

SMD Assembly High Current Power Inductor-TRHP Series

TRHP Series is a ferrite power inductor designed for high-frequency and high-current applications. Featuring low loss and tight tolerance DCR, it is specifically optimized for precise current sensing in multi-phase power supplies such as servers and GPUs. The inductor adopts a compact surface-mount package and complies with environmental and high-temperature process requirements.



Features

- SMD inductors
- High current and lower DCR
- Ferrite core material
- Shielded construction

Applications

- Servers
- Multi-phase and Vcore regulators
- Notebook regulators
- Battery power systems
- Graphics cards

Operating Temp

- -40°C~+125°C

Product Identification

1	2	3	4	5	6	7
TRHP	040404	XX	XXX	X	T	X

1	Product Symbol
TRHP	SMD Power Inductor

2	External Dimensions(mm)
040404	4.0*4.0*4.0
050506	5.2*5.0*6.3
050507	5.2*5.2*6.5
060610	6.3*6.3*9.8
656510	6.5*6.5*10.0
070608	6.9*6.2*8.2
070704	7.0*6.6*3.6
070705	7.0*6.8*5.0
070711	7.2*6.7*11.2
080805	7.62*7.49*5.0
080809	8.0*8.0*9.5
090509	8.8*4.9*9.3
090608	9.4*6.2*8.0
090608	9.6*6.4*8.0
090609	9.6*6.4*9.0
090610	9.6*6.4*10.0
090705	9.3*6.8*5.5
100612	9.7*6.0*11.8
100705	10.0*6.8*5.0
100709	10.0*7.0*9.0
100710	10.0*7.0*10.0
100712	10.5*7.5*11.8
100807	10.7*8.0*7.0
100875	10.2*8.0*7.3
100808	10.4*8.2*8.2
100810	10.0*8.0*10.0

2	External Dimensions(mm)
110707	11.0*7.3*7.5
111109	11.2*11.2*9.5
120808	12.0*8.0*8.1
121109	11.8*11.5*9.4
131308	13.7*12.8*8.1

3	Internal Code
SM	Mn-Zn (Horizontal)
UM	Mn-Zn (Vertical)

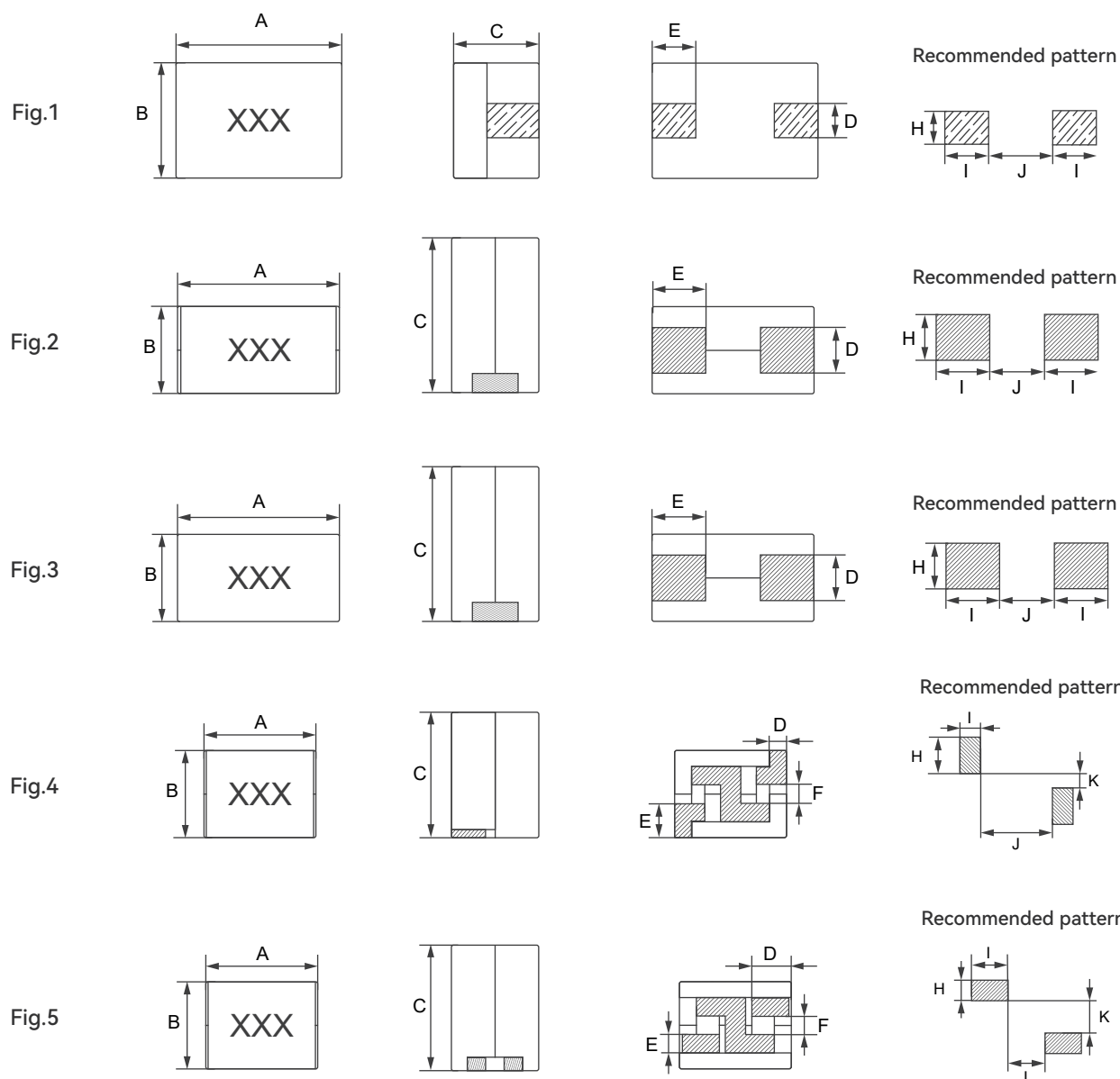
4	Nominal Inductance
22N	22nH
R08	80nH
R12	120nH
1R0	1000nH

