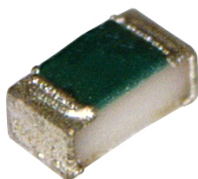


TFL Series



The TFL Series is designed for miniaturized devices, featuring low inductance, high precision and low loss. It allows for easy impedance matching for both RF and IF circuit designs as well as compact high frequency circuit designs

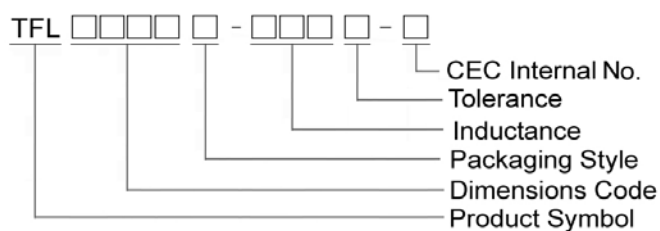
Features

- Ultra small size
- Excellent Q factor and SRF characteristics
- Minimal deviation in inductance
- Finely graded inductance level

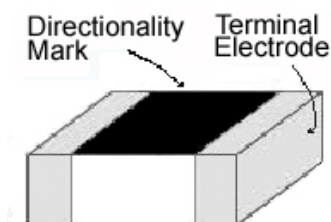
Applications

- RF and wireless communication
- Bluetooth, cellular phone, ultrabook, telecommunications, W-LAN
- High frequency circuits in general

Product Identification



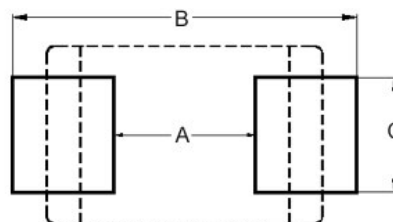
Shape and Dimensions



Dimensions in mm

TYPE	A	B	C	D
TFL0603	0.6±0.03	0.3±0.03	0.3±0.03	0.10±0.05

Recommended Pattern



Dimensions in mm

TYPE	A	B	C
TFL0603	0.3	0.75 ~ 1.05	0.3

SMD Thin Film Chip Inductors – TFL Series

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Typ.	DC Resistance (Ω) Max	IDC (mA) Max
TFL0603T-0N6□-S	0.6	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.10	450
TFL0603T-0N7□-S	0.7	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.10	450
TFL0603T-0N8□-S	0.8	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.10	420
TFL0603T-0N9□-S	0.9	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.10	410
TFL0603T-1N0□-S	1.0	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.10	410
TFL0603T-1N1□-S	1.1	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.10	400
TFL0603T-1N2□-S	1.2	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.10	280
TFL0603T-1N3□-S	1.3	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.12	280
TFL0603T-1N4□-S	1.4	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.13	280
TFL0603T-1N5□-S	1.5	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.16	280
TFL0603T-1N6□-S	1.6	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.16	280
TFL0603T-1N7□-S	1.7	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.20	280
TFL0603T-1N8□-S	1.8	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.20	220
TFL0603T-1N9□-S	1.9	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.20	220
TFL0603T-2N0□-S	2.0	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.20	220
TFL0603T-2N1□-S	2.1	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.20	220
TFL0603T-2N2□-S	2.2	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.20	220
TFL0603T-2N3□-S	2.3	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.20	220
TFL0603T-2N4□-S	2.4	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.20	220
TFL0603T-2N5□-S	2.5	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.20	220
TFL0603T-2N6□-S	2.6	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.20	220
TFL0603T-2N7□-S	2.7	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.23	220
TFL0603T-2N8□-S	2.8	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.25	220
TFL0603T-2N9□-S	2.9	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.25	220
TFL0603T-3N0□-S	3.0	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.30	220
TFL0603T-3N1□-S	3.1	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.30	190
TFL0603T-3N2□-S	3.2	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.30	190
TFL0603T-3N3□-S	3.3	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.30	190
TFL0603T-3N4□-S	3.4	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.32	170
TFL0603T-3N5□-S	3.5	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.32	170
TFL0603T-3N6□-S	3.6	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.32	170
TFL0603T-3N7□-S	3.7	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.40	170
TFL0603T-3N8□-S	3.8	±0.1nH/±0.2nH	12	500 / 500mV	6000	0.40	170
TFL0603T-3N9□-S	3.9	±0.1nH/±0.2nH	12	500 / 500mV	5700	0.40	170
TFL0603T-4N3□-S	4.3	3/5	12	500 / 500mV	5300	0.40	160
TFL0603T-4N7□-S	4.7	3/5	12	500 / 500mV	4400	0.45	150
TFL0603T-5N1□-S	5.1	3/5	12	500 / 500mV	4200	0.50	140
TFL0603T-5N6□-S	5.6	3/5	12	500 / 500mV	4000	0.55	140
TFL0603T-6N2□-S	6.2	3/5	12	500 / 500mV	4000	0.60	130
TFL0603T-6N8□-S	6.8	3/5	12	500 / 500mV	3900	0.70	130
TFL0603T-7N5□-S	7.5	3/5	12	500 / 500mV	3700	1.10	110
TFL0603T-8N2□-S	8.2	3/5	12	500 / 500mV	3600	1.20	110
TFL0603T-9N1□-S	9.1	3/5	12	500 / 500mV	3300	1.20	100
TFL0603T-10N□-S	10	3/5	12	500 / 500mV	3200	1.30	90

