



Features

- High Q value, self-resonant frequency
- Tight tolerance
- Epoxy cover for mechanical stability and pick & place
- Surface mount
- RoHS compliant*

Applications

- High frequency TV and radio receivers
- Radio transmitters
- RF amplifiers
- Tuning applications

AC1060R Series – Air Coil Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance		Q Min.	Test Frequency (MHz)	SRF (GHz) Min.	DCR (mΩ) Max.	Irms (A) Max.
	L (nH)	Tol. (%)					
AC1060R-90N_	90	±2, ±5	95	50	1.140	15	3.5
AC1060R-R11_	111		87		1.020	15	3.5
AC1060R-R13_	130		87		0.900	20	3.0
AC1060R-R17_	169		95		0.875	25	3.0
AC1060R-R20_	206		95		0.800	30	3.0
AC1060R-R22_	222		92		0.730	35	3.0
AC1060R-R24_	246		95		0.685	35	3.0
AC1060R-R30_	307		95		0.660	35	3.0
AC1060R-R38_	380		95		0.590	50	2.5
AC1060R-R42_	422		95		0.540	60	2.5
AC1060R-R49_	491		95		0.535	65	2.0
AC1060R-R53_	538		87		0.490	90	2.0

Note:

Underscore indicates Inductance Tolerance Code:

G = ±2 %, J = ±5 %

Additional Information

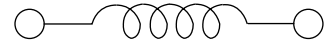
Click these links for more information:



General Specifications

Operating Temperature -25 °C to +125 °C
 Storage Temperature -25 °C to +85 °C
 Temperature Rise 15 °C
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

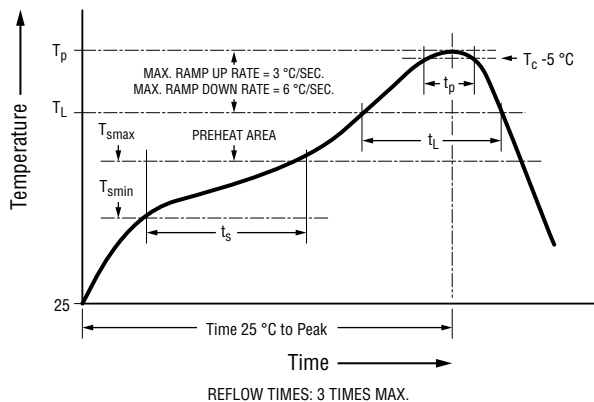
Electrical Schematic



Materials

Wire Enameled Copper
 Cover Epoxy
 Terminal Sn/Ag/Cu
 Packaging 1000 pcs. per 13-inch reel

Soldering Profile



Profile Feature	Pb Free Assembly
Preheat - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time (t_s) from T_{smin} to T_{smax}	150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_P)	3 °C/second max.
Liquidous temperature (T_L) Time (t_L) maintained above T_L	217 °C 60-150 seconds
Peak package body temperature (T_P)	260 °C
Time (t_p) at $T_C - 5 °C$ (T_P should be equal to or less than T_C)	< 30 seconds
Ramp-Down Rate (T_P to T_L)	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.



WARNING
 Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

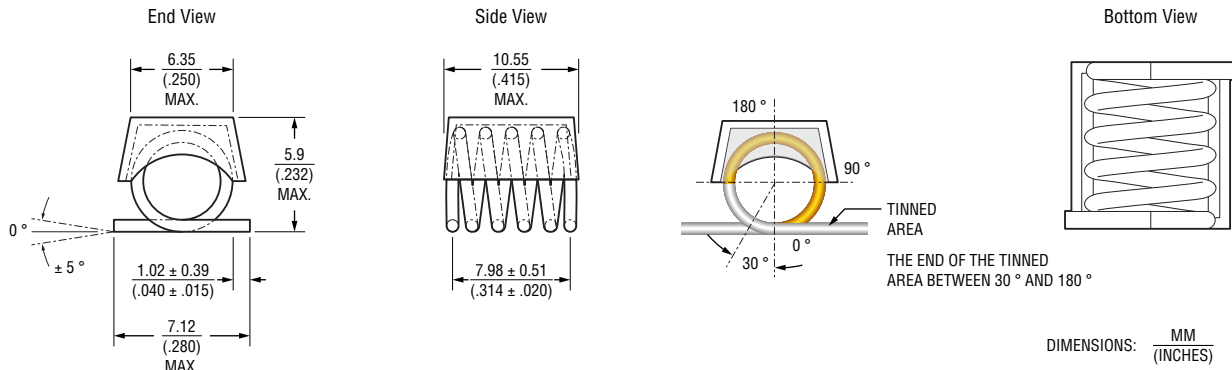
Users should verify actual device performance in their specific applications.