5	Inductance Tolerance
K	±10%
L	±15%
M	±20%

6	Packing
T	Tape Carrier Package

7	Internal Code
A	Standard
B	Special

Shape and Dimensions



Dimensions											Unit:mm
Series	A	B	C	D	E	F	H	I	J	K	Shape
TRHP040404SM	4.0Max.	4.0Max.	4.0Max.	1.4Ref.	0.9Ref.	/	1.9	1.7	0.9	/	Fig.1
TRHP050506SM	5.2Max.	5.0Max.	6.3Max.	2.0±0.2	1.4±0.2	/	2.6	1.9	1.7	/	Fig.1
TRHP050507SM	5.2Max.	5.2Max.	6.5Max.	2.0±0.2	0.7±0.2	/	2.5	1.15	3.2	/	Fig.1
TRHP060610UM	6.3±0.2	6.3±0.2	9.8±0.2	3.7±0.2	1.75±0.2	/	4.1	2.35	2.05	/	Fig.3
TRHP656510UM	6.5Max.	6.5Max.	10.0Max.	3.7±0.3	1.75±0.3	/	4.2	2.0	2.6	/	Fig.2
TRHP070608SM	6.9±0.3	6.2±0.3	See Remarks	2.95±0.3	2.15±0.3	/	3.5	3.05	1.5	/	Fig.1
TRHP070704SM	7.0±0.35	6.6±0.25	3.6±0.25	3.0±0.3	1.6±0.35	/	3.5	2.35	3.7	/	Fig.1
TRHP070705SM	7.0Max.	6.8Max.	See Remarks	2.5Ref.	1.5Ref.	/	2.8	2.0	3.4	/	Fig.1
TRHP070711UM	7.2Max.	6.7Max.	11.2Max.	3.3Typ.	1.9Typ.	/	3.8	2.62	2.4	/	Fig.2
TRHP080805SM	7.62Max.	7.49Max.	5.0Max.	3.12±0.3	2.16±0.3	/	3.43	2.54	2.6	/	Fig.1
TRHP080809UM	8.0Max.	8.0Max.	9.5Max.	1.2	2.95	1.5	3.4	1.75	4.5	1.0	Fig.4
TRHP090509UM	8.8±0.2	4.9±0.3	9.3±0.2	2.4±0.2	2.5±0.2	/	2.8	3.1	3.4	/	Fig.2
TRHP090608SM	9.4±0.3	6.2±0.2	8.0Max.	2.14±0.2	2.3±0.5	/	2.54	3.2	4.0	/	Fig.1
TRHP090608UM	9.6Max.	6.4Max.	8.0Max.	See Remarks	See Remarks	/	3.2	3.6	4.0	/	Fig.2
TRHP090609UM	9.6Max.	6.4Max.	9.0Max.	2.6Typ.	2.5Typ.	/	3.1	3.25	3.5	/	Fig.2
TRHP090610UM	9.6Max.	See Remarks	See Remarks	See Remarks	See Remarks	/	3.5	3.5	3.0	/	Fig.2

Dimensions

Unit:mm

Series	A	B	C	D	E	F	H	I	J	K	Shape
TRHP090705SM	6.8±0.2	9.3±0.3	5.5Max.	2.3±0.1	2.3±0.3	/	2.7	2.9	4.2	/	Fig.1
TRHP100612UM	9.7±0.3	See Remarks	11.8±0.2	2.4±0.25	2.9±0.25	/	3.3	3.2	3.9	/	Fig.2
TRHP100705SM	10.0± 0.25	6.8±0.2	5.0±0.2	See Remarks	See Remarks	/	3.05	2.03	6.4	/	Fig.1
TRHP100709UM	10.0Max.	7.0Max.	9.0Max.	2.7±0.25	2.5±0.25	/	3.0	3.2	4.6	/	Fig.2
TRHP100710UM	9.7±0.3	6.7±0.3	9.7±0.3	2.5±0.3	1.1±0.3	1.0±0.3	1.65	3.15	4.2	0.5	Fig.5
	10.0Max.	7.0Max.	10.0Max.	2.2±0.25	2.5±0.3	/	3	3.3	4.4	/	Fig.2
TRHP100712UM	10.5±0.2	7.5±0.2	11.8±0.2	3.1±0.2	2.8±0.3	/	3.5	3.4	3.7	/	Fig.3
TRHP100807SM	10.7Max.	8.0Max.	7.0Max.	2.1±0.05	2.2±0.15	/	2.6	3	5.0	/	Fig.1
TRHP100875SM	10.2±0.3	8.0Max.	7.3±0.2	2.2±0.2	2.54±0.5	/	2.5	3	4.7	/	Fig.1
TRHP100808SM	See Remarks	See Remarks	See Remarks	See Remarks	See Remarks	/	4.5	3.3	4.0	/	Fig.1
TRHP100810UM	10.0Max.	8.0Max.	10.0Max.	3.4±0.25	2.65Ref.	/	4.2	3.45	3.4	/	Fig.2
TRHP110707SM	11.0Max.	7.3Max.	7.5Max.	1.85±0.15	2.2±0.5	/	2.1	3.1	5.0	/	Fig.1
TRHP111109SM	11.2Max.	11.2Max.	9.5Max.	2.1±0.3	2.6±0.3	/	2.54	3.1	5.3	/	Fig.1
TRHP120808SM	12.0Max.	8.0Max.	8.1Max.	1.3±0.2	2.2±0.2	/	1.7	2.8	6.5	/	Fig.1
TRHP121109SM	11.8Max.	11.5Max.	9.4Max.	2.18Ref.	3.2Ref.	/	2.7	3.95	4.2	/	Fig.1
TRHP131308SM	See Remarks	See Remarks	See Remarks	See Remarks	See Remarks	/	7.6	3.2	7.2	/	Fig.1