SMD Thin Film Chip Inductors – TFL Series

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Typ.	DC Resistance (Ω) Max	IDC (mA) Max
TFL0603T-12N□-S	12	3/5	12	500 / 500mV	2900	1.30	90
TFL0603T-15N□-S	15	3/5	12	500 / 500mV	2600	1.50	90
TFL0603T-18N□-S	18	3/5	12	500 / 500mV	2200	1.70	80
TFL0603T-22N□-S	22	3/5	12	500 / 500mV	2200	2.55	70

●

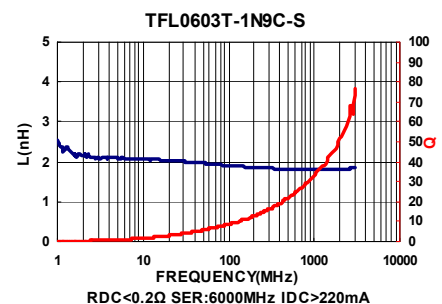
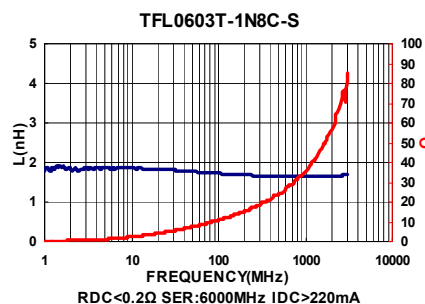
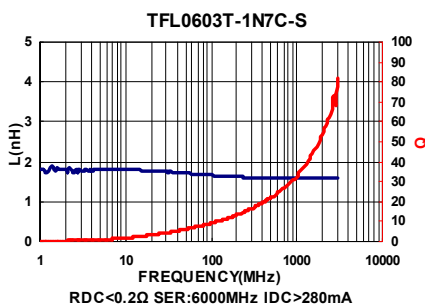
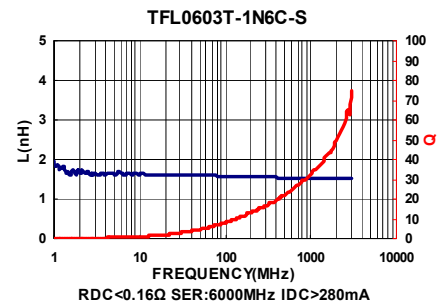
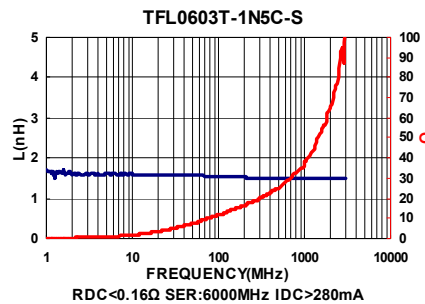
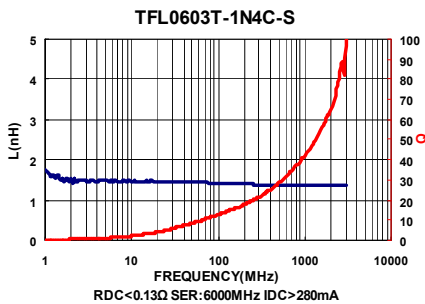
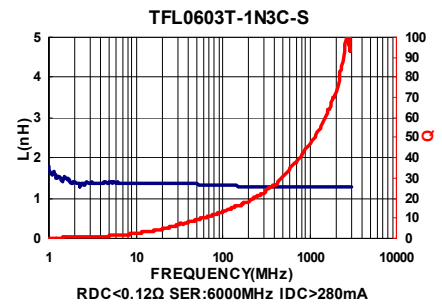
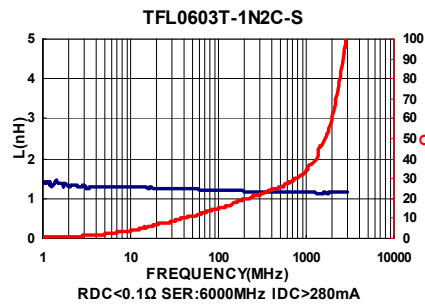
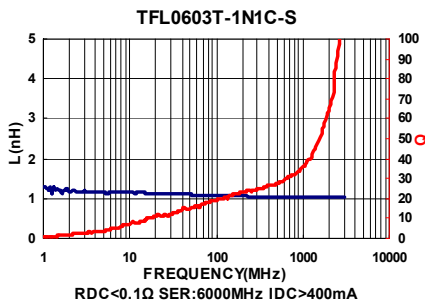
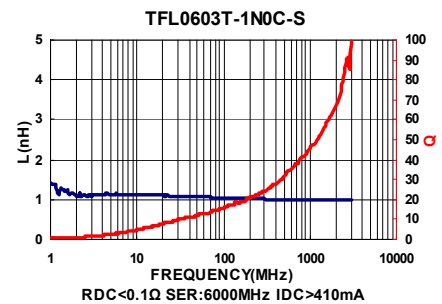
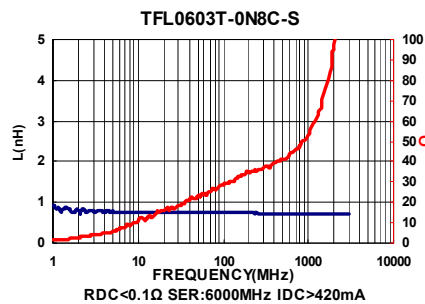
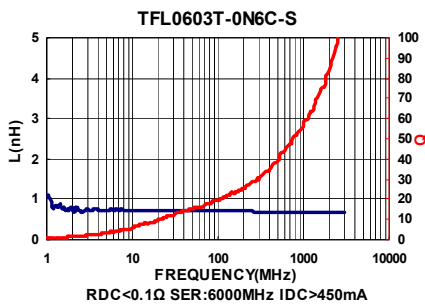
● Tolerance : B = $\pm 0.1\text{nH}$, C = $\pm 0.2\text{nH}$, H = $\pm 3\%$, J = $\pm 5\%$

