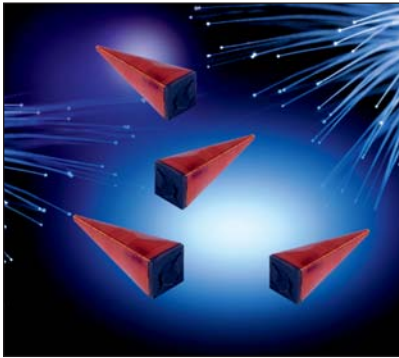


Ultra Broad Band Inductor



ADVANTAGES

- Ultra Broad Band Performance
- Ultra-Low Insertion Loss
- Excellent Return Loss Through 40 GHz
- Flat Frequency Response
- Part to Part Performance Repeatability
- Rugged Powdered Iron Core

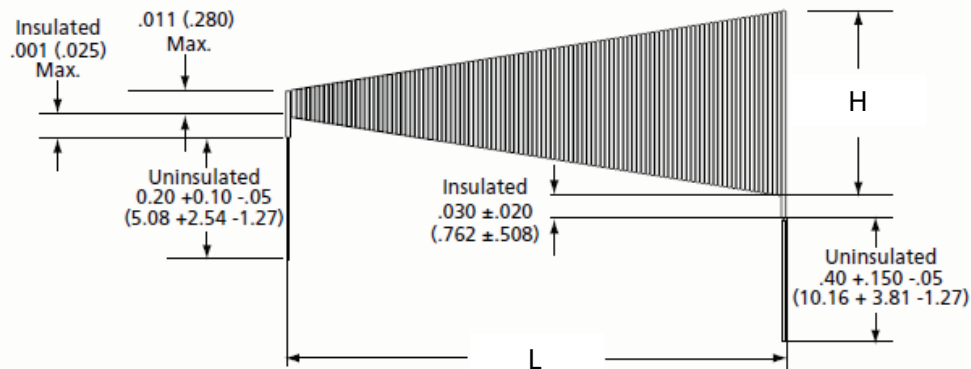
APPLICATIONS

- Communication Customers
- Receiver Optical Sub-Assemblies
- Transimpedance Amplifier Customers
- Test Equipment Manufacturers

The GL Series was developed specifically to deliver repeatable and reliable Ultra Broad Band performance up through 40 + GHz. The GL Series of inductors provide Ultra-Low Insertion loss, excellent return loss and extreme part to part performance repeatability. The pyramid shape of the GL Series provides for maximum inductance in the space available. The GL Series was

developed using a powdered iron core and gold plated terminations that allow for easy use in hand solder applications. The combination of Flat Frequency Response with the Ultra-Low Insertion loss makes this an ideal component for optical data systems, transimpedance amplifiers and test equipment.

MECHANICAL SPECIFICATIONS



inches (mm)

Inductance (μH)	L	H	# of Turns
2	0.102 ± 0.002 (2.59 ± 0.051)	0.065 ± 0.002 (1.65 ± 0.051)	46 Turns #44 AWG Cu
6	0.182 ± 0.003 (4.62 ± 0.076)	0.073 ± 0.002 (1.85 ± 0.051)	80 Turns #44 AWG Cu
11	0.182 ± 0.003 (4.62 ± 0.076)	0.072 ± 0.002 (1.83 ± 0.051)	110 Turns #47 AWG Cu

ELECTRICAL SPECIFICATIONS

Operating Temperature: -55°C to + 125°C

Inductance (μH)	Operating Frequency Range	Insertion Loss	Return Loss	Rdc (Ω) @ 20°C, 10 mA current	IDC (mA), dc max.	Number of Turns	Cu Wire Size (AWG)
2	2.3 MHz to 40 GHz	0.5 dB typ.	17 dB typ.	1.45	250	46	44
6	880 KHz to 40 GHz	0.6 dB typ.	18 dB typ.	2.90	200	80	44
11	500 KHz to 40 GHz	0.4 dB typ.	18 dB typ.	7.00	115	110	47