Remarks:

Series	A	B	C (mm)	D	E	L / DCR
TRHP070608SM	/	/	8.7Max.	/	/	R03
	/	/	8.2Max.	/	/	R05/R06/R07/R20
TRHP070705SM	/	/	5.3Max.	/	/	R70
	/	/	5.1max.	/	/	R10
	/	/	5.0max.	/	/	R12/R15/R18/R20/R22
TRHP090608UM	/	/	/	2.15±0.3	2.50±0.3	DCR=0.29%±10%
	/	/	/	2.5±0.3	2.7±0.3	DCR=0.145%±10%
TRHP090610UM	/	6.4Max.	10.0Max.	2.45	2.9	DCR=0.125%±10%
	/	6.6Max.	10.1Max.	3.2±0.3	2.7±0.3	DCR=0.12Max.
TRHP100612UM	/	6.0Max.	/	/	/	R08/R10/R12/R14/R15/R22/R25/R33
	/	6.1Max.	/	/	/	R07
TRHP100705SM	/	/	/	2.3±0.1	1.52±0.25	DCR=0.32%±10%
	/	/	/	2.54±0.1	2.03±0.2	DCR=0.23%±10%
TRHP100710UM	9.7±0.3	6.7±0.3	9.7±0.3	2.5±0.3	1.1±0.3	DCR=0.891 Max. (0.81 Typ.)
	10.0Max.	7.0Max.	10.0Max.	2.2±0.25	2.5±0.3	DCR=0.17±10%
TRHP100808SM	10.4Max.	8.2Max.	8.2Max.	3.4±0.2	2.4±0.2	DCR=0.18±15%
	10.8Max.	8.0Max.	8.0Max.	2.25Typ.	2.2Typ.	DCR=0.12±8%
TRHP131308SM	13.46Max.	12.95Max.	8.0Max.	5.08Typ.	2.54Typ.	DCR=0.29%±10%
	13.7Max.	12.8Max.	8.1Max.	6.5Typ.	2.7Typ.	DCR=0.19%±10%

Specification

TRHP040404SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP040404SM22NMTA	22	M	40.00	34.00	45.00	0.32±10%	@100kHz, 1V
TRHP040404SM55N□TA	55	L,M	30.00	25.00			
TRHP040404SM65N□TA	65	L,M	26.00	18.00			
TRHP040404SMR08□TA	80	L,M	22.00	16.00			
TRHP040404SMR10MTA	100	M	17.00	15.00			

TRHP050506SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP050506SMR05MTA	50	M	68.00	/	56.00	0.29±10%	@100kHz,0.1V
TRHP050506SMR08MTA	80	M	44.00	/			
TRHP050506SMR10□TA	100	L,M	35.00	/			
TRHP050506SMR11□TA	110	L,M	31.00	/			
TRHP050506SMR15□TA	150	L,M	17.00	/			

TRHP050507SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25℃	100℃	Irms(A)	RDC(mΩ)	/
TRHP050507SM55NMTA	55	M	70.00	60.00	50.00	0.25±20%	@100kHz, 1V
TRHP050507SMR08MTA	80	M	50.00	40.00			
TRHP050507SMR10MTA	100	M	40.00	30.00			
TRHP050507SMR11MTA	110	M	36.00	27.00			
TRHP050507SMR15MTA	150	M	25.00	20.00			

TRHP060610UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25℃	100℃	Irms(A)	RDC(mΩ)	/
TRHP060610UMR05KTA	50	K	150.00	120.00	70.00	0.17±10%	@800kHz,0.1V
TRHP060610UMR07KTA	70	K	120.00	100.00			
TRHP060610UMR10KTA	100	K	85.00	70.00			
TRHP060610UMR12KTA	120	K	70.00	60.00			
TRHP060610UMR15KTA	150	K	56.00	46.00			

TRHP656510UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP656510UMR07LTA	70	L	110.00	100.00	70.00	0.17±10%	@100kHz,0.1V
TRHP656510UMR09LTA	90	L	90.00	80.00			
TRHP656510UMR10LTA	100	L	80.00	70.00			
TRHP656510UMR12LTA	120	L	69.00	60.00			
TRHP656510UMR15LTA	150	L	52.00	46.00			
TRHP656510UMR20LTA	200	L	35.00	35.00			
TRHP656510UMR22LTA	220	L	33.00	30.00			

