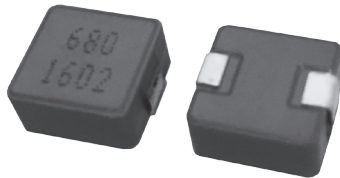




# SMD Molding Type Power Inductor

## TMPD Series



### Features

- Shielded construction
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction

### Application

- Excellent for power line DC-DC conversion applications used in power switching, personal computers and other handheld electronic equipment

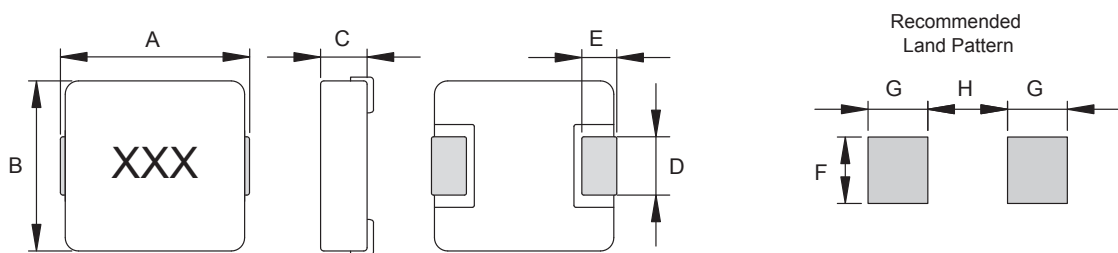
### Part Numbering

**TMPD 0503 HG - R47 M - □ A**

①      ②      ③      ④      ⑤      ⑥      ⑦

- ① Product Group
- ② Dimension Code
- ③ Type Code
- ④ Inductance Code: R means decimal point  
Ex: R47→0.47μH
- ⑤ Inductance Tolerance M=±20%, N=±30%
- ⑥ Control Code
- ⑦ Automobile Code

### Shapes and Dimension



Unit: mm

Type	A	B	C	D	E	F	G	H
TMPD0503	5.70±0.50	5.20±0.30	2.80±0.20	2.00±0.20	1.00 (Typ.)	2.50 (Typ.)	1.60 (Typ.)	2.80 (Typ.)
TMPD0603	7.10±0.50	6.60±0.30	2.80±0.20	3.00±0.30	1.60±0.50	3.50 (Typ.)	2.20 (Typ.)	3.70 (Typ.)
TMPD1004	12.00 Max	10.00±0.50	3.80±0.20	2.00 Ref.	See Spec table	3.50 (Typ.)	3.50 (Typ.)	3.70 (Typ.)

### General Technical Data

Operating Temperature Range	-40°C ~ +125°C
Storage Temperature	40°C Max. , 70%RHMax.

• The specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.  
 • The catalog has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.



