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High Current Common Mode Chokes



- · Solutions for use in a wide array of power line circuits
- · Ideal for use in consumer electronics and industrial applications
- \bullet Suppression of high frequency common mode noise up to 30 MHz
- Excellent current ratings up to 40 A
- · Isolation (hipot) up to 3250 Vrms

Core material See part number page for details Terminations RoHS compliant tin-silver-copper over copper Weight See part number page for details Ambient temperature -40°C to +85°C with Irms current Maximum part temperature +125°C (ambient + temp rise) +105°C (CMH3923-30431L) Sterment +0°C to +105°C

Storage temperature Component: -40°C to +125°C. Tray packaging: -40°C to +80°C **Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

Part number	Inductance ¹ min (µH)	DCR ² max (mOhms)	Irms³ (A)	lsolation⁴ (Vrms)	Length max (mm)	Width max (mm)	Height max (mm)
CMH2617-11340L	11	0.5	40	2500	26	26	17
CMH3923-30431L	300	1.5	31	2500	39	38	23
CMH7036-75433L	750	2.0	33	3250	70	70	36
CMV3532-10516L	1000	5.0	16	2500	35	22	32
CMH4530-10523L	1000	2.7	23	2500	45	45	30
CMH3921-10534L	1000	1.5	34	2500	39	38	21
CMH7018-10535L	1000	2.0	35	2500	70	70	18
CMH3921-20522L	2000	3.2	22	2500	39	38	21.5
CMH3815-24516L	2400	5.5	16	2500	38.5	38.5	15.5

1. Inductance shown for each winding. Measurement details are part number specific. See part number page for details.

2. DCR is specified per winding.

 Current flows through both windings connected in series that causes a 40°C rise. This information is for reference only and does not represent absolute maximum ratings.

4. Isolation (hipot) measured for 1 minute.

5. Electrical specifications at 25°C.



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Common Mode Chokes – CMH2617-11340L





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Common Mode Chokes – CMH3923-30431L





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Common Mode Chokes – CMH7036-75433L





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Common Mode Chokes – CMV3532-10516L



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Common Mode Chokes – CMH4530-10523L

Part number	Common mode impedance max (Ohms)	Inductan min (μH	ice ¹ I)	Irms² (A)	DCR max ³ (mOhms)	Isolation ⁴ (Vrms)	
CMH4530-10523L	1967 @ 4.9 MHz	1000		23	2.7	2500	
1. Inductance shown for 0 Adc on an Agilent/H	each winding, measured at 10 kH P 4263B LCR meter or equivalen	lz, 0.1 Vrms, t.	Typica	l Attenuation	n		
2. Current flows through 40°C rise. This information	both windings connected in serie ation is for reference only and doe	s that causes a	0	Differential mode			
3. DCR is specified per v	vinding.		10				
4. Isolation (hipot) measure	ured for 1 minute.						
5. Electrical specification	is at 25°C.		a 20				
			p P				
			30 High				
			enu —	Common mode.			
			40				
	000 000 .						
		max	50				
		¥					
$\checkmark \frac{1.77}{\sqrt{2}} \varnothing \max \rightarrow$		A	60				
45,0 2	$\frac{0.13}{2,0}$ g typ $\frac{0.13}{4,0}$	1 ± 0.04 ± 1.0	0.1	Fr	1 equency (MHz)	10 30	
			Typica	1 Impedance	versus Freq	nency	
	$4 \rightarrow \frac{0.299 \pm 0.02}{7,6 \pm 0.5}$		10000				
0.815	<u>5 ±0.02</u>						
20,7	4 ± 0.5	⊘ typ					
	₹		1000				
	$\frac{0.881 \pm 0.02}{22.4 \pm 0.5}$		<u> </u>				
inches	Recommended		0				
Dimensions are in $\frac{\text{mens}}{\text{mm}}$	Land Pattern		20 100				
Bookeging 20 per trav			eqa				
Packaging 20 per tray							
Core material Nanocr	ystalline		10				
Weight 77.04 g							
10 3							
10000 ∫			1 <u> </u>		1	10 30	
		Frequency (MHz)					
(000)							
10-1 LO 2							



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Common Mode Chokes – CMH3921-10534L





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Common Mode Chokes – CMH7018-10535L





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Common Mode Chokes CMH3921-20522L

Part number	Common mode impedance max (Ohms)	Inductance ¹ min (μH)		Irms ² (A)	DCR max ³ (mOhms)	Isolation ⁴ (Vrms)
CMH3921-20522L	2870 @ 5.0 MHz	2000		22	3.2	2500
Part number CMH3921-20522L 1. Inductance shown for a 0 Adc on an Agilent/HI 2. Current flows through I 40°C rise. This information absolute maximum ration of the second structure of the second s	Common mode impedance max (Ohms) 2870 @ 5.0 MHz bach winding, measured at 10 kHz, 0.1 2463B LCR meter or equivalent. both windings connected in series that tion is for reference only and does not only and does not reference only and does not sat 25°C. max ef ef ef ef ef ef ef ef ef ef ef ef ef	Inductance ¹ 2000 Vrms, T causes a represent 1 1 1 1 1 1 1 1 1 1 1 1 1	ypical 0 10 20 30 40 50 60 70 0.1 ypical 1000 1000 1000 1000 1000 1000 1000 1000 10 1	Irms ² 22 Attenuation	DCR max ³ 3.2	<u>Isolation</u> ⁴ 2500
Land Fattern	II		1			
Packaging 36 per tray Core material Nanocry Weight 52.19 g	rstalline		0.1	Fr	1 equency (MHz)	10 30



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Common Mode Chokes – CMH3815-24516L

Part number	Common mode impedance max (Ohms)	Inductance ¹ min (μH)		Irms ² (A)	DCR max ³ (mOhms)	³ Isolation ⁴ (Vrms)		
CMH3815-24516L	1830 @ 5.7 MHz	2400		16	5.5	2500		
 Inductance shown for each winding, measured at 10 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent. Current flows through both windings connected in series that causes a 40°C rise. This information is for reference only and does not represent absolute maximum ratings. 		Hz, 0.1 Vrms, tt. T	Typical Attenuation					
		es not represent	0	Differential n	node			
 DCR is specified per w Isolation (hipot) measurement 	vinding. ured for 1 minute.		10					
5. Electrical specification	s at 25°C.	B	2 20					
	0.01	on (c						
	<u>וס.ס. 15,5</u> m תררר ח_חות ו		30	Common mod	e			
		Atte	40					
	$\rightarrow \parallel \checkmark \qquad \uparrow \qquad$		50					
$-\frac{1.52}{38,5}$ max $-$	T,5 3,5 ±0	,5						
			60 0.1		1	10 30		
0 256 +0 039				I	Frequency (MH	lz)		
6,5 ±1,0	20	T	Typical	l Impedanc	e versus Fi	requency		
<u>0.91 ±0</u> 23,0 ±		-03 1	10000					
			1000					
$\frac{0.59 \pm 0.039}{15,0 \pm 1,0} \qquad \qquad$	$\frac{170}{78} \otimes \text{typ}$ 10	- ⁰⁴						
Recommended Land Pattern	Dimensions are in $\frac{in}{r}$	ches O						
Packaging 36 per trav		danc						
Core material Napoen	retalling	mpe						
Weight 30.59 g	Jotannie	_	10					
			1					
			0.1	F	1 Frequency (MH	10 30		
				•	· · · · · · · · · · · · · · · · · · ·	- ,		



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