

CUSTOMER :	STD
PRODUCTS :	SHIELDED SMD POWER INDUCTOR
PART NO :	MCSHT Series
CUST P/ NO:	
DATE :	2021.08.09
SALES DEP:	
E-MAIL:	

VERSION :	REV.A
CHANGE PROJECT :	-
BEFORE :	-
AFTER :	-
CHANGE DATE :	-
CUSTOMER SIGNATURE :	-

APPROVAL BY :	CHECK BY :	DRAWN BY :
Honey Wei	Leo Wang	May Gao



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CHANGE	HISTORY			
Ver	Revision Items	Before Revision	After Revision	Date
Rev.A	-	-	-	2021.08.09
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MCSHT Series



- · SHIELDED SMD POWER INDUCTOR
- \cdot Operating Temperature up tp -40 $^\circ\!\!C$ ~ 125 $^\circ\!\!C$
- · High Current up to 90.0A
- · Low DCR down to 0.17mOhms
- · Environmental Lead free
- · Environmental RoHS2.0 compliant
- · Environmental halogen free
- Storage Temperature : -40 °C to +125 °C.
- · Packaging 13"Reel, Plastic tape: 24 mm wide

FEATURES

- · Ferrite based with lower core loss
- · Frerrite High Bs material.
- · Accurate&low DCR design
- \cdot The pad surface design is directly completed by the Clip.
- Low thickness by1.5 turn loop design.

Applications

- · Multi-phase and Vcore regulators.
- \cdot Server and desktop VRMs and EVRDs.
- · Data networking and storage systems.
- · Graphics cards and battery power systems.

· Buck Converter, VRMs.

PRODUCT IDENTIFICATION

MC	<u>SHT</u>	<u>75</u>	<u>Z</u>	<u>R10</u>	L	<u>R25</u>
1	2	3	(4)	5	6	\bigcirc

- ① Brand & Product classification
- 2 Product Series NO.(SHC : SMD Power Inductors.)
- ③ External Dimensions.(75 : L:7.0 × W:7.0 × H:5.0) [mm]
- 4 Separator code.

(5) Nominal Inductance

Example	Nominal Value
R22	0.22uH
1R0	1.0uH
100	10uH
101	100uH
70NH	70nH

- (6) Inductance Tolerance.(L: ±15%; M: ±20%; N: ±30%)
- ⑦ Nominal DC Resistance.(R25 : $0.25m\Omega$)



Mechanical & Dimensions					-	(Unit: mm)
					Code	Dimensions
	Ţ				A	7.2 Max
					В	7.0 Max
		└ <u>·</u>			С	4.95 Max
		E T			D	2.45±0.2
	<u> </u>				E	1.52±0.3
R10 ₿	├				F	3.65±0.5
			_	X 6		
			,			
			电阻测试点在a	和b点		
Recommend Land Pattern	Dimensions					(Unit: mm
					Code	Dimensions
	 I				a	3.1 Ref
					b	2.0 Ref
					C	3.35 Ref
Electrical Characteristics						
Part Number	Inductance ¹	DCR ²	I-sat ^{3.1}	I-sat ^{3.2}	I-rms ⁴	
Part Number	(nH)	(mΩ)	(Amps)Max	(Amps)Max	(Amps)Typs	\$
MCSHT75Z72NHLR25	72±15%	0.25±10%	65.0	50.0	43.0	
MCSHT75ZR10LR25	105±15%	0.25±10%	44.0	34.0	43.0	
MCSHT75ZR12LR25	120±15%	0.25±10%	37.0	30.0	43.0	
MCSHT75ZR15LR25	150±15%	0.25±10%	30.0	24.0	43.0	
MCSHT75ZR18LR25	180±15%	0.25±10%	25.0	20.0	43.0	_
MCSHT75ZR22LR25	226±15%	0.25±10%	20.0	16.0	43.0	_
N - 4						
Note:						
1.Inductance is measured at 1						
2. The nominal DCR is measured at the standard sector in the sector in the standard sector in the standard sector in the standard sector is the standard sector in the standard sector is the standard sector is set of the standard sector is sector is set of the standard sector is sector is set of the standard sector is sector				ff -1 05°0		
3.1The I-sat that will cause ini			-			
3.2The I-sat that will cause ini	tial inductance	value approxim	ately 20% rollo	on at 125℃		

3.2The I-sat that will cause initial inductance value approximately 20% rolloff at 125 $^\circ\!C$

4.The I-rms that will cause temperature rise approximate 40°C without core loss.