# SMD Molding Type Power Inductor

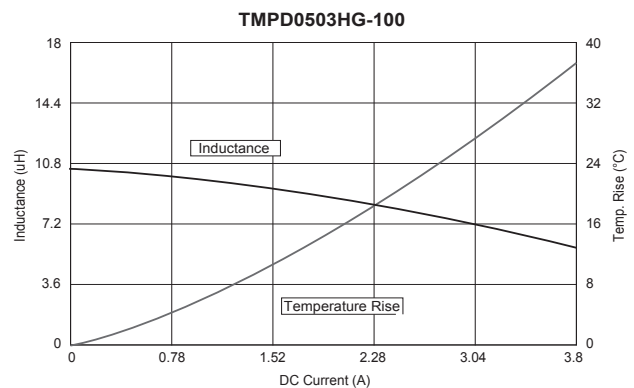
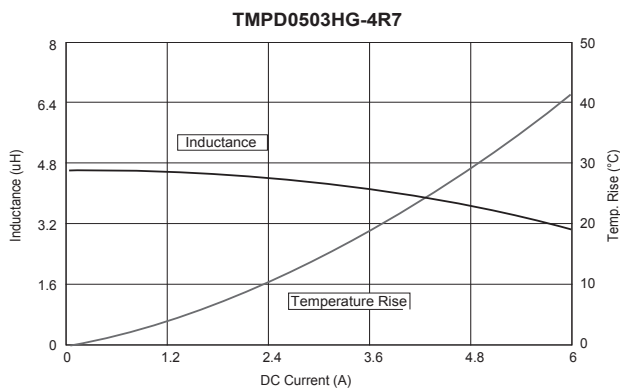
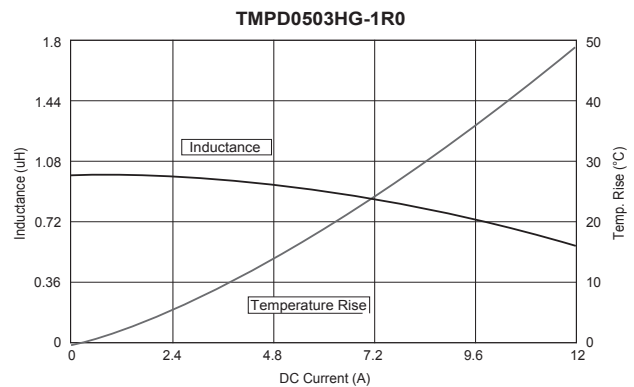
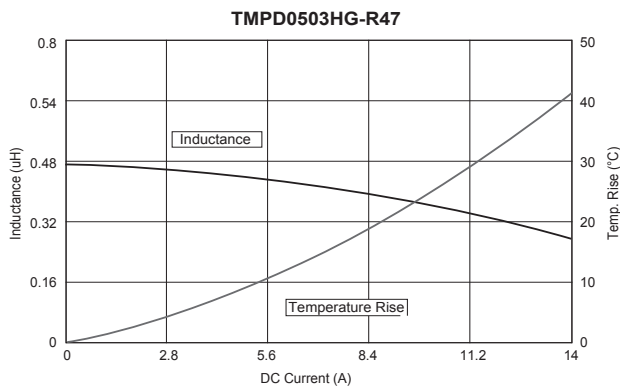
## TMPD Series

### Electrical Characteristics

AEC  
Q200

Part Number	Inductance	Test Frequency	DC Resistance (RDC) Max.	Saturation Current ( $I_{SAT}$ ) Typ./Max.	Temperature Rise Current ( $I_{RMS}$ ) Typ./Max.
<b>TMPD0503HG Series</b>					
TMPD0503HG-R47M-□A	0.47 $\mu$ H $\pm$ 20%	100KHz	6.0m $\Omega$	10.0A / 9.0A	13.5A / 12.0A
TMPD0503HG-R68M-□A	0.68 $\mu$ H $\pm$ 20%	100KHz	8.5m $\Omega$	9.0A / 8.0A	12.5A / 11.0A
TMPD0503HG-R82M-□A	0.82 $\mu$ H $\pm$ 20%	100KHz	9.2m $\Omega$	8.8A / 7.7A	10.0A / 9.0A
TMPD0503HG-1R0M-□A	1.00 $\mu$ H $\pm$ 20%	100KHz	12.0m $\Omega$	8.5A / 7.5A	9.0A / 8.0A
TMPD0503HG-1R5M-□A	1.50 $\mu$ H $\pm$ 20%	100KHz	15.7m $\Omega$	7.5A / 6.5A	8.0A / 7.0A
TMPD0503HG-2R2M-□A	2.20 $\mu$ H $\pm$ 20%	100KHz	25.0m $\Omega$	6.5A / 5.8A	7.0A / 6.5A
TMPD0503HG-3R3M-□A	3.30 $\mu$ H $\pm$ 20%	100KHz	33.0m $\Omega$	6.0A / 5.3A	6.3A / 5.8A
TMPD0503HG-4R7M-□A	4.70 $\mu$ H $\pm$ 20%	100KHz	44.0m $\Omega$	5.3A / 4.6A	5.5A / 4.8A
TMPD0503HG-5R6M-□A	5.60 $\mu$ H $\pm$ 20%	100KHz	58.0m $\Omega$	4.6A / 4.0A	5.0A / 4.3A
TMPD0503HG-6R8M-□A	6.80 $\mu$ H $\pm$ 20%	100KHz	66.0m $\Omega$	3.5A / 3.1A	4.3A / 3.7A
TMPD0503HG-100M-□A	10.00 $\mu$ H $\pm$ 20%	100KHz	103.0m $\Omega$	2.5A / 2.1A	3.8A / 3.4A