TRHP070608SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP070608SMR03MTA	30	M	120.00	/	36.00	0.22 Max	@100kHz,0.1V
TRHP070608SMR05MTA	50	M	100.00	/			
TRHP070608SM65NMTA	65	M	80.00	/			
TRHP070608SMR07MTA	70	M	60.00	/			
TRHP070608SMR20LTA	200	L	22.00	/			

TRHP070704SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP070704SMR05MTA	50	M	55.00	/	50.00	0.17±10%	@100kHz, 1V
TRHP070704SMR06MTA	60	M	48.00	/			
TRHP070704SMR07□TA	70	L, M	42.00	/			
TRHP070704SMR10□TA	100	K, L, M	34.00	/			
TRHP070704SMR15□TA	150	K, L, M	22.00	/			

TRHP070705SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25℃	100℃	Irms(A)	RDC(mΩ)	/
TRHP070705SMR07□TA	70	M	65.00	/	31.00	0.32±10%	@100kHz, 1V
TRHP070705SMR10□TA	100	L,M	46.00	/			
TRHP070705SMR12□TA	120	K,L,M	37.00	/			
TRHP070705SMR15□TA	150	K,L,M	30.00	/			
TRHP070705SMR18□TA	180	K,L,M	25.00	/			
TRHP070705SMR20□TA	200	K,L,M	22.00	/			
TRHP070705SMR22□TA	220	K,L,M	20.00	/			
TRHP070705SMR07□TB	70	L,M	65.00	/	43.00	0.25±10%	@100kHz, 1V
TRHP070705SMR10□TB	100	K,L,M	46.00	/			
TRHP070705SMR12□TB	120	K,L,M	37.00	/			
TRHP070705SMR15□TB	150	K,L,M	30.00	/			
TRHP070705SMR18□TB	180	K,L,M	25.00	/			
TRHP070705SMR22□TB	220	K,L,M	20.00	/			

TRHP070711UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP070711UMR10□TA	100	K,L,M	100+	/	40.00	0.32±10%	@100kHz, 1V
TRHP070711UMR12□TA	120	K,L,M	75.00	/			
TRHP070711UMR15□TA	150	K,L,M	72.00	/			
TRHP070711UMR18□TA	180	K,L,M	60.00	/			
TRHP070711UMR20□TA	200	K,L,M	55.00	/			
TRHP070711UMR22□TA	220	K,L,M	50.00	/			
TRHP070711UMR23□TA	230	K,L,M	45.00	/			
TRHP070711UMR33□TA	330	K,L,M	28.00	/			

TRHP080805SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP080805SM65NLTA	65	L	80.00	/	39.00	0.17±10%	@100kHz,0.1V
TRHP080805SMR10KTA	100	K	42.00	/			
TRHP080805SMR15KTA	150	K	34.00	/			

TRHP080809UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP080809UMR30KTB	300	K	60.00	/	28.00	0.80±15%	@100kHz, 1V
TRHP080809UMR40KTB	400	K	45.00	/			
TRHP080809UMR47KTB	470	K	36.00	/			
TRHP080809UMR60KTB	600	K	29.00	/			
TRHP080809UMR80KTB	800	K	22.00	/			
TRHP080809UM1R0KTB	1000	K	15.00	/			

TRHP090509UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP090509UMR09KTA	90	K	90.00	77.00	63.00	0.125±10%	@500kHz,0.1V
TRHP090509UMR10KTA	100	K	80.00	70.00			
TRHP090509UMR12KTA	120	K	72.00	64.00			
TRHP090509UMR15KTA	150	K	58.00	51.00			
TRHP090509UMR18KTA	180	K	49.00	42.00			
TRHP090509UMR21KTA	210	K	38.00	33.00			
TRHP090509UMR24KTA	240	K	33.00	30.00			
TRHP090509UMR27KTA	270	K	30.00	26.00			
TRHP090509UMR33KTA	330	K	23.00	19.00			

TRHP090608SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP090608SMR10□TA	100	L,M	94.00	81.00	51.00	0.29±10%	@100kHz,0.1V
TRHP090608SMR12□TA	120	K,L,M	79.00	68.00			
TRHP090608SMR15□TA	150	K,L,M	65.00	55.00			
TRHP090608SMR18□TA	180	K,L,M	54.00	45.00			
TRHP090608SMR22□TA	220	K,L,M	44.00	37.50			
TRHP090608SMR30□TA	300	K,L,M	32.50	27.50			

TRHP090608UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP090608UMR10□TA	100	L,M	94.00	81.00	51.00	0.29±5%	@100kHz,0.1V
TRHP090608UMR12□TA	120	K,L,M	79.00	68.00			
TRHP090608UMR15□TA	150	K,L,M	65.00	55.00			
TRHP090608UMR18□TA	180	K,L,M	55.00	45.00			
TRHP090608UMR22□TA	220	K,L,M	44.00	37.50			
TRHP090608UMR28□TA	280	K,L,M	34.00	29.00			
TRHP090608UMR30□TA	300	K,L,M	32.50	27.50			
TRHP090608UMR07□TB	70	L,M	105.00	/	75.00	0.145±10%	@100kHz,0.1V
TRHP090608UMR10□TB	100	L,M	95.00	/			
TRHP090608UMR12□TB	120	K,L,M	70.00	/			
TRHP090608UMR15□TB	150	K,L,M	60.00	/			
TRHP090608UMR18□TB	180	K,L,M	40.00	/			
TRHP090608UMR22□TB	220	K,L,M	38.00	/			
TRHP090608UMR30□TB	300	K,L,M	26.00	/			

