

# Winding Type Chip Inductor

SWF1608RIV-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-55~+125°C (Including self - temperature rise)
6. These products provide low DC resistance and high current.
7. Precision inductance tolerance is available.
8. High reliability -Reliability comply with AEC-Q200
9. Application for DC power line.

Digital camera and other