- Saturation Current for Inductance becomes 30% lower than its initial value
- Temperature Rise Current for a 40°C rise above 25°C ambient



- The specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
- The catalog has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.



# SMD Molding Type Power Inductor

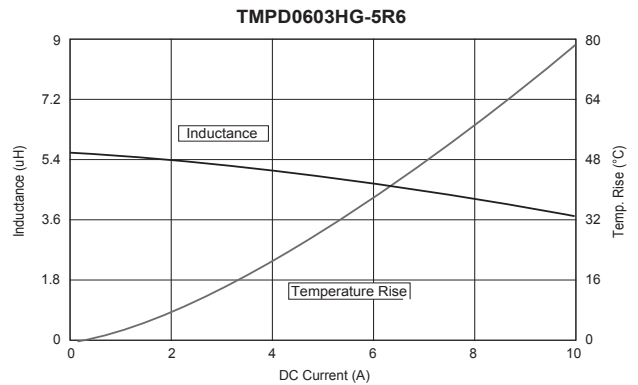
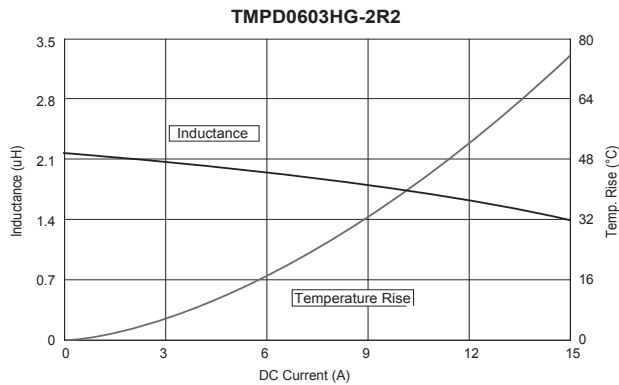
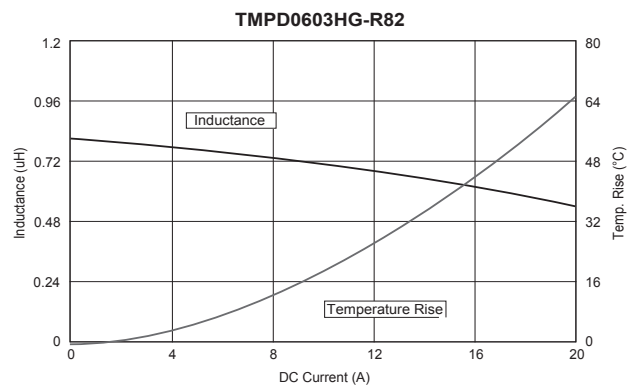
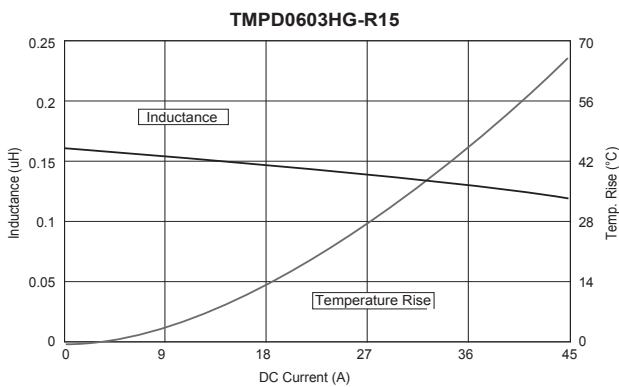
## TMPD Series