TRHP090609UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP090609UMR07KTA	70	K	160.00	136.00	66.00	0.17±10%	@100kHz,1V
TRHP090609UMR10□TA	100	L,M	110.00	95.00			
TRHP090609UMR12□TA	120	K,L,M	94.00	80.00			
TRHP090609UMR15□TA	150	K,L,M	75.00	64.00			
TRHP090609UMR17□TA	170	K,L,M	65.00	55.00			
TRHP090609UMR18□TA	180	K,L,M	60.00	48.00			
TRHP090609UMR30□TA	300	K,L,M	33.00	23.00			

TRHP090610UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP090610UMR07□TA	70	L,M	125.00	/	71.00	0.125±10%	@100kHz,1V
TRHP090610UMR10□TA	100	K,L,M	92.00	/			
TRHP090610UMR12□TA	120	K,L,M	75.00	/			
TRHP090610UMR22□TA	220	K,L,M	38.00	/			
TRHP090610UMR07□TB	70	L,M	145.00	126.00	84.00	0.12 max.	@100kHz,0.1V
TRHP090610UMR10□TB	100	L,M	108.00	90.00			
TRHP090610UMR12□TB	120	K,L,M	85.00	72.00			
TRHP090610UMR15□TB	150	K,L,M	64.00	58.00			
TRHP090610UMR18□TB	180	K,L,M	56.00	49.00			
TRHP090610UMR22□TB	220	K,L,M	46.00	40.00			
TRHP090610UMR28□TB	280	K,L,M	36.00	31.00			
TRHP090610UMR33□TB	330	K,L,M	23.00	19.00			

TRHP090705SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP090705SMR07LTA	70	L	100.00	85.00	65.00	0.14±10%	@100kHz, 1V
TRHP090705SMR10LTA	100	L	70.00	59.00			
TRHP090705SMR12LTA	120	L	58.00	49.00			
TRHP090705SMR15LTA	150	L	46.00	39.00			
TRHP090705SMR18LTA	180	L	38.00	33.00			
TRHP090705SMR22LTA	220	L	31.00	27.00			

TRHP100612UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP100612UMR07MTA	70	M	175.00	150.00	77.00	0.125±10%	@100kHz,0.1V
TRHP100612UMR08LTA	80	L	155.00	130.00			
TRHP100612UMR10LTA	100	L	125.00	105.00			
TRHP100612UMR12LTA	120	L	105.00	88.00			
TRHP100612UMR14LTA	135	L	92.00	77.00			
TRHP100612UMR15LTA	150	L	83.00	70.00			
TRHP100612UMR22LTA	220	L	60.00	46.00			
TRHP100612UMR25LTA	250	L	46.00	36.00			
TRHP100612UMR33LTA	330	L	40.00	30.00			

TRHP100705SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25℃	100℃	Irms(A)	RDC(mΩ)	/
TRHP100705SMR08LTA	80	L	80.00	/	45.00	0.32±10%	@100kHz, 1V
TRHP100705SMR10LTA	100	L	62.00	/			
TRHP100705SMR12LTA	120	L	56.00	/			
TRHP100705SMR15LTA	150	L	50.00	/			
TRHP100705SMR20LTA	200	L	33.00	/			
TRHP100705SMR22LTA	220	L	30.00	/			
TRHP100705SMR08LTB	80	L	90.00	/	37.00	0.23±10%	@100kHz, 1V
TRHP100705SMR10LTB	100	L	73.00	/			
TRHP100705SMR12LTB	120	L	60.00	/			
TRHP100705SMR16LTB	160	L	53.00	/			
TRHP100705SMR20LTB	200	L	40.00	/			
TRHP100705SMR22LTB	220	L	33.00	/			
TRHP100705SMR25LTB	250	L	25.00	/			

TRHP100709UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25℃	100℃	Irms(A)	RDC(mΩ)	/
TRHP100709UMR10□TA	100	L	118.00	/	70.00	0.18±10%	@100kHz, 1V
TRHP100709UMR12□TA	120	L	110.00	/			
TRHP100709UMR15□TA	150	L	75.00	/			
TRHP100709UMR18□TA	180	L	60.00	/			
TRHP100709UMR22□TA	220	L	44.00	/			
TRHP100709UMR33□TA	330	L	30.00	/			
TRHP100709UMR40□TA	400	L	28.00	/			

TRHP100710UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP100710UMR07□TA	70	L,M	165.00	120.00	70.00	0.17±10%	@100kHz,1V
TRHP100710UMR10□TA	100	K,L,M	135.00	100.00			
TRHP100710UMR12□TA	120	K,L,M	107.00	80.00			
TRHP100710UMR15□TA	150	K,L,M	92.00	75.00			
TRHP100710UMR18□TA	180	K,L,M	70.00	58.00			
TRHP100710UMR20□TA	200	K,L,M	68.00	51.00			
TRHP100710UMR22□TA	220	K,L,M	62.00	47.00			
TRHP100710UMR28□TA	280	K,L,M	45.00	36.00			
TRHP100710UMR33□TA	330	K,L,M	37.00	28.00			
TRHP100710UMR47KTB	470	K	48.00	38.00	30.00	0.891 Max. (0.81 Typ.)	@100kHz,1V
TRHP100710UMR68KTB	680	K	34.00	29.00			

