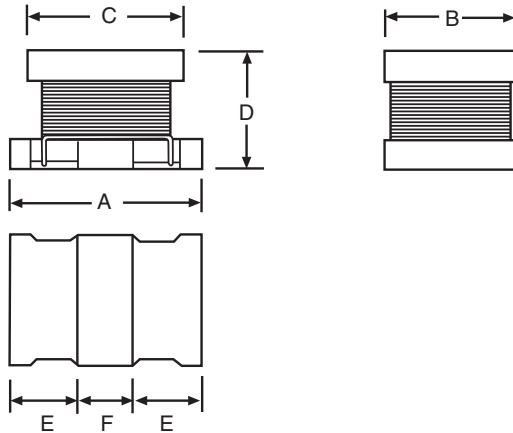




RL-8000-1 RL-8000-2, RL-8000-3

SMD POWER CHOKES



PART NUMBER IDENTIFICATION

RL-8000 -1 R10 M
(1) (2) (3) (4)

- (1) SERIES NAME
 - (2) DIMENSIONS
 - (3) INDUCTANCE CODE
 - (4) TOLERANCE CODE
- K = ±10% M = ±20%

FEATURES

- Surface mount inductor with high current rating.
- Low resistance to keep power loss minimum.

APPLICATIONS

Excellent for power line DC-DC conversion applications used in hard disk, notebook computers and other electronic equipment.

MATERIALS CONSTRUCTION

- a. Core: Ferrite DR Core
- b. Wire: Enameled Copper Wire
- c. Terminal: Ag + Cu + Ni + Sn/Pb

GENERAL SPECIFICATIONS

Temperature rise: 40°C Max.
 Operating Temperature: -40°C to +85°C
 Storage Temperature: -25°C to +125°C
 Resistance to solder heat: 260°C for 10 seconds
 Rated Current: Based on Temperature Rise
 & L/LOA = 10% max.

TAPE AND REEL PACKAGING

Part number	Pieces per reel	Plastic reel size
RL-8000-1	2,000	7"
RL-8000-2	500	7"
RL-8000-3	250	7"

MECHANICAL DIMENSIONS (m/m)

Part Number	EIA	A	B	C	D	E (Ref)	F (Ref)
RL-8000-1	1210	3.20±0.30	2.50±0.30	2.20±0.30	2.40 Max	0.9	1.3
RL-8000-2	1812	4.50±0.30	3.20±0.30	3.60±0.30	3.00 Max	1.2	1.6
RL-8000-3	2220	5.70±0.30	5.00±0.30	5.00±0.30	4.90 Max	1.3	1.7



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Part Number	Inductance (μH)	Q Min	Test Freq. (KHz)		RDC (Ω) Max	IDC (mA) Max	SRF (MHz) Max
			L	Q			
RL-8000-1-1R0M	1.0	20	1000	1000	0.50	445	100.0
RL-8000-1-1R2M	1.2	20	1000	1000	0.60	425	100.0
RL-8000-1-1R5K	1.5	20	1000	1000	0.60	400	75.0
RL-8000-1-1R8K	1.8	20	1000	1000	0.70	390	60.0
RL-8000-1-2R2K	2.2	20	1000	1000	0.80	370	50.0
RL-8000-1-2R7K	2.7	20	1000	1000	0.90	320	43.0
RL-8000-1-3R3K	3.3	20	1000	1000	1.00	300	38.0
RL-8000-1-3R9K	3.9	20	1000	1000	1.10	290	35.0
RL-8000-1-4R7K	4.7	20	1000	1000	1.20	270	31.0
RL-8000-1-5R6K	5.6	20	1000	1000	1.30	250	28.0
RL-8000-1-6R8K	6.8	20	1000	1000	1.50	240	25.0
RL-8000-1-8R2K	8.2	20	1000	1000	1.60	225	23.0
RL-8000-1-100K	10.0	35	1000	1000	1.80	190	20.0
RL-8000-1-120K	12.0	35	1000	1000	2.00	180	18.0
RL-8000-1-150K	15.0	35	1000	1000	2.20	170	16.0
RL-8000-1-180K	18.0	35	1000	1000	2.50	165	15.0
RL-8000-1-220K	22.0	35	1000	1000	2.80	150	14.0
RL-8000-1-270K	27.0	40	1000	1000	3.10	125	13.0
RL-8000-1-330K	33.0	40	1000	1000	3.50	115	12.0
RL-8000-1-390K	39.0	40	1000	1000	3.90	110	11.0
RL-8000-1-470K	47.0	40	1000	1000	4.30	100	11.0
RL-8000-1-560K	56.0	40	1000	1000	4.90	85	10.0
RL-8000-1-680K	68.0	40	1000	1000	5.50	80	9.0
RL-8000-1-820K	82.0	40	1000	796	6.20	70	8.5
RL-8000-1-101K	100.0	40	1000	796	7.00	80	8.0
RL-8000-1-121K	120.0	40	1000	796	8.00	75	7.5
RL-8000-1-151K	150.0	40	1000	796	9.30	70	7.0
RL-8000-1-181K	180.0	40	1000	796	10.20	65	6.0
RL-8000-1-221K	220.0	40	1000	796	11.80	65	5.5
RL-8000-1-271K	270.0	40	1000	796	12.50	65	5.0
RL-8000-1-331K	330.0	40	1000	796	13.00	65	5.0
RL-8000-1-391K	390.0	50	1000	796	22.00	50	5.0
RL-8000-1-471K	470.0	50	1	796	25.00	45	5.0
RL-8000-1-561K	560.0	50	1	796	28.00	40	5.0

