

**NEW!**

# Chip Inductors 016008F Series (0402)



- World's smallest high-frequency-wirewound chip inductor
- Exceptionally low DCR – lower than all thin film type
- High inductance values in 016008 package (metric 0402)
- Inductance values up to 120 nH

Part number <sup>1</sup>	L <sup>2</sup> (nH)	Percent tolerance	Impedance typ <sup>3</sup> (Ohms)			SRF typ <sup>4</sup> (GHz)	DCR max <sup>5</sup> (mOhms)	Irms (mA)		
			100 MHz	900 MHz	1.7 GHz			at 25°C <sup>6</sup>	at 85°C <sup>7</sup>	at 125°C <sup>8</sup>
016008F-18NXKRW	18	10	10	80	140	4.5	180	550	500	140
016008F-30NXKRW	30	10	15	120	220	4.0	210	500	455	140
016008F-39NXKRW	39	10	25	170	300	3.5	320	410	375	100
016008F-56NXKRW	56	10	30	260	500	3.0	470	340	300	90
016008F-75NXKRW	75	10	45	360	700	2.7	640	290	260	70
016008F-101XKRW	100	10	55	450	900	2.5	920	240	215	50
016008F-121XKRW	120	10	70	570	1200	2.3	1100	225	200	50

- Packaging:** W = 7" machine-ready reel. EIA-481 punched paper tape (2000 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).
- Inductance measured at 7.9 MHz using a Coilcraft CCF1426 fixture in an Agilent/HP 4287 impedance analyzer with Coilcraft-provided correlation pieces.
- Z measured using an Agilent/HP 4991 with an Coilcraft CCF1481 test fixture.
- SRF measured using Agilent/HP 8722ES network analyzer and Coilcraft CCF1406 test fixture.
- DCR measured on Cambridge Technology micro-ohmmeter and Coilcraft CCF858 test fixture.
- Current that causes a 40°C temperature rise at 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
- Maximum current that can be applied at 85°C.
- Maximum current that can be applied at 125°C.
- Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

**Core material** Ferrite

**Environmental** RoHS compliant, halogen free

**Terminations** Matte tin over copper over nickel over molybdenum - manganese

**Weight** 0.10 – 0.16 mg

**Ambient temperature** -40°C to +125°C with Irms current

**Maximum part temperature** +140°C (ambient + temp rise)

**Storage temperature** Component: -55°C to +140°C.

Tape and reel packaging: -55°C to +80°C

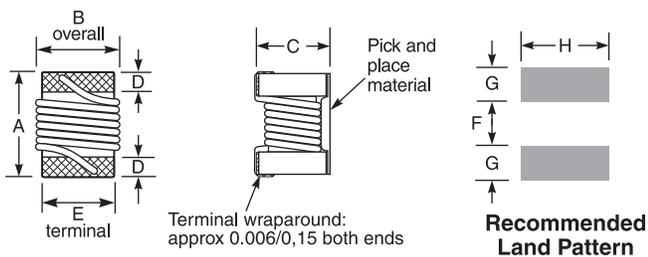
**Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

**Temperature Coefficient of Inductance (TCL)** +25 to +150 ppm/°C

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

**Packaging** 2000 per 7" reel. Paper tape: 8 mm wide, 0.42 mm thick, 2 mm pocket spacing

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

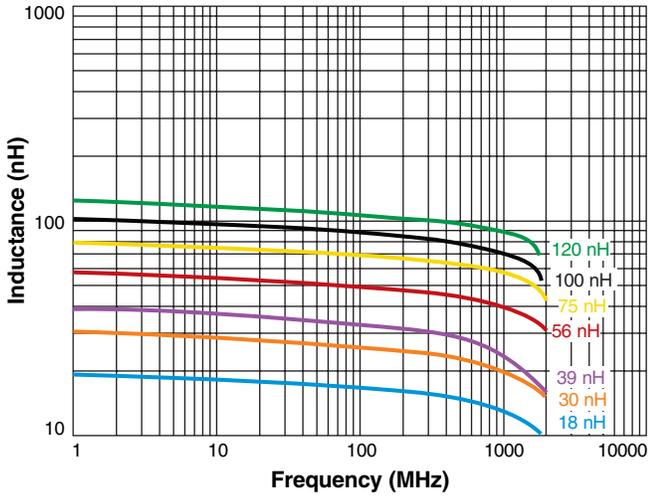


Amax	Bmax	Cmax	Dref	Eref	Fref	Gref	Href	
0.02	0.01	0.015	0.004	0.008	0.006	0.009	0.012	inches
0,50	0,25	0,38	0,10	0,20	0,15	0,23	0,30	mm



# Chip Inductors – 016008F Series

## Typical L vs Frequency



## Typical Z vs Frequency