TRHP100712UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP100712UMR07KTA	70	K	194.00	181.00	75.00	0.15±10%	@100kHz, 1V
TRHP100712UMR10KTA	100	K	136.00	126.00			
TRHP100712UMR12KTA	120	K	113.00	105.00			
TRHP100712UMR15KTA	150	K	90.00	84.00			
TRHP100712UMR18KTA	180	K	75.00	70.00			
TRHP100712UMR20KTA	200	K	67.00	62.00			
TRHP100712UMR22KTA	220	K	61.00	57.00			
TRHP100712UMR27KTA	270	K	51.00	47.00			
TRHP100712UMR33KTA	330	K	41.00	38.00			
TRHP100712UMR47KTA	470	K	29.00	27.00			

TRHP100807SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25℃	100℃	Irms(A)	RDC(mΩ)	/
TRHP100807SMR10□TA	100	L,M	81.00	/	61.00	0.29±10%	@100kHz,0.1V
TRHP100807SMR15□TA	150	K,L,M	75.00	/			
TRHP100807SMR18□TA	180	K,L,M	60.00	/			
TRHP100807SMR22□TA	220	K,L,M	50.00	/			
TRHP100807SMR27□TA	270	K,L,M	41.00	/			
TRHP100807SMR30□TA	300	K,L,M	35.00	/			
TRHP100807SMR33□TA	330	K,L,M	33.00	/			
TRHP100807SMR39□TA	390	K,L,M	28.00	/			
TRHP100807SMR47□TA	470	K,L,M	23.50	/			

TRHP100875SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP100875SMR12□TA	120	K,L,M	96.00	/	56.00	0.29±10%	@100kHz, 1V
TRHP100875SMR15□TA	150	K,L,M	73.00	/			
TRHP100875SMR17□TA	170	K,L,M	66.00	/			
TRHP100875SMR22□TA	220	K,L,M	50.00	/			
TRHP100875SMR27□TA	270	K,L,M	40.00	/			
TRHP100875SMR30□TA	300	K,L,M	35.00	/			
TRHP100875SMR40□TA	400	K,L,M	25.00	/			

TRHP100808SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP100808SMR10□TA	100	K,L,M	103.00	86.00	74.00	0.18±15%	@100kHz,1V
TRHP100808SMR12□TA	120	K,L,M	89.00	/			
TRHP100808SMR15□TA	150	K,L,M	85.00	68.00			
TRHP100808SMR18□TA	180	K,L,M	61.00	/			
TRHP100808SMR22□TA	220	K,L,M	56.00	/			
TRHP100808SMR27□TA	270	K,L,M	44.00	/			
TRHP100808SMR30□TA	300	K,L,M	36.00	/			
TRHP100808SMR10LTB	100	L	109.00	/	70.00	0.12±8%	@100kHz,0.1V
TRHP100808SMR12LTB	120	L	91.00	/			
TRHP100808SMR30LTB	300	L	36.00	/			

TRHP100810UM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP100810UMR10LTA	100	L	145.00	/	75.00	0.13±10%	@100kHz,0.1V
TRHP100810UMR12LTA	120	L	135.00	/			
TRHP100810UMR15LTA	150	L	110.00	/			
TRHP100810UMR22LTA	220	L	75.00	/			
TRHP100810UMR33LTA	330	L	45.00	/			

TRHP110707SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP110707SMR07MTA	70	M	150.00	140.00	60.00	0.29±10%	@100kHz, 1V
TRHP110707SMR12□TA	120	K,L,M	90.00	/			
TRHP110707SMR15□TA	150	K,L,M	75.00	/			
TRHP110707SMR17KTA	170	K	70.00	/			
TRHP110707SMR18□TA	180	K,L,M	63.00	/			
TRHP110707SMR20KTA	200	K	60.00	/			
TRHP110707SMR23□TA	230	K,L,M	50.00	/			
TRHP110707SMR30□TA	300	K,L,M	32.00	/			
TRHP110707SMR40□TA	400	K,L,M	23.00	/			
TRHP110707SMR50KTA	500	K	18.00	/			
TRHP110707SMR51□TA	510	K,L,M	18.00	/			

TRHP111109SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP111109SMR05□TA	50	K,L,M	180.00	/	43.00	0.42±10%	@100kHz, 1V
TRHP111109SMR10□TA	100	K,L,M	145.00	/			
TRHP111109SMR12□TA	120	K,L,M	120.00	/			
TRHP111109SMR15□TA	150	K,L,M	100.00	/			
TRHP111109SMR20□TA	200	K,L,M	80.00	/			
TRHP111109SMR25□TA	250	K,L,M	63.00	/			
TRHP111109SMR27□TA	270	K,L,M	58.00	/			
TRHP111109SMR30□TA	300	K,L,M	53.00	/			
TRHP111109SMR33□TA	330	K,L,M	46.00	/			
TRHP111109SMR47□TA	470	K,L,M	36.00	/			
TRHP111109SMR56□TA	560	K,L,M	30.00	/			
TRHP111109SM1R0□TA	1000	K,L,M	13.00	/			

TRHP120808SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP120808SMR15KTA	150	K	85.00	/	50.00	0.29±5%	@100kHz, 1V
TRHP120808SMR18KTA	180	K	72.00	/			
TRHP120808SMR21KTA	210	K	65.00	/			
TRHP120808SMR23KTA	230	K	60.00	/			
TRHP120808SMR25KTA	250	K	52.00	/			
TRHP120808SMR45KTA	450	K	24.00	/			
TRHP120808SMR47KTA	470	K	22.00	/			