Note:

1. Inductance measured by LCR Meter HP4284A.
2. RDC Measured by Milliohm meter HP4338A.



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Part Number	Inductance (µH)	Q Min	Test Freq. (KHz)		RDC (Ω) Max	IDC (mA) Max	SRF (MHz) Max
			L	Q			
RL-8000-2-1R0M	1.0	20	1000	1000	0.20	500	120.0
RL-8000-2-1R2M	1.2	20	1000	1000	0.20	500	100.0
RL-8000-2-1R5M	1.5	20	1000	1000	0.30	500	85.0
RL-8000-2-1R8M	1.8	20	1000	1000	0.30	500	75.0
RL-8000-2-2R2M	2.2	20	1000	1000	0.30	500	62.0
RL-8000-2-2R7M	2.7	20	1000	1000	0.32	500	53.0
RL-8000-2-3R3M	3.3	20	1000	1000	0.35	500	47.0
RL-8000-2-3R9M	3.9	20	1000	1000	0.38	500	41.0
RL-8000-2-4R7K	4.7	30	1000	1000	0.40	500	38.0
RL-8000-2-5R6K	5.6	30	1000	1000	0.47	500	33.0
RL-8000-2-6R8K	6.8	30	1000	1000	0.50	450	31.0
RL-8000-2-8R2K	8.2	30	1000	1000	0.56	450	27.0
RL-8000-2-100K	10.0	35	1000	1000	0.56	400	23.0
RL-8000-2-120K	12.0	35	1000	1000	0.62	380	21.0
RL-8000-2-150K	15.0	35	1000	1000	0.73	360	19.0
RL-8000-2-180K	18.0	35	1000	1000	0.82	340	17.0
RL-8000-2-220K	22.0	35	1000	1000	0.94	320	15.0
RL-8000-2-270K	27.0	35	1000	1000	1.10	300	14.0
RL-8000-2-330K	33.0	35	1000	1000	1.20	270	12.0
RL-8000-2-390K	39.0	35	1000	1000	1.40	240	11.0
RL-8000-2-470K	47.0	35	1000	1000	1.50	220	10.0
RL-8000-2-560K	56.0	35	1000	1000	1.70	200	9.3
RL-8000-2-680K	68.0	35	1000	1000	1.90	180	8.4
RL-8000-2-820K	82.0	35	1000	1000	2.20	170	7.5
RL-8000-2-101K	100.0	40	1000	796	2.50	160	6.8
RL-8000-2-121K	120.0	40	1000	796	3.00	150	6.2
RL-8000-2-151K	150.0	40	1000	796	3.70	130	5.5
RL-8000-2-181K	180.0	40	1000	796	4.50	120	5.0
RL-8000-2-221K	220.0	40	1000	796	5.40	110	4.5
RL-8000-2-271K	270.0	40	1000	796	6.80	100	4.0
RL-8000-2-331K	330.0	40	1000	796	8.20	95	3.6
RL-8000-2-391K	390.0	40	1000	796	9.70	90	3.3
RL-8000-2-471K	470.0	40	1	796	11.80	80	3.0
RL-8000-2-561K	560.0	40	1	796	14.50	70	2.7
RL-8000-2-681K	680.0	40	1	796	17.00	65	2.5
RL-8000-2-821K	820.0	40	1	796	20.50	60	2.2
RL-8000-2-102K	1000.0	40	1	252	25.00	50	2.0
RL-8000-2-122K	1200.0	40	1	252	30.00	45	1.8
RL-8000-2-152K	1500.0	40	1	252	37.00	40	1.6
RL-8000-2-182K	1800.0	40	1	252	45.00	35	1.5
RL-8000-2-222K	2200.0	40	1	252	50.00	30	1.3