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Mechanical & Dimensions					<u>г г</u>	(Unit: mm
					Code	Dimensions
					A	7.2 Max
					В	7.0 Max
					С	4.95 Max
					D	2.45±0.2
					E	1.52±0.3
R10	F.	- † Ç			F	3.65±0.5
	<u> </u>			6 ₩b点		
Recommend Land Pattern	Dimensions					(Unit: mm
					Code	Dimensions
·	— — 				а	3.1 Ref
					b	2.0 Ref
					С	3.35 Ref
	i					
	-h- -					
	,.					
Electrical Characteristics						
Deut Number	Inductance ¹	DCR ²	I-sat ^{3.1}	I-sat ^{3.2}	I-rms ⁴	
Part Number	(nH)	(mΩ)	(Amps)Max	(Amps)Max	(Amps)Typs	
MCSHT75Z72NHLR32	72±15%	0.32±10%	65.0	50.0	38.0	
MCSHT75ZR10LR32	105±15%	0.32±10%	44.0	34.0	38.0	
MCSHT75ZR12LR32	120±15%	0.32±10%	37.0	30.0	38.0	
MCSHT75ZR15LR32	150±15%	0.32±10%	30.0	24.0	38.0	
MCSHT75ZR18LR32	180±15%	0.32±10%	25.0	20.0	38.0	
MCSHT75ZR22LR32	226±15%	0.32±10%	20.0	16.0	38.0	
Note:						
1.Inductance is measured at	100 KHz and 1 ($0 \text{ Vrme at } 25^{\circ}\text{C}$				
2. The nominal DCR is measu			re.			

3.1The I-sat that will cause initial inductance value approximately 20% $\,$ rolloff at 25 $^\circ\!{\rm C}$

3.2The I-sat that will cause initial inductance value approximately 20% $\,$ rolloff at 125 $^\circ\!\!\mathbb{C}$

4. The I-rms that will cause temperature rise approximate 40°C without core loss.

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Mechanical & Dimensions						(Unit: mm
					Code	Dimensions
					A	7.2 Max
					В	7.0 Max
⊸ ⊢		◀			С	4.95 Max
		│ <u>↓</u>			D	2.45±0.2
		I E T			E	1.52±0.3
	A				F	3.65±0.5
R10 B	É <u>t</u>		<i>♀</i> ✓ 电阻测试点在	▲ A和b点		
Recommend Land Pattern	Dimensions					(Unit: mm
					Code	Dimensions
[]					а	3.1 Ref
					b	2.0 Ref
					С	3.35 Ref
Electrical Characteristics		DCR ²	I-sat ^{3.1}	I-sat ^{3.2}	I-rms ⁴	
Part Number	(nH)	mΩ)	(Amps)Max	(Amps)Max	(Amps)Typs	
MCSHT75Z72NHLR46	72±15%	0.46±10%	65.0	50.0	38.0	
MCSHT75ZR10LR46	105±15%	0.46±10%	44.0	34.0	38.0	
MCSHT75ZR12LR46	120±15%	0.46±10%	37.0	30.0	38.0	
MCSHT75ZR15LR46	150±15%	0.46±10%	30.0	24.0	38.0	
MCSHT75ZR18LR46	180±15%	0.46±10%	25.0	20.0	38.0	
MCSHT75ZR22LR46	226±15%	0.46±10%	20.0	16.0	38.0	
Note:						
1.Inductance is measured at 2.The nominal DCR is measured 3.1The I-sat that will cause ini 3.2The I-sat that will cause ini	red at 20°∁ aml tial inductance	pient temperatu value approxim	ately 20% rollo			

3.2The I-sat that will cause initial inductance value approximately 20% rolloff at 125 $^\circ\!\!\mathbb{C}$

4.The I-rms that will cause temperature rise approximate 40°C without core loss.