### Electrical Characteristics

AEC  
Q200

Part Number	Inductance	Test Frequency	DC Resistance (RDC) Max.	Saturation Current ( $I_{SAT}$ ) Typ.	Temperature Rise Current ( $I_{RMS}$ ) Typ.
<b>TMPD0603HG Series</b>					
TMPD0603HG-R15N-□A	0.15 $\mu$ H $\pm$ 30%	100KHz	2.1m $\Omega$	40.0A	30.0A
TMPD0603HG-R22M-□A	0.22 $\mu$ H $\pm$ 20%	100KHz	2.5m $\Omega$	34.0A	23.0A
TMPD0603HG-R33M-□A	0.33 $\mu$ H $\pm$ 20%	100KHz	3.4m $\Omega$	25.0A	21.0A
TMPD0603HG-R36M-□A	0.36 $\mu$ H $\pm$ 20%	100KHz	3.9m $\Omega$	24.0A	20.0A
TMPD0603HG-R47M-□A	0.47 $\mu$ H $\pm$ 20%	100KHz	4.0m $\Omega$	20.0A	18.0A
TMPD0603HG-R56M-□A	0.56 $\mu$ H $\pm$ 20%	100KHz	4.5m $\Omega$	18.0A	16.5A
TMPD0603HG-R68M-□A	0.68 $\mu$ H $\pm$ 20%	100KHz	5.3m $\Omega$	17.0A	16.0A
TMPD0603HG-R82M-□A	0.82 $\mu$ H $\pm$ 20%	100KHz	6.0m $\Omega$	16.0A	14.0A
TMPD0603HG-1R0M-□A	1.00 $\mu$ H $\pm$ 20%	100KHz	7.4m $\Omega$	15.0A	12.0A
TMPD0603HG-1R2M-□A	1.20 $\mu$ H $\pm$ 20%	100KHz	9.5m $\Omega$	14.0A	10.0A
TMPD0603HG-1R5M-□A	1.50 $\mu$ H $\pm$ 20%	100KHz	12.1m $\Omega$	14.0A	10.0A
TMPD0603HG-2R2M-□A	2.20 $\mu$ H $\pm$ 20%	100KHz	15.0m $\Omega$	10.0A	8.0A
TMPD0603HG-3R3M-□A	3.30 $\mu$ H $\pm$ 20%	100KHz	22.0m $\Omega$	9.5A	6.5A
TMPD0603HG-4R7M-□A	4.70 $\mu$ H $\pm$ 20%	100KHz	33.0m $\Omega$	6.5A	5.5A
TMPD0603HG-5R6M-□A	5.60 $\mu$ H $\pm$ 20%	100KHz	42.0m $\Omega$	6.0A	5.5A
TMPD0603HG-6R8M-□A	6.80 $\mu$ H $\pm$ 20%	100KHz	50.0m $\Omega$	6.0A	4.5A
TMPD0603HG-8R2M-□A	8.20 $\mu$ H $\pm$ 20%	100KHz	60.0m $\Omega$	6.0A	4.5A
TMPD0603HG-100M-□A	10.00 $\mu$ H $\pm$ 20%	100KHz	68.0m $\Omega$	5.5A	4.0A
TMPD0603HG-150M-□A	15.00 $\mu$ H $\pm$ 20%	100KHz	140.0m $\Omega$	4.5A	3.0A
TMPD0603HG-220M-□A	22.00 $\mu$ H $\pm$ 20%	100KHz	190.0m $\Omega$	3.0A	2.5A

- Saturation Current for Inductance becomes 30% lower than its initial value
- Temperature Rise Current for a 40°C rise above 25°C ambient



- The specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
- The catalog has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.