● Test Instruments : L/Q : Agilent E4991A Fixture : Agilent 16197A

SRF : HP8753D

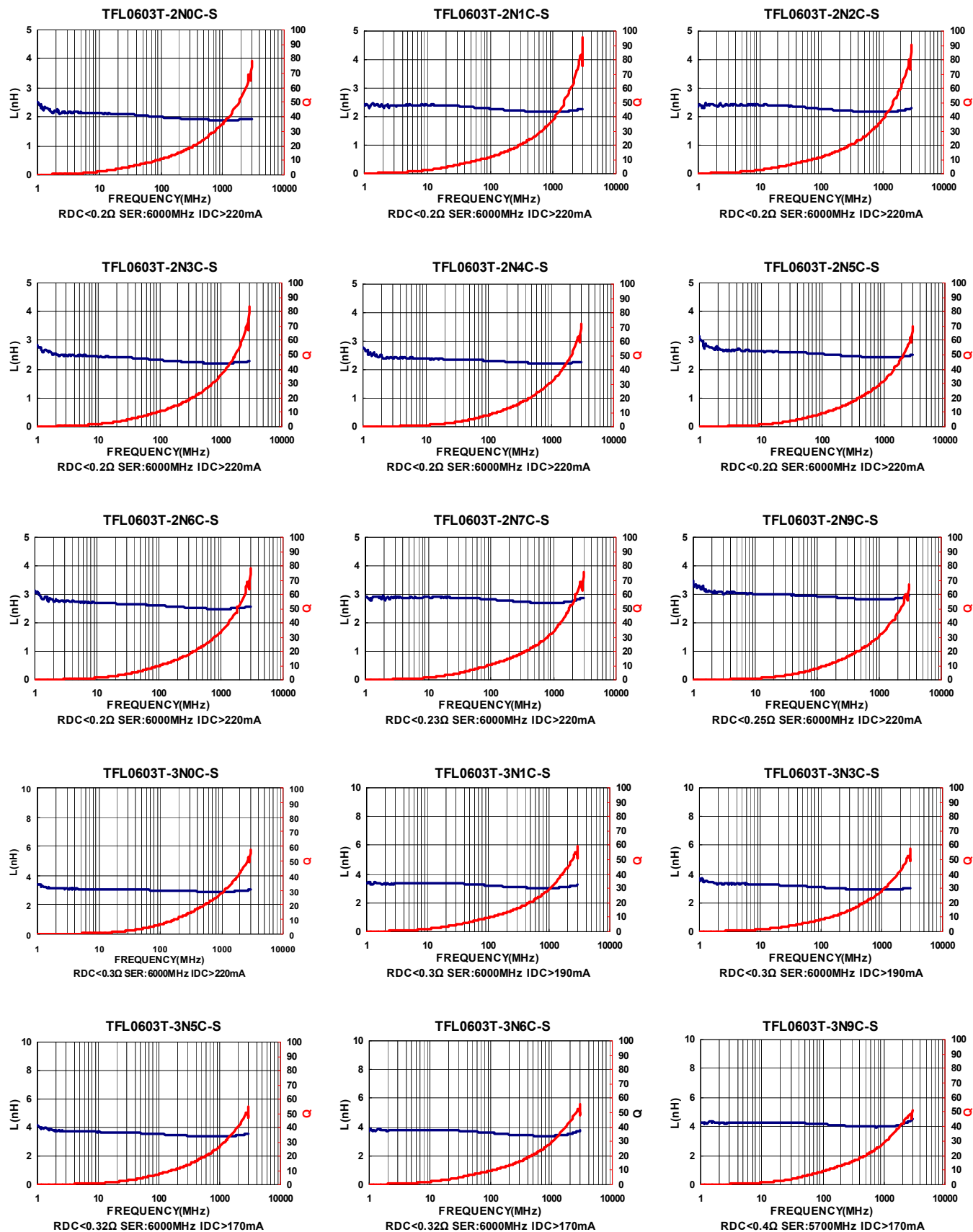
RDC : HP4338B/ CH502BC

