

Winding Type Chip Inductor

SWF1608PRF-SERIES

1. Features

1. Ferrite core wire wound construction.
2. High Reliability due to wire wound type construction.
3. Small footprint as well as low profile.
4. 100% Lead (Pb) & Halogen-Free and RoHS compliant.
5. Operating temperature-40~+125°C (Including self - temperature rise)
6. These products provide low DC resistance and high current.
7. Precision inductance tolerance is available.
8. Application for DC power line.



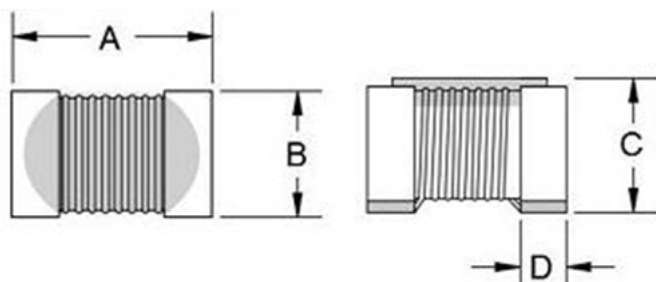
Digital camera and other electronic equipment

Personal computers, Hard disk drives

Mobile Device / Handheld Device / LowProfile Device / Panel

xDSL modem and Cable modem

2. Dimensions



Size	A	B	C	D
SWF1608	1.60±0.20	1.00±0.20	1.00±0.20	0.35±0.10

Unit:mm

3. Part Numbering

SWF	1608	P	R	F	-	2R2	K
A	B	C	D	E		F	G

A: Series

B: Dimension

C: Control S/N

D: Control S/N

E: Lead free type

F: Inductance

G: Inductance Tolerance

L x W

2R2=2.20uH

K=±10%, M=±20%

4. Specification

TAI-TECH Part Number	Inductance (uH)	Tolerance	Test Frequency (Hz)	Q/MHz Typ.	SRF (MHz) Typ.	DCR (Ω) ±30%	Isat (mA) Typ.	Irms (mA) Typ.
SWF1608PRF-R10□	0.10	K,M	0.5V/7.9M	13/7.9	1150	0.063	1700	1400
SWF1608PRF-R15□	0.15	K,M	0.5V/7.9M	13/7.9	1050	0.074	1700	1300
SWF1608PRF-R27□	0.27	K,M	0.5V/7.9M	13/7.9	1000	0.12	1400	1100
SWF1608PRF-R33□	0.33	K,M	0.5V/7.9M	13/7.9	1100	0.13	1300	1000

TAI-TECH Part Number	Inductance (uH)	Tolerance	Test Frequency (Hz)	Q/MHz Typ.	SRF (MHz) Typ.	DCR (Ω) $\pm 30\%$	Isat (mA) Typ.	Irms (mA) Typ.
SWF1608PRF-R47□	0.47	K,M	0.5V/7.9M	13/7.9	900	0.18	1100	900
SWF1608PRF-R56□	0.56	K,M	0.5V/7.9M	13/7.9	630	0.20	1100	800
SWF1608PRF-R68□	0.68	K,M	0.5V/7.9M	13/7.9	510	0.22	900	750
SWF1608PRF-1R0□	1.0	K,M	0.5V/7.9M	16/7.9	390	0.32	850	650
SWF1608PRF-1R5□	1.5	K,M	0.5V/7.9M	16/7.9	160	0.40	720	600
SWF1608PRF-2R2□	2.2	K,M	0.5V/7.9M	16/7.9	103	0.56	600	550
SWF1608PRF-3R3□	3.3	K,M	0.5V/7.9M	16/7.9	66	0.70	550	500
SWF1608PRF-4R7□	4.7	K,M	0.5V/7.9M	16/7.9	51	0.97	450	400
SWF1608PRF-5R6□	5.6	K,M	0.5V/7.9M	16/7.9	47	1.10	380	380
SWF1608PRF-6R8□	6.8	K,M	0.5V/7.9M	16/7.9	43	1.50	340	340
SWF1608PRF-8R2□	8.2	K,M	0.5V/7.9M	16/7.9	40	1.68	300	300
SWF1608PRF-100□	10	K,M	0.5V/2.5M	14/2.5	36	1.85	280	280
SWF1608PRF-150□	15	K,M	0.5V/2.5M	14/2.5	29	2.60	240	180
SWF1608PRF-180□	18	K,M	0.5V/2.5M	14/2.5	28	2.90	220	150
SWF1608PRF-220□	22	K,M	0.5V/2.5M	14/2.5	24	3.61	200	120

Note:

Measurement board data

Material : FR4

Board dimensions : 100 X 50 X 1.6t mm

Pattern dimensions: 45 X 30 mm (Double side board)

Pattern thickness : 50 μ m

5. Recommended PC Board Pattern

Chip size						Land Patterns For Reflow Soldering		
Series	Type	A(mm)	B(mm)	C(mm)	D(mm)	L(mm)	G(mm)	H(mm)
SWF	1608	1.60 $\pm$ 0.20	1.00 $\pm$ 0.20	1.00 $\pm$ 0.20	0.35 $\pm$ 0.10	1.92	0.92	1.02