# SMD Molding Type Power Inductor

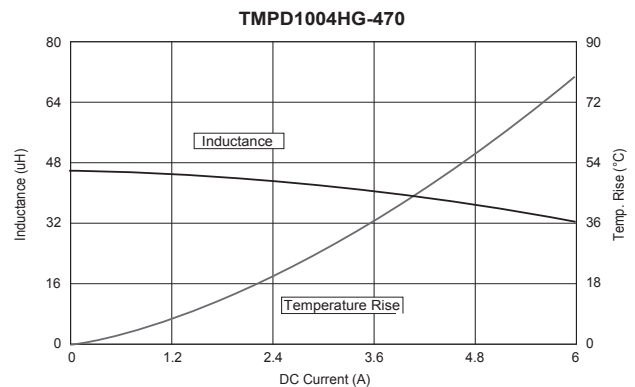
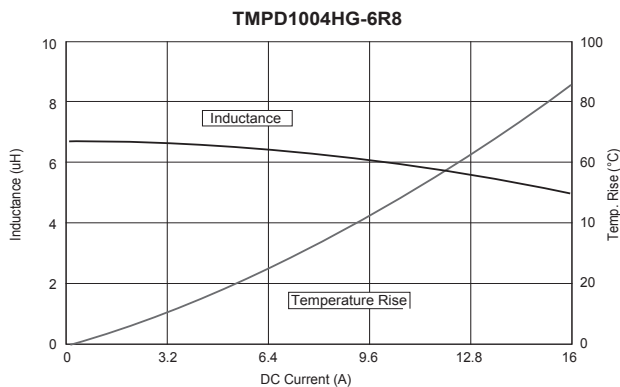
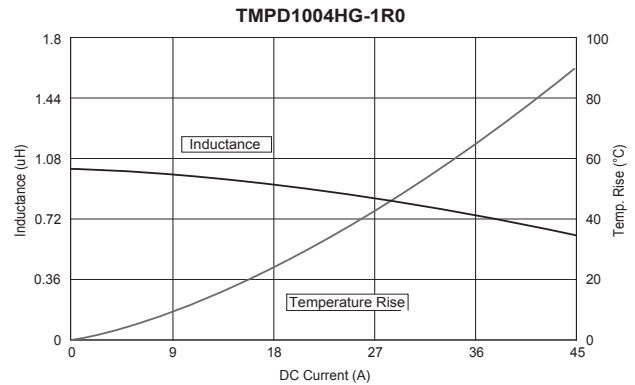
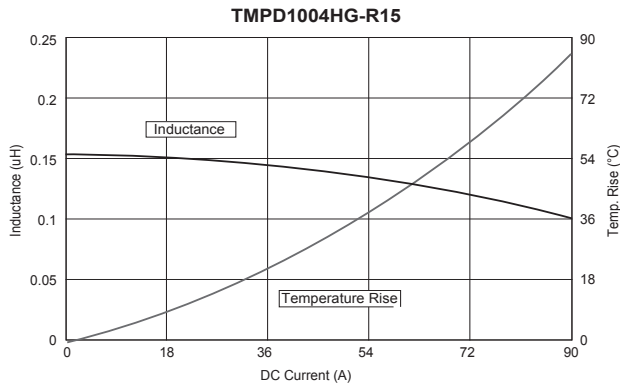
## TMPD Series