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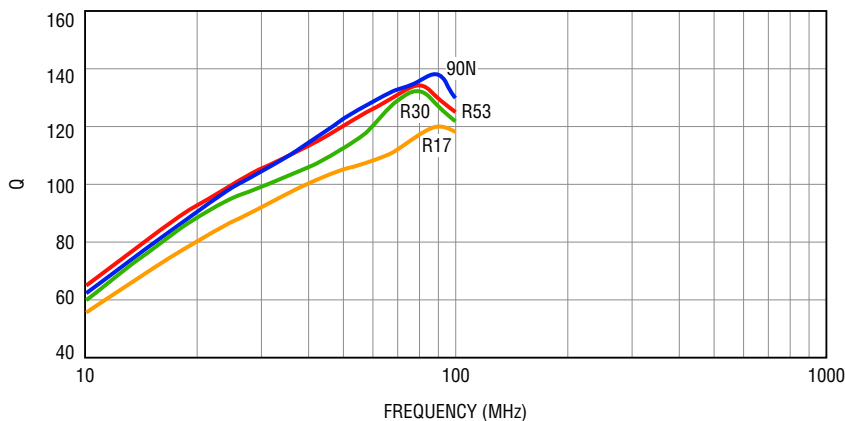
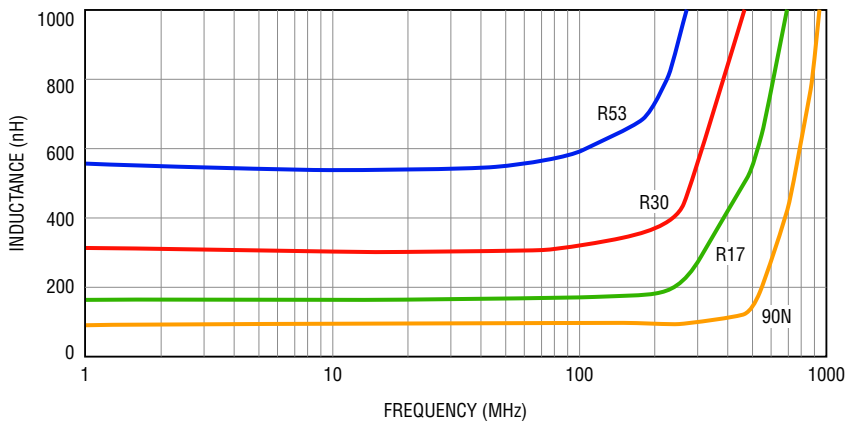
AC1060R Series – Air Coil Inductors

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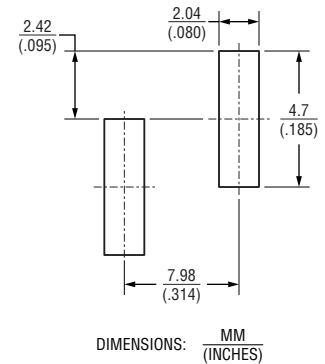
Product Dimensions