Test Instruments : Agilent E4991A Material/Impedance Analyzer



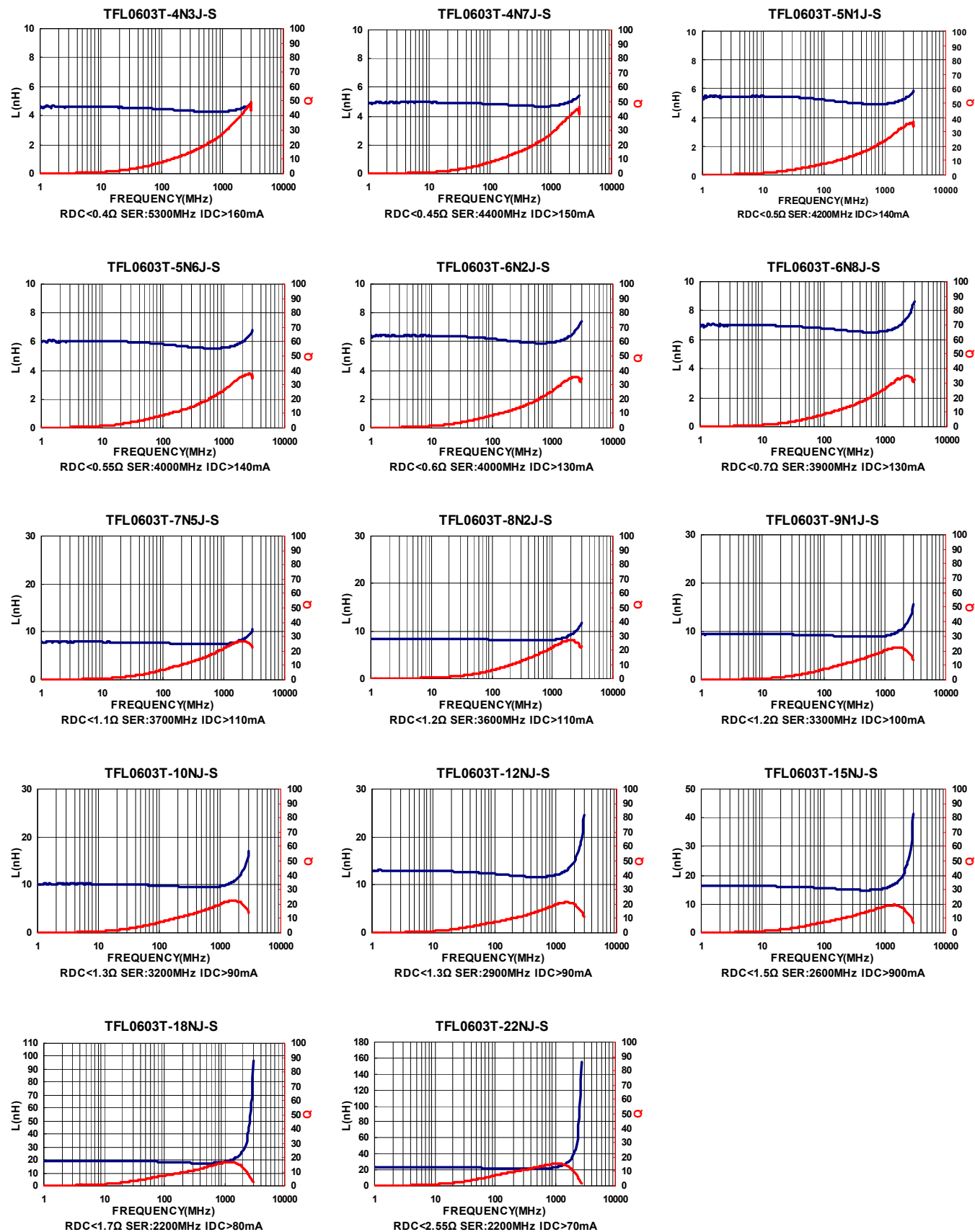
SMD Thin Film Chip Inductors – TFL Series