### Electrical Characteristics

AEC  
Q200

Part Number	Inductance	Test Frequency	DC Resistance (RDC) Max.	Saturation Current ( $I_{SAT}$ ) Typ./Max.	Temperature Rise Current ( $I_{RMS}$ ) Typ./Max.	Dimension D (mm)
<b>TMPD1004HG Series</b>						
TMPD1004HG-R15N-□A	0.15 $\mu$ H $\pm$ 30%	100KHz	0.60m $\Omega$	82.0A / 75.0A	44.0A / 38.0A	3.0 $\pm$ 0.3
TMPD1004HG-R22M-□A	0.22 $\mu$ H $\pm$ 20%	100KHz	0.83m $\Omega$	70.0A / 60.0A	36.0A / 33.0A	3.0 $\pm$ 0.3
TMPD1004HG-R36M-□A	0.36 $\mu$ H $\pm$ 20%	100KHz	1.18m $\Omega$	51.0A / 45.0A	33.0A / 29.0A	3.0 $\pm$ 0.3
TMPD1004HG-R47M-□A	0.47 $\mu$ H $\pm$ 20%	100KHz	1.50m $\Omega$	46.0A / 40.0A	32.0A / 28.0A	3.0 $\pm$ 0.3
TMPD1004HG-R56M-□A	0.56 $\mu$ H $\pm$ 20%	100KHz	1.80m $\Omega$	34.0A / 29.0A	25.0A / 23.0A	2.5 $\pm$ 0.3
TMPD1004HG-R68M-□A	0.68 $\mu$ H $\pm$ 20%	100KHz	2.20m $\Omega$	31.0A / 28.0A	23.0A / 20.0A	2.5 $\pm$ 0.3
TMPD1004HG-1R0M-□A	1.00 $\mu$ H $\pm$ 20%	100KHz	3.25m $\Omega$	29.0A / 26.0A	20.0A / 18.0A	2.5 $\pm$ 0.3
TMPD1004HG-1R5M-□A	1.50 $\mu$ H $\pm$ 20%	100KHz	4.20m $\Omega$	26.0A / 22.0A	17.5A / 16.0A	2.5 $\pm$ 0.3
TMPD1004HG-2R2M-□A	2.20 $\mu$ H $\pm$ 20%	100KHz	6.70m $\Omega$	20.0A / 16.0A	15.0A / 13.0A	3.0 $\pm$ 0.3
TMPD1004HG-3R3M-□A	3.30 $\mu$ H $\pm$ 20%	100KHz	11.80m $\Omega$	17.5A / 14.0A	11.0A / 10.0A	3.0 $\pm$ 0.3
TMPD1004HG-4R7M-□A	4.70 $\mu$ H $\pm$ 20%	100KHz	19.00m $\Omega$	15.2A / 13.0A	8.8A / 8.0A	3.0 $\pm$ 0.3
TMPD1004HG-5R6M-□A	5.60 $\mu$ H $\pm$ 20%	100KHz	22.80m $\Omega$	14.1A / 11.5A	8.0A / 7.2A	3.0 $\pm$ 0.3
TMPD1004HG-6R8M-□A	6.80 $\mu$ H $\pm$ 20%	100KHz	24.50m $\Omega$	12.2A / 11.0A	7.8A / 6.8A	3.0 $\pm$ 0.3
TMPD1004HG-100M-□A	10.00 $\mu$ H $\pm$ 20%	100KHz	30.00m $\Omega$	8.6A / 7.5A	7.5A / 6.1A	3.0 $\pm$ 0.3
TMPD1004HG-150M-□A	15.00 $\mu$ H $\pm$ 20%	100KHz	45.00m $\Omega$	7.0A / 6.0A	6.25A / 5.0A	3.0 $\pm$ 0.3
TMPD1004HG-220M-□A	22.00 $\mu$ H $\pm$ 20%	100KHz	66.00m $\Omega$	6.2A / 5.5A	5.0A / 4.1A	3.0 $\pm$ 0.3
TMPD1004HG-330M-□A	33.00 $\mu$ H $\pm$ 20%	100KHz	91.00m $\Omega$	5.5A / 5.0A	4.4A / 3.5A	3.0 $\pm$ 0.3
TMPD1004HG-470M-□A	47.00 $\mu$ H $\pm$ 20%	100KHz	143.00m $\Omega$	4.0A / 3.7A	3.5A / 3.0A	3.0 $\pm$ 0.3

- Saturation Current for Inductance becomes 30% lower than its initial value
- Temperature Rise Current for a 40°C rise above 25°C ambient



- The specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
- The catalog has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.