Note:

1. Inductance measured by LCR Meter HP4284A.
2. RDC Measured by Milliohm meter HP4338A.



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Part Number	L Tolerance	L (μ H)	L Test Freq.	SRF (MHz) Min	DCR Max (Ω)	IDC (mA) Max
RL-8000-3-R12M	$\pm 20\%$	0.12	1.0MHz	450.0	0.0098	6000
RL-8000-3-R27M	$\pm 20\%$	0.27	1.0MHz	300.0	0.0140	5300
RL-8000-3-R47M	$\pm 20\%$	0.47	1.0MHz	200.0	0.0182	4800
RL-8000-3-1R0M	$\pm 20\%$	1.0	1.0MHz	150.0	0.0270	4000
RL-8000-3-1R5M	$\pm 20\%$	1.5	1.0MHz	110.0	0.0310	3700
RL-8000-3-2R2M	$\pm 20\%$	2.2	1.0MHz	60.0	0.0410	3200
RL-8000-3-3R3M	$\pm 20\%$	3.3	1.0MHz	40.0	0.0400	2900
RL-8000-3-4R7M	$\pm 20\%$	4.7	1.0MHz	30.0	0.0574	2700
RL-8000-3-6R8M	$\pm 20\%$	6.8	1.0MHz	25.0	0.104	2000
RL-8000-3-100X	$\pm 10\%$ or $\pm 20\%$	10.0	1.0MHz	20.0	0.13	1700
RL-8000-3-150X	$\pm 10\%$ or $\pm 20\%$	15.0	1.0MHz	17.0	0.21	1400
RL-8000-3-220X	$\pm 10\%$ or $\pm 20\%$	22.0	1.0MHz	15.0	0.266	1200
RL-8000-3-330X	$\pm 10\%$ or $\pm 20\%$	33.0	1.0MHz	12.0	0.448	900
RL-8000-3-470X	$\pm 10\%$ or $\pm 20\%$	47.0	1.0MHz	10.0	0.560	800
RL-8000-3-680X	$\pm 10\%$ or $\pm 20\%$	68.0	1.0MHz	7.6	0.938	640
RL-8000-3-101X	$\pm 10\%$ or $\pm 20\%$	100.0	100KHz	6.5	1.204	560
RL-8000-3-151X	$\pm 10\%$ or $\pm 20\%$	150.0	100KHz	5.0	2.66	420
RL-8000-3-221X	$\pm 10\%$ or $\pm 20\%$	220.0	100KHz	4.0	3.36	320
RL-8000-3-331X	$\pm 10\%$ or $\pm 20\%$	330.0	100KHz	3.1	6.16	270
RL-8000-3-471X	$\pm 10\%$ or $\pm 20\%$	470.0	100KHz	2.4	7.56	240
RL-8000-3-681X	$\pm 10\%$ or $\pm 20\%$	680.0	100KHz	1.9	11.34	190
RL-8000-3-102X	$\pm 10\%$ or $\pm 20\%$	1000.0	10KHz	1.7	14.42	150
RL-8000-3-222X	$\pm 10\%$ or $\pm 20\%$	2200.0	10KHz	1.2	30.10	100
RL-8000-3-472X	$\pm 10\%$ or $\pm 20\%$	4700.0	10KHz	0.8	61.04	70
RL-8000-3-103X	$\pm 10\%$ or $\pm 20\%$	10000.0	10KHz	0.5	140.0	50

Note:

1. Test Equipment: Agilent/HP 4287 + Agilent/HP 8753D or HP 4291A
2. Tolerance Available: K = $\pm 10\%$ M = $\pm 20\%$



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