

# SURFACE-MOUNT MULTI-LAYER CERAMIC CHIP INDUCTORS

## AIML-0402 SERIES

### FEATURES:

- Multilayer ceramic structure
- Closed magnetic circuit
- Avoids crosstalk
- Excellent solderability
- High reliability
- Counter measures for complying with FCC,VDE,CSA,VCCI and CE

### OPTIONS:

- Packaging:Tape & Reel is standard (Qty:2000pcs)  
Bulk packaging available for smaller quantities
- Tolerance:20% and 10% is standard, tighter tolerances available

### COMMON APPLICATIONS:

- VCRs
- Mobil Radios
- Cordless Telephones
- Modems
- Global Positioning Systems
- Wireless Communications Equipment
- Network Systems
- Computer Products

### ELECTRICAL CHARACTERISTICS:

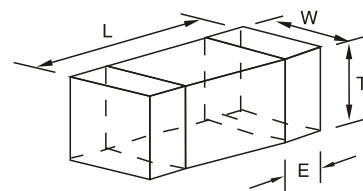
Part Number	L (nH)	Tol %	Q Min	SRF MHz Min	DCR $\Omega$ Max	IDC Max mA	Test Freq MHz
AIML-0402-47NM	47nH	± 20	10	220	0.045	25	50
AIML-0402-56NM	56nH	± 20	10	210	0.045	25	50
AIML-0402-68NM	68nH	± 20	10	210	0.045	25	50
AIML-0402-82NM	82nH	± 20	10	200	0.045	25	50
AIML-0402-R10K	.10	± 10	15	200	0.70	25	25
AIML-0402-R12K	.12	± 10	15	165	0.70	25	25
ALML-0402-R15K	.15	± 10	15	140	0.80	25	25
AIML-0402-R18K	.18	± 10	15	120	0.80	25	25
AIML-0402R22K	.22	± 10	15	110	1.00	25	25
AIML-0402-R27K	.27	± 10	15	95	1.20	25	25
AIML-0402-R33K	.33	± 10	15	85	1.20	25	25
AIML-0402-R39K	.39	± 10	15	70	1.3	20	25
AIML-0402-R47K	.47	± 10	15	68	1.5	20	25
AIML-0402-R56K	.56	± 10	15	55	2.0	20	25
AIML-0402-R68K	.68	± 10	15	50	2.3	20	25
AIML-0402-R82K	.82	± 10	15	45	3.0	18	25
AIML-0402-1R0K	1.0	± 10	20	40	1.2	25	10
AIML-0402-1R2K	1.2	± 10	20	35	1.2	25	10
AILM-0402-1R5K	1.5	± 10	20	30	1.3	20	10
AIML-0402-1R8K	1.8	± 10	20	30	1.4	20	10
AIML-0402-2R2K	2.2	± 10	20	28	1.7	20	10
AIML-0402-2R7K	2.7	± 10	20	22	1.9	20	10
AIML-0402-3R3K	3.3	± 10	20	20	2.0	20	10
AIML-0402-3R9K	3.9	± 10	20	18	2.2	20	10
AIML-0402-4R7K	4.7	± 10	20	15	2.5	18	10
AIML-0402-5R6K	5.6	± 10	20	13	2.2	18	4
AIML-0402-6R8K	6.8	± 10	20	11	2.4	18	4
AIML-0402-8R2K	8.2	± 10	20	10	2.9	18	4
AIML-0402-100K	10	± 10	20	9	3.1	10	2
AIML-0402-120K	12	± 10	20	8	3.3	5	2
AIML-0402-150K	15	± 10	20	8	3.5	5	1
AIML-0402-180K	18	± 10	20	8	3.5	5	1

Note: 1. K= ± 10%,M= ± 20%,N= ± 30%

### TECHNICAL INFORMATION:

- Testing:(Equivalent acceptable)  
Inductance & Q-HP4195A+HP41951  
DCR:VOAC-7412  
SRF:HP8753C
- Solderability:75% of the terminal electrode shall be covered  
Preheat: @ 180°C ± 5°C for 2-3 minutes  
Solder temperature:230°C for 4 seconds ± 1 second Flux:Emersion into methanol solution with Colophony for 3 to 5 seconds.
- IDC:The DC current at which tither the initial L value is decreased by 5% with the application of DC bias or the value of current at which the temperature of the element is increased by 20°C
- Operating Temperature:-40°C to +100°C

### PHYSICAL CHARACTERISTICS:



Dimensions: Inches (mm)

L	$\frac{0.063 \pm 0.006}{(1.6 \pm 0.15)}$
W	$\frac{0.031 \pm 0.006}{(0.8 \pm 0.15)}$
T	$\frac{0.031 \pm 0.006}{(0.8 \pm 0.15)}$
E	$\frac{0.012 \pm 0.008}{(0.3 \pm 0.2)}$