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Mechanical & Dimensions (Unit: mm) Dimensions Code 7.5 Max A 7.82 Max В \square 5.2 Max С 3.12±0.2 D Е 2.16±0.3 ¥ F 3.25±0.5 **R10** Ŕ б 电阻测试点在a和b点 **Recommend Land Pattern Dimensions** (Unit: mm) Dimensions Code 3.43 Ref а 2.79 Ref b a 2.4 Ref С **Electrical Characteristics** I-sat^{3.1} I-sat^{3.2} I-rms⁴ Inductance¹ DCR² Part Number (mΩ) (Amps)Max (Amps)Max (Amps)Typs (nH) 32±20% MCSHT85Z32NHLR17 0.17±10% 110.0 95.0 65.0 MCSHT85Z58NHLR17 58±15% 0.17±10% 83.0 61.0 65.0 MCSHT85Z72NHLR17 72±15% 0.17±10% 67.0 49.0 65.0 MCSHT85ZR10LR17 100±15% 0.17±10% 50.0 35.0 65.0 MCSHT85ZR20LR17 200±15% 0.17±10% 20.0 16.0 65.0 Note: 1.Inductance is measured at 100 KHz and 1.0 Vrms at 25°C 2. The nominal DCR is measured at 20°C ambient temperature.

3.1The I-sat that will cause initial inductance value approximately 20% rolloff at $25^\circ\!\mathbb{C}$

3.2The I-sat that will cause initial inductance value approximately 20% $\,$ rolloff at 125 $^\circ\!\mathrm{C}$

4. The I-rms that will cause temperature rise approximate 40°C without core loss.

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Mechanical & Dimensions						(Unit: mm)
					Code	Dimensions
					A	6.8±0.2
A	D				В	10.0±0.3
		7			C	5.0±0.2
		T.			D	2.54±0.2
					E	2.03±0.3
				~) ▼ 6	F	5.94 Ref
		/	电阻测试点在 a 利	□ b点		0.041101
Recommend Land Pattern	Dimensions					(Unit: mm)
					Code	Dimensions
 					а	2.8 Ref
					b	2.3 Ref
					С	5.6 Ref
Electrical Characteristics					L	
Part Number	Inductance ¹ (nH)	DCR ² (mΩ)	I-sat ^{3.1} (Amps)Max	l-sat ^{3.2} (Amps)Max	l-sat ^{3.3} (Amps)Max	l-rms ⁴ (Amps)Typs
Part Number MCSHT10705ZR10LR125				(Amps)Max		(Amps)Typs
	(nH)	(mΩ)	(Amps)Max 65,≧80nH		(Amps)Max	(Amps)Typs
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125	(nH) 100±15%	(mΩ) 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0
MCSHT10705ZR10LR125 MCSHT10705ZR12LR125	(nH) 100±15% 120±15%	(mΩ) 0.125±10% 0.125±10%	(Amps)Max 65,≧80nH	(Amps)Max	(Amps)Max	(Amps)Typs 40.0
MCSHT10705ZR10LR125 MCSHT10705ZR12LR125	(nH) 100±15% 120±15%	(mΩ) 0.125±10% 0.125±10%	(Amps)Max 65,≧80nH 55,≧96nH	(Amps)Max	(Amps)Max	(Amps)Typs 40.0
MCSHT10705ZR10LR125 MCSHT10705ZR12LR125	(nH) 100±15% 120±15% 	(mΩ) 0.125±10% 0.125±10%	(Amps)Max 65,≧80nH 55,≧96nH	(Amps)Max	(Amps)Max	(Amps)Typs 40.0
MCSHT10705ZR10LR125 MCSHT10705ZR12LR125	(nH) 100±15% 120±15% 	(mΩ) 0.125±10% 0.125±10%	(Amps)Max 65,≧80nH 55,≧96nH	(Amps)Max	(Amps)Max	(Amps)Typs 40.0
MCSHT10705ZR10LR125 MCSHT10705ZR12LR125	(nH) 100±15% 120±15% 	(mΩ) 0.125±10% 0.12	(Amps)Max 65,≧80nH 55,≧96nH 	(Amps)Max	(Amps)Max	(Amps)Typs 4 40.0