Test Instruments : Agilent E4991A Material/Impedance Analyzer



SMD Thin Film Chip Inductors – TFL Series

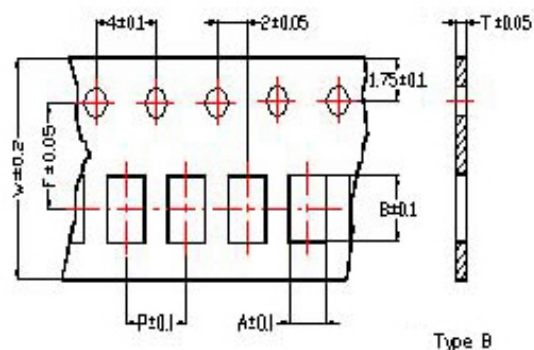
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SMD Thin Film Chip Inductors – TFL Series

Packaging Specifications

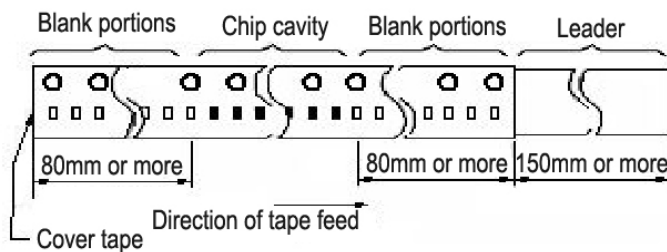
Tape Dimensions



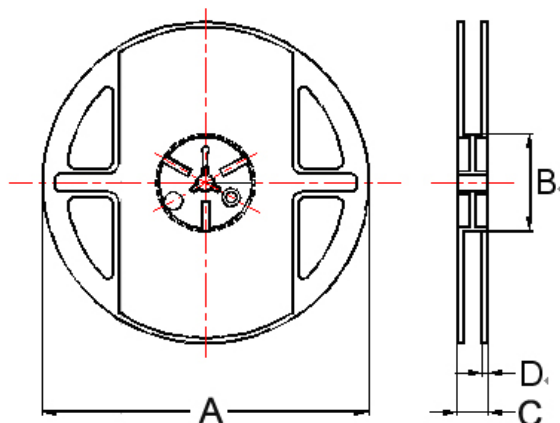
Tape Material

Carrier tape : Paper

Cover tape : Polyethylene



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions						Reel Dimensions				Quantity PCS / Reel
	A	B	T	W	P	F	A	B	C	D	
TFL0603	0.37	0.67	0.42	8	2	3.5	180	60	13	1.5	10000