TRHP121109SM Series

Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP121109SMR25□TA	250	K,L,M	65.00	/	38.00	0.30±10%	@100kHz, 1V
TRHP121109SMR33□TA	330	K,L,M	46.00	/			
TRHP121109SMR47□TA	470	K,L,M	35.00	/			
TRHP121109SMR50□TA	500	K,L,M	32.00	/			

TRHP131308SM Series

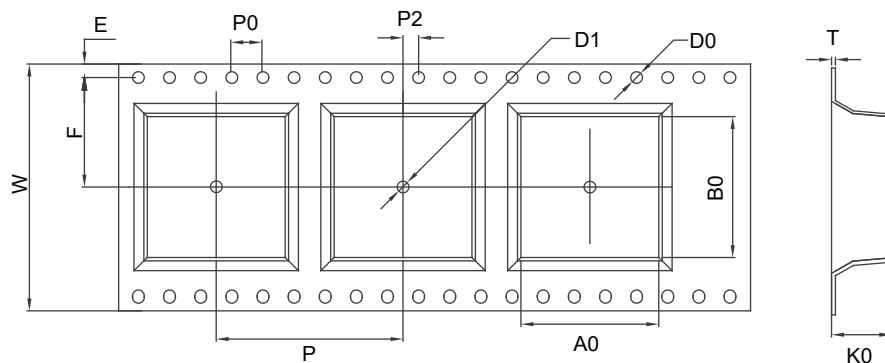
Part Number	Inductance	Tolerance	Saturation Current		Heat Rating Current	DC Resistance	L Test Condition
			Isat(A)				
	L (nH)	/	25°C	100°C	Irms(A)	RDC(mΩ)	/
TRHP131308SMR18□TA	180	K,L,M	90.00	/	45.00	0.29±10%	@100kHz, 1V
TRHP131308SMR21□TA	210	K,L,M	70.00	/			
TRHP131308SMR26□TA	260	K,L,M	60.00	/			
TRHP131308SMR32□TA	320	K,L,M	50.00	/			
TRHP131308SMR44□TA	440	K,L,M	35.00	/			
TRHP131308SMR11KTB	110	K	140.00	113.00	68.00	0.19±10%	@100kHz, 1V
TRHP131308SMR15KTB	150	K	100.00	80.00			
TRHP131308SMR18KTB	180	K	85.00	68.00			
TRHP131308SMR21KTB	210	K	80.00	64.00			
TRHP131308SMR26KTB	260	K	61.00	50.00			
TRHP131308SMR32KTB	320	K	45.00	36.00			
TRHP131308SMR36KTB	360	K	40.00	32.00			
TRHP131308SMR44KTB	440	K	37.00	30.00			
TRHP131308SMR50KTB	500	K	28.00	22.00			

Notes

- All test data for each model is referenced to a 25°C ambient temperature.
- Irms: DC current for an approximate temperature rise of 40 °C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application.
- Isat : Peak current for approximately 20% rolloff @+25 °C
- Marking: Denotes inductance
- Tolerance: OCL Tolerance: K=±10% / L=±15% / M=±20%
- Measurement Equipment: WK3260B+WK3265B (or equivalent)