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Mechanical & Dimensions						(Unit: mm)
					Code	Dimensions
					A	7.0 Max
	- -]				В	10.4 Max
		<u>+</u>			С	4.95 Max
		E			D	2.5±0.2
	A	↑			E	1.52±0.3
					F	6.9±0.5
R10				 \ 6		
	<u> </u>		9	\backslash		
			电阻测试点	(在a和b点		
Recommend Land Pattern	Dimensions				· · ·	(Unit: mm)
					Code	Dimensions
					а	3.1 Ref
					b	2.0 Ref
					С	6.35 Ref
	6- -					
Electrical Characteristics			1	1	1	-
Part Number	Inductance ¹		I-sat ^{3.1}	I-sat ^{3.2}	I-rms⁴	
	(nH)	(mΩ)	(Amps)Max	(Amps)Max	(Amps)Typs	
MCSHT10705Z80NHLR31	80±15%	0.31±10%	90.0	64.0	53.0	
MCSHT10705ZR10LR31	100±15%	0.31±10%	73.0	57.0	53.0	
MCSHT10705ZR12LR31	120±15%	0.31±10%	60.0	48.0	53.0	
MCSHT10705ZR15LR31	150±15%	0.31±10%	47.0	37.0	53.0	
MCSHT10705ZR22LR31	220±15%	0.31±10%	33.0	26.0	53.0	
						_
						+
Noto						
Note:						
1.Inductance is measured at 1						
2. The nominal DCR is measur				# -1 OC°C		
3.1The I-sat that will cause init	ial inductance	value approxim	arely 20% rollo	IT AT 25 (

The I-sat that will cause initial inductance value approximately 20% $\,$ rolloff at 25 $^\circ\!\!\mathbb{C}$

3.2The I-sat that will cause initial inductance value approximately 20% rolloff at 125° C

4. The I-rms that will cause temperature rise approximate 40°C without core loss.

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Mechanical & Dimensions						(Unit: mm
					Code	Dimensions
					Α	7.0 Max
	_ →]				В	10.4 Max
		<u> </u>			С	4.95 Max
		E			D	2.5±0.2
					E	1.52±0.3
					F	6.9±0.5
R10				 ∖ 6		
			9 📕			
			电阻测试点	(在a和b点		
Recommend Land Pattern I	Dimensions				I . I	(Unit: mm
					Code	Dimensions
					а	3.1 Ref
					b	2.0 Ref
					С	6.35 Ref
· · · · · · · · · · · · · · · · · · ·						
	6- 					
Electrical Characteristics						
	Inductance ¹	DCR ²	I-sat ^{3.1}	I-sat ^{3.2}	I-rms ⁴	
Part Number	(nH)	(mΩ)	(Amps)Max	(Amps)Max	(Amps)Typs	
MCSHT10705Z80NHLR39	80±15%	0.39±10%	90.0	64.0	53.0	
MCSHT10705ZR10LR39	100±15%	0.39±10%	73.0	57.0	53.0	
MCSHT10705ZR12LR39	120±15%	0.39±10%	60.0	48.0	53.0	
MCSHT10705ZR15LR39	150±15%	0.39±10%	47.0	37.0	53.0	
MCSHT10705ZR22LR39	220±15%	0.39±10%	33.0	26.0	53.0	
Note:						
1.Inductance is measured at 1						
1.Inductance is measured at 1 2.The nominal DCR is measur 3.1The I-sat that will cause ini	red at 20°C am	bient temperatu				

3.2The I-sat that will cause initial inductance value approximately 20% rolloff at 125 $^\circ$ C

4. The I-rms that will cause temperature rise approximate 40°C without core loss.

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Mechanical & Dimensions Π E 4 **R10** B 电阻测试点在a和b点 **Recommend Land Pattern Dimensions**



