.

Part Number	Inductance L0 A(uH) ±20%	I _{rms} (A)		I _{sat} (A)		DCR (mΩ) ±7%	Type
		Typ	Max	Typ	Max		
TMPA0604S-R24MN-1R007-D	0.24	34	27	35	28	1.0	non-leadframe

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Testing Instrument(or equ) : Agilent 4284A,E4991A,4339B,KEYSIGHT E4980A/AL,chroma3302,3250,16502.
4. Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately Δ T of 40°C
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6. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. I_{rms} Testing : Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
8. Rated DC current: The lower value of I_{rms} and I_{sat}.

6. Typical Performance Curves