Inductance vs. IDC



Recommended Layout



How to Order

AC1060R - 90N

Model _____
 Value Code _____
 (See Table)
 Tolerance _____
 G = ±2 %
 J = ±5 %

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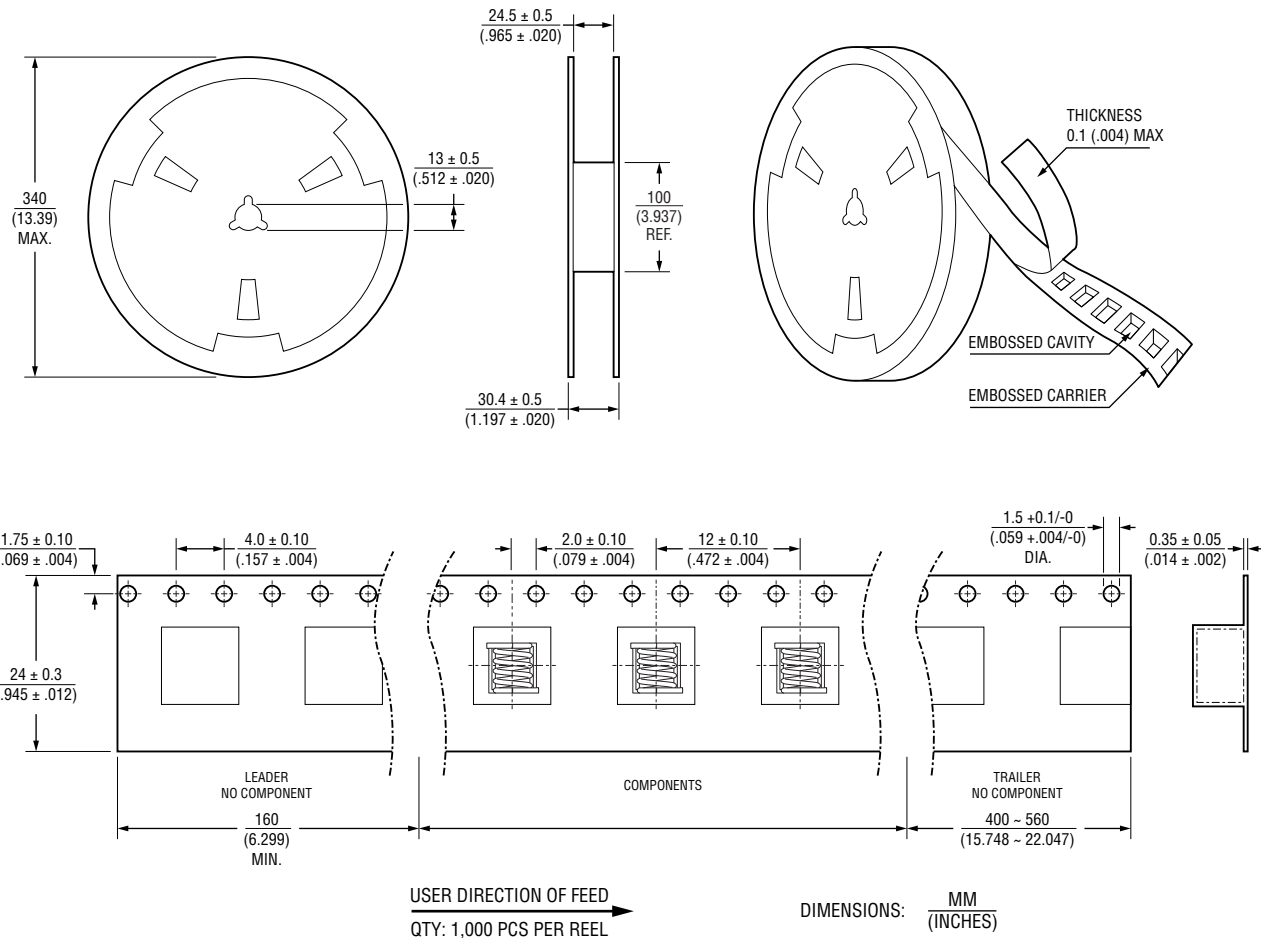
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AC1060R Series – Air Coil Inductors

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Packaging Specifications



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