Electrical Characteristics

Part Number	Inductance ¹	DCR ²	I-sat ^{3.1}	I-sat ^{3.2}	I-rms⁴	
	(nH)	(mΩ)	(Amps)Max	(Amps)Max	(Amps)Typs	
MCSHT10705Z80NHLR47	80±15%	0.47±10%	90.0	64.0	50.0	
MCSHT10705ZR10LR47	100±15%	0.47±10%	73.0	57.0	50.0	
MCSHT10705ZR12LR47	120±15%	0.47±10%	60.0	48.0	50.0	
MCSHT10705ZR15LR47	150±15%	0.47±10%	47.0	37.0	50.0	
MCSHT10705ZR22LR47	220±15%	0.47±10%	33.0	26.0	50.0	
NI-4	-	•	•	•		•

Note:

1.Inductance is measured at 100 KHz and 1.0 Vrms at 25°C

2. The nominal DCR is measured at 20°C ambient temperature.

3.1The I-sat that will cause initial inductance value approximately 20% rolloff at 25° C

3.2The I-sat that will cause initial inductance value approximately 20% rolloff at 125°C

4. The I-rms that will cause temperature rise approximate 40°C without core loss.

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(Unit: mm)

Dimensions

7.0 Max

10.4 Max

4.95 Max

2.5±0.2

1.52±0.3

6.9±0.5

(Unit: mm)

Dimensions

3.1 Ref

2.0 Ref

6.35 Ref

Code

A В

С

D

Е

F

Code

а

b

С

ъ

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Mechanical & Dimensions						(Unit: mm)
					Code	Dimensions
					A	7.0 Max
A	- - I				В	10.4 Max
		<u>↓</u>			С	4.95 Max
		E			D	2.5±0.2
					E	1.52±0.3
					F	6.9±0.5
R10				 ► 6		
_ v			♀ ∕▼ 电阻测试点			
Recommend Land Pattern I	Dimensions				Code	(Unit: mm
					Code	Dimensions
					a b	3.1 Ref 2.0 Ref
					b c	6.35 Ref
					C	0.33 Kei
	N- 1					
Electrical Characteristics						
Part Number	Inductance ¹	DCR ²	I-sat ^{3.1}	I-sat ^{3.2}	I-rms⁴	
	(nH)	(mΩ)	(Amps)Max	(Amps)Max	(Amps)Typs	
MCSHT10705Z80NHLR55	80±15%	0.55±10%	90.0	64.0	50.0	
MCSHT10705ZR10LR55	100±15%	0.55±10%	73.0	57.0	50.0	
MCSHT10705ZR12LR55	120±15%	0.55±10%	60.0	48.0	50.0	
MCSHT10705ZR15LR55	150±15%	0.55±10%	47.0	37.0	50.0	
MCSHT10705ZR22LR55	220±15%	0.55±10%	33.0	26.0	50.0	
Note:		l		l		1
1.Inductance is measured at 1 2.The nominal DCR is measur 3.1The I-sat that will cause init 3.2The I-sat that will cause init	red at 20°C amb tial inductance	pient temperatu value approxim	ately 20% rollo			

3.2The I-sat that will cause initial inductance value approximately 20% rolloff at 125 $^\circ$ C

4. The I-rms that will cause temperature rise approximate 40°C without core loss.

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Mechanical & Dimensions (Unit: mm) Dimensions Code 7.65±0.3 A В 10.2±0.3 7.2±0.3 С E 2.2±0.3 D Е 2.54 ± 0.3 F 5.12±0.5 **R10** Ŕ ъ 电阻测试点在a和b点 **Recommend Land Pattern Dimensions** (Unit: mm) Dimensions Code 3.1 Ref а 2.0 Ref b a 6.35 Ref С **Electrical Characteristics** I-rms⁴ I-sat^{3.1} I-sat^{3.2} Inductance¹ DCR² Part Number (nH) (mΩ) (Amps)Max (Amps)Max (Amps)Typs MCSHT107975ZR22LR29 215±15% 0.29±10% 52,≧155nH 43.0 65.0 Note: 1.Inductance is measured at 100 KHz and 1.0 Vrms at 25°C 2. The nominal DCR is measured at 20°C ambient temperature.