Packaging Information

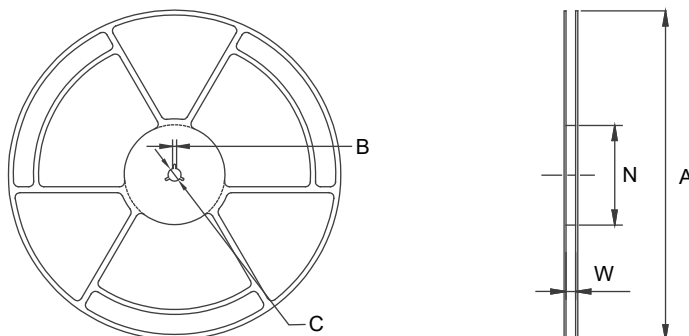
Tape Dimensions



Dimensions

Series	Tape dimensions (mm)											
	W	P	P0	P2	T	D0	D1	A0	B0	K0	E	F
TRHP040404SM	12±0.3	8±0.1	4±0.1	2±0.1	0.4±0.05	1.5±0.1	1.5±0.1	/	/	/	1.75±0.1	5.5±0.1
TRHP050506SM	16±0.3	12±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	5.0±0.1	5.1±0.1	6.0±0.1	1.75±0.1	7.5±0.1
TRHP050507SM	16±0.3	12±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	5.3	5.3	6.8	1.75±0.1	7.5±0.1
TRHP060610UM	/	/	/	/	/	/	/	/	/	/	/	/
TRHP656510UM	16±0.2	12±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	/	/	/	1.75±0.1	7.5±0.1
TRHP070608SM	24±0.3	12±0.1	4±0.1	2±0.1	/	1.5±0.1	/	7.1	7.8	8.5	1.75±0.1	/
TRHP070704SM	16±0.3	12±0.1	4±0.1	2±0.1	0.4±0.05	1.5±0.1	1.5±0.1	7.1±0.1	/	3.5±0.2	1.75±0.1	7.5±0.1
TRHP070705SM	16±0.3	12±0.1	4±0.1	2±0.1	0.4±0.05	1.5±0.1	1.5±0.1	6.9±0.1	7.6±0.1	5.4±0.1	1.75±0.1	7.5±0.1
TRHP070711UM	24±0.3	16±0.1	4±0.1	2±0.1	/	1.5±0.1	1.5±0.1	/	/	/	1.75±0.1	11.5±0.1
TRHP080805SM	16±0.3	12±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	7.5±0.1	7.6±0.1	5.4±0.1	1.75±0.1	7.5±0.1
TRHP080809UM	24±0.2	12±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	/	/	/	1.75±0.1	11.5±0.1
TRHP090509UM	/	/	/	/	/	/	/	/	/	/	/	/
TRHP090608SM	24±0.3	12±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	6.7±0.1	10±0.1	8.3±0.1	1.75±0.1	11.5±0.1
TRHP090608UM	24±0.3	12±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	6.7±0.1	10±0.1	8.3±0.1	1.75±0.1	11.5±0.1
TRHP090609UM	24±0.3	12±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	6.6±0.1	9.7±0.1	9.6±0.1	1.75±0.1	11.5±0.1
TRHP090610UM	24±0.3	12±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	6.6±0.1	10±0.1	10.8±0.1	1.75±0.1	11.5±0.1
TRHP090705SM	/	/	/	/	/	/	/	/	/	/	/	/
TRHP100612UM	24±0.3	16±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	7.3±0.1	10.3±0.1	12.2±0.1	1.75±0.1	11.5±0.1
TRHP100705SM	24±0.2	12±0.1	4±0.1	2±0.1	/	1.5±0.1	1.5±0.1	7.4±0.1	11.7±0.10	5.4±0.1	1.75±0.1	11.5±0.1
TRHP100709UM	24±0.3	16±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	6.6±0.1	9.9±0.1	9.3±0.1	1.75±0.1	11.5±0.1
TRHP100710UM	/	/	/	/	/	/	/	/	/	/	/	/
TRHP100710UM	24±0.3	16±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	7.15±0.1	10.25±0.1	9.8±0.1	1.75±0.1	11.5±0.1
TRHP100712UM	/	/	/	/	/	/	/	/	/	/	/	/
TRHP100807SM	24±0.3	12±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	8.2±0.1	10.5±0.1	6.4±0.1	1.75±0.1	11.5±0.1
TRHP100875SM	24±0.3	12±0.1	4±0.1	2±0.1	0.4±0.05	1.5±0.1	/	8.0±0.1	10.8±0.1	7.7±0.1	1.75±0.1	11.5±0.1
TRHP100808SM	24±0.3	16±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	8.2±0.1	10.8±0.1	8.6±0.1	1.75±0.1	11.5±0.1
TRHP100810UM	24±0.3	16±0.1	4±0.1	2±0.1	/	1.5±0.1	/	10.2	10.2	8.2	1.75±0.1	/
TRHP110707SM	24±0.2	12±0.1	4±0.1	2±0.1	/	1.5±0.1	1.5±0.1	/	/	/	1.75±0.1	11.5±0.1
TRHP111109SM	/	/	/	/	/	/	/	/	/	/	/	/
TRHP120808SM	/	/	/	/	/	/	/	/	/	/	/	/
TRHP121109SM	24±0.3	20±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	11.2±0.1	10.8±0.1	9.6±0.1	1.75±0.1	11.5±0.1
TRHP131308SM	24±0.3	20±0.1	4±0.1	2±0.1	0.5±0.05	1.5±0.1	1.5±0.1	13.1±0.1	14.2±0.1	8.4±0.1	1.75±0.1	11.5±0.1

Reel Dimensions



Dimensions

Series	Reel Dimensions (mm)					Quantity
	A	W	N	B	C	Reel
TRHP040404SM	330±2.0	18.4	100	2.0±0.5	13.0±0.5	1800pcs / reel
TRHP050506SM	330±2.0	22.4	100	2.0±0.5	13.0±0.5	800pcs / reel
TRHP050507SM	330±2.0	16.4	100	2.0±0.5	13.0±0.5	850pcs / reel
TRHP060610UM	/	/	/	/	/	/
TRHP656510UM	330±2.0	22.4	100	2.0±0.5	13.0±0.5	400pcs / reel
TRHP070608SM	330±2.0	24.4	100	2.0±0.5	13.0±0.5	600pcs / reel
TRHP070704SM	330±2.0	22.4	100	2.0±0.5	13.0±0.5	1500pcs / reel
TRHP070705SM	330±2.0	22.4	100	2.0±0.5	13.0±0.5	900pcs / reel
TRHP070711UM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	300pcs / reel
TRHP080805SM	330±2.0	22.4	100	2.0±0.5	13.0±0.5	1000pcs / reel
TRHP080809UM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	500pcs / reel
TRHP090509UM	/	/	/	/	/	/
TRHP090608SM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	600pcs / reel
TRHP090608UM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	600pcs / reel
TRHP090609UM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	500pcs / reel
TRHP090610UM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	400pcs / reel
TRHP090705SM	/	/	/	/	/	/
TRHP100612UM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	300pcs / reel
TRHP100705SM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	800pcs / reel
TRHP100709UM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	400pcs / reel
TRHP100710UM	/	/	/	/	/	/
TRHP100710UM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	400pcs / reel
TRHP100712UM	/	/	/	/	/	/
TRHP100807SM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	700pcs / reel
TRHP100875SM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	700pcs / reel
TRHP100808SM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	500pcs / reel
TRHP100810UM	330±2.0	24.4	100	2.0±0.5	13.0±0.5	300pcs / reel
TRHP110707SM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	700pcs / reel
TRHP111109SM	/	/	/	/	/	/
TRHP120808SM	/	/	/	/	/	/
TRHP121109SM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	300pcs / reel
TRHP131308SM	330±2.0	30.4	100	2.0±0.5	13.0±0.5	350pcs / reel