GL Series



Ultra Broad Band Inductor

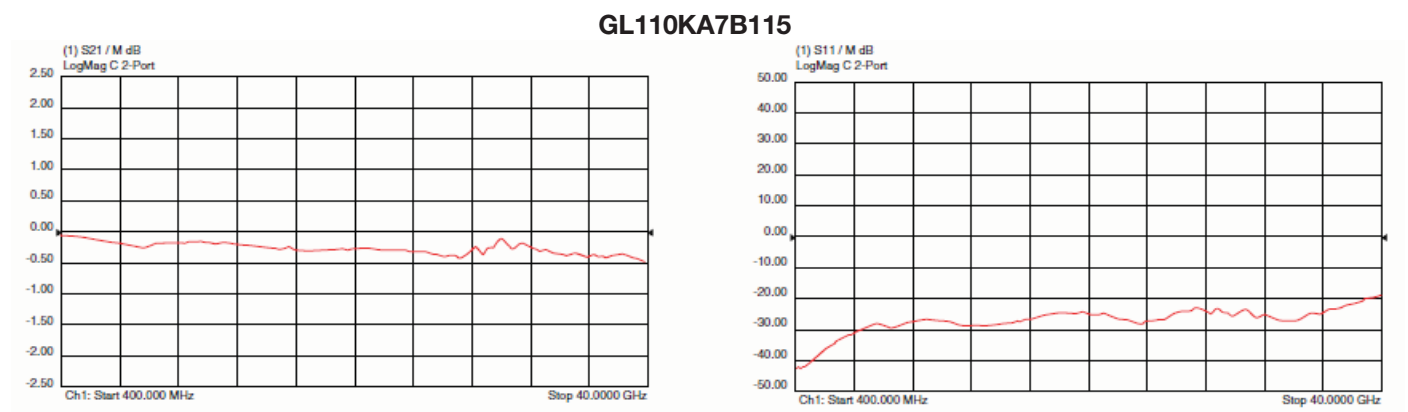
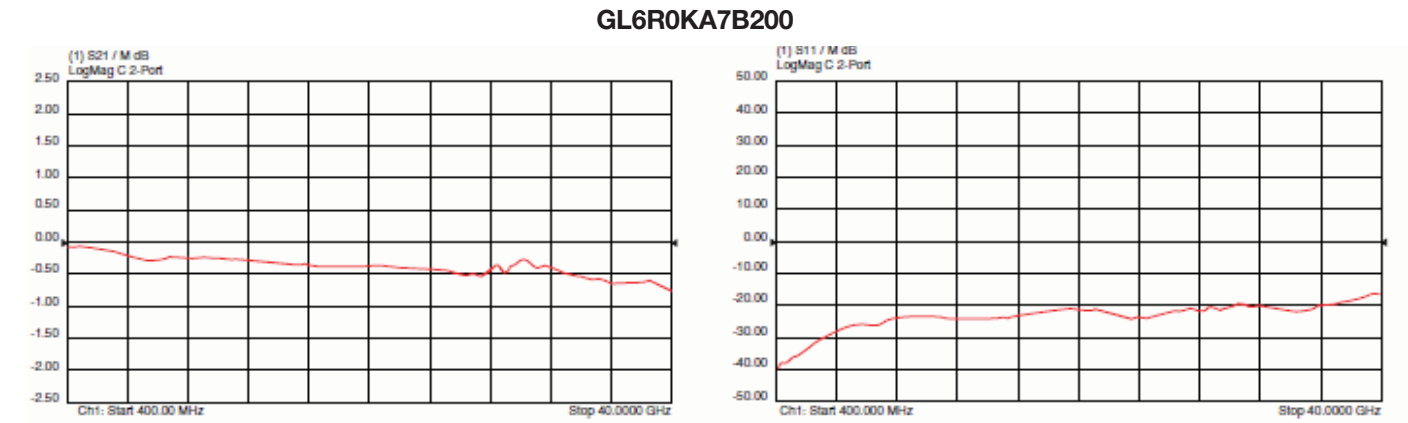
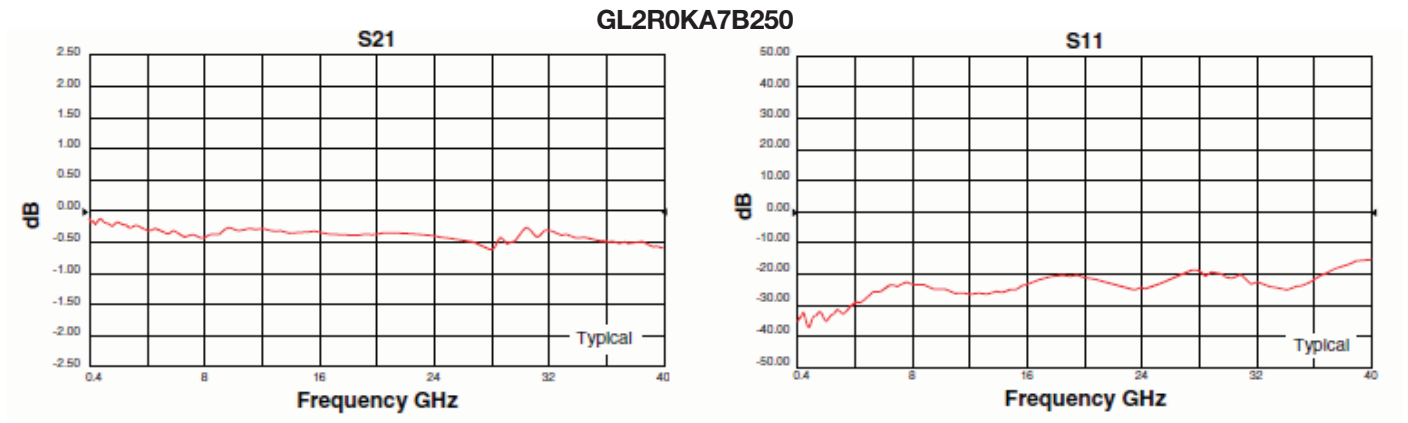
HOW TO ORDER

GL	6R0	K	A	7	B
Style	Inductance First 2 significant digits for inductance	Tolerance $K = \pm 10\%$	Failure Rate	Termination 7 = 15-25 μ in., Gold Plate	Packaging B = 1 piece in plastic box



AVAILABLE PART NUMBERS

GL2R0KA7B250
GL6R0KA7B200
GL110KA7B115



TEST PARAMETERS:

All testing performed on 10 mil thick Rogers RO4350 microstrip board, with the GL Leads connected between the microstrip trace and the underside ground plane (nominal 50 ohm characteristic impedance)