3.1The I-sat that will cause rolloff nominal inductance value at $25^\circ\!\mathbb{C}$

3.2The I-sat that will cause initial inductance value approximately 20% rolloff at 125 $^\circ\!\!\mathbb{C}$

4. The I-rms that will cause temperature rise approximate 40°C without core loss.



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Mechanical & Dimensions						(Unit: mm)
					Code	Dimensions
					А	12.3±0.3
					В	11.5±0.3
					С	3.91±0.15
R33 B1B			_		D	3.05±0.2
		<u>+</u>			Е	9.1±0.25
	//3////				F	2.54±0.3
⊢–				~	Н	9.1±0.25
电阻测	试点在 ① 和 ② 点				_	3.0±0.2
Recommend Land Pattern I	Dimensions					(Unit: mm)
e					Code	Dimensions
	г				a	2.8 Ref
					b	3.35 Ref
					c d	2.7 Ref 9.4 Ref
	Ł				-	12.0 Ref
					е	12.0 Rei
Electrical Characteristics						
Part Number	Inductance ¹	DCR ²	I-sat ³	I-rms⁴		
	(nH)	(mΩ)	(Amps)Max	(Amps)Typs		
MCSHT124ZR33LR45Z2T	330±15%	0.45±10%	40,≧240nH	38.0		
Note:						
1.Inductance is measured at 1						
2. The nominal DCR is measure						
3. The I-sat that will cause rollo					ic Din1 2	
4.The I-rms that will cause ter	mperature rise a	approximate 40		ाण्ड्य ,ाल्डा मणाग	. 13 F1111-2.	

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Mechanical & Dimensions (Unit: mm) Dimensions Code 15.0±0.3 A 11.0±0.3 В 2 С 2.7±0.3 R16 3 D 3.0±0.2 (1)Е 2.5±0.3 F 8.5±0.3 G 2.5±0.3 **Recommend Land Pattern Dimensions** (Unit: mm) Dimensions Code 2.8 Ref а 3.3 Ref b 2.2 Ref С 8.8 Ref d 15.5 Ref е **Electrical Characteristics** I-sat^{3.2} I-rms⁴ I-sat^{3.1} Inductance¹ DCR² Part Number (Amps)Max (Amps)Max (Amps)Typs (nH) (mΩ) MCSHT151103ZR16LR66Z2T 165±15% 0.66Max 55,≧140nH 45,≧140nH 28.5 Note: 1.Inductance is measured at 100 KHz and 1.0 Vrms at 25°C, test point is Pin1-2. 2. The nominal DCR is measured at 20°C ambient temperature ,test point is Pin1-2. 3.1The I-sat that will cause rolloff nominal inductance value at 25°C ,test point is Pin1-2. 3.2The I-sat that will cause rolloff nominal inductance value at 100°C ,test point is Pin1-2.

4. The I-rms that will cause temperature rise approximate 40°C without core loss ,test point is Pin1-2.

RF^S Specifications subject to change without notice.Please confirm according to our company for latest information.

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Packaging

Reel Dimension:



MCSHT75 13" x16mm 330 100 16.5 20.7 1500 MCSHT85 13" x16mm 330 100 16.5 20.7 1000 MCSHT10705 13" x24mm 330 100 24.5 28.7 1000 MCSHT107975 13" x24mm 330 100 24.5 28.7 500 MCSHT124-2T 13" x24mm 330 100 24.5 28.7 900 MCSHT151103-2T 13" x24mm 330 100 24.5 28.7 1000 MCSHT151103-2T 13" x24mm 100 100 100 100 100 100 100<	P/N	Туре	A(mm)	B(mm)	G(mm)	T(mm)	Chip/Reel
MCSHT10705 13" x 24mm 330 100 24.5 28.7 1000 MCSHT107975 13" x 24mm 330 100 24.5 28.7 500 MCSHT124-2T 13" x 24mm 330 100 24.5 28.7 900	MCSHT75	13" x16mm	330	100	16.5	20.7	1500
MCSHT107975 13" x 24mm 330 100 24.5 28.7 500 MCSHT124-2T 13" x 24mm 330 100 24.5 28.7 900	MCSHT85	13" x16mm	330	100	16.5	20.7	1000
MCSHT124-2T 13" x 24mm 330 100 24.5 28.7 900	MCSHT10705	13" x 24mm	330	100	24.5	28.7	1000
	MCSHT107975	13" x 24mm	330	100	24.5	28.7	500
MCSHT151103-2T 13" x 24mm 330 100 24.5 28.7 1000 Image: Constraint of the second seco	MCSHT124-2T	13" x 24mm	330	100	24.5	28.7	900
Image: set of the	MCSHT151103-2T	13" x 24mm	330	100	24.5	28.7	1000
Image: sector of the sector							
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Packaging

Packaying									
Tape Dimension:									
◆ ◆ ◆ ◆ 后空200m									
P/N	Ao	Во	Ко	Р	W				
MCSHT75	6.6±0.1	7.5±0.1	5.2±0.1		16.0±0.3				
MCSHT85	7.9±0.1	7.7±0.1	5.1±0.1		16.0±0.3				
MCSHT10705	7.5±0.1	10.4±0.1			24.0±0.3				
MCSHT107975 MCSHT124-2T	8.2±0.1	10.7±0.1 12.9±0.1			24.0±0.3				
					24.0±0.3				
MCSHT151103-2T	11.6±0.1	15.7±0.1	3.4±0.1	16.0±0.1	24.0±0.3				
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Packaging

Tearing Off Force:



%Storage Conditions

- 1. Recommended products should be used within 6 months form the time of delivery.
- 2. The packaging material should be kept where no chlorine or sulfur exists in the air.

X Transportation

- 1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- 2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
- 3. Bulk handling should ensure that abrasion and mechanical shock are minimized.

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Reliability and Testing Conditions

Item	Specification	Conditions				
Operating temperature range	-40°C ~ +125°C (Including self-temperature rise)					
Storage temperature and humidity range	-40°C ~ +85°C , 70% RH Max					
Solderability	More than 90% of the terminal electrode should be covered with solder.	 Preheat: 150 °C, 60 sec Solder: Sn96.5%-Ag3%-Cu0.5% Temperature: 245±5°C Flux for lead free: Rosin 9.5% Dip time: 4±1 sec Depth: completely cover the termination 				
Resistance to Soldering Heat	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	 Solder technique simulation: SMD Temperature (°C): 260 ± 5 (solder temp) Time (s): 10 ± 1 Temperature ramp / immersion and emersion rate: 25 mm/s ± 6 mm/s Number of heat cycles: 1 				
Resistance to High Temperature	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	500 hrs. at 125°C±5°C Unpowered. Measurement at 24±4 hours after test conclusion.				
Resistance to Low Temperature	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	500 hrs. at -40°C±5°C. Unpowered. Measurement at 24±4 hours after test conclusion.				
Resistance to Humidity	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	After 500 hours in $40\pm2^\circ\mathbb{C}$ and 90 to 95% humidity , and hour drying under normal condition.				
		After 100 cycles of following condition.				
Thermal shock	Inductance within ±20% of initial value. No disconnection or short circuit. The appearance shall not break.	StepTemperature ($^{\circ}$ C)Times (min.)1-40±5 $^{\circ}$ C302Room TemperatureWithin 33125±5 $^{\circ}$ C304Room TemperatureWithin 3				
Vibration Test	Inductance within ±10% of initial value and appearance shall not break.	After vibration for 1hour, In each of three orientations at sweep vibration (10~55~10Hz) with 1.52mm P-P Amplitudes.				
Terminal strength	The terminal electrode and the ferrite must not be damaged	Solder a chip to test substrate, and then laterally app load 10N in the arrow direction, Duration :5s				
Drop Test	Inductance within ±20% of initial value. The appearance shall not break.	Drop 3 times on a concrete floor from a height of 75cm by inimum packing				

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