

Winding Type Chip Inductor

SWF1608RIF-SERIES-X5

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

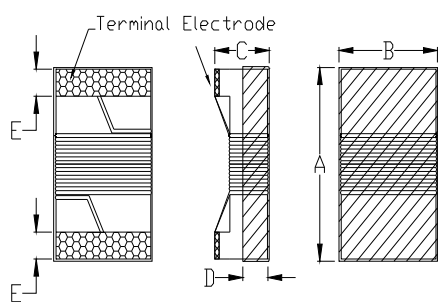
Personal computers, Hard disk drives

Mobile Device / Handheld Device / LowProfile Device / Panel

xDSL modem and Cable modem



2. Dimensions



Size	A	B	C	D	E
SWF1608	1.60±0.20	1.00±0.20	1.00±0.10	0.60 ref.	0.35±0.10

Unit:mm

3. Part Numbering

SWF	1608	R	I	F	-	2R2	-	N	X5
A	B	C	D	E		F		G	H

A: Series

B: Dimension

L x W

C: Control S/N

D: Material

I3C

E: Lead free type

F: Inductance

2R2=2.20uH

G: Inductance Tolerance

L=+15%-5%, N=+20%-0%

H: Control S/N

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.
SWF1608RIF-R10-□X5	0.10	L,N	0.5V/7.9M	13/7.9	1150	0.063	1700	1400
SWF1608RIF-R15-□X5	0.15	L,N	0.5V/7.9M	13/7.9	1050	0.074	1700	1300
SWF1608RIF-R27-□X5	0.27	L,N	0.5V/7.9M	13/7.9	1000	0.12	1400	1100
SWF1608RIF-R33-□X5	0.33	L,N	0.5V/7.9M	13/7.9	1100	0.13	1300	1000
SWF1608RIF-R47-□X5	0.47	L,N	0.5V/7.9M	13/7.9	900	0.18	1100	900

TAI-TECH Part Number	Inductance (uH)	Tolerance	Test Frequency (Hz)	Q/MHz Typ.	SRF (MHz) Typ.	DCR (Ω) $\pm 30\%$	IDC (mA) Typ.	Irms (mA) Typ.
SWF1608RIF-R56-□X5	0.56	L,N	0.5V/7.9M	13/7.9	630	0.20	1100	800
SWF1608RIF-R68-□X5	0.68	L,N	0.5V/7.9M	13/7.9	510	0.22	900	750
SWF1608RIF-1R0-□X5	1.0	L,N	0.5V/7.9M	16/7.9	390	0.32	860	700
SWF1608RIF-1R5-□X5	1.5	L,N	0.5V/7.9M	16/7.9	160	0.40	720	600
SWF1608RIF-2R2-□X5	2.2	L,N	0.5V/7.9M	16/7.9	103	0.56	600	580
SWF1608RIF-3R3-□X5	3.3	L,N	0.5V/7.9M	16/7.9	66	0.70	500	500
SWF1608RIF-4R7-□X5	4.7	L,N	0.5V/7.9M	16/7.9	51	0.97	400	420
SWF1608RIF-5R6-□X5	5.6	L,N	0.5V/7.9M	16/7.9	47	1.10	380	380
SWF1608RIF-6R8-□X5	6.8	L,N	0.5V/7.9M	16/7.9	43	1.50	340	340
SWF1608RIF-8R2-□X5	8.2	L,N	0.5V/7.9M	16/7.9	40	1.68	300	300
SWF1608RIF-100-□X5	10.0	L,N	0.5V/2.5M	14/2.5	36	1.85	280	280
SWF1608RIF-150-□X5	15	L,N	0.5V/2.5M	14/2.5	29	2.60	240	240
SWF1608RIF-180-□X5	18	L,N	0.5V/2.5M	14/2.5	28	2.90	220	220
SWF1608RIF-220-□X5	22	L,N	0.5V/2.5M	14/2.5	24	3.61	200	200

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)	E(mm)	L(mm)	G(mm)	H(mm)
SWF	1608	1.60 $\pm$ 0.2	1.0 $\pm$ 0.2	1.0 $\pm$ 0.1	0.60 ref	0.35 $\pm$ 0.1	1.92	0.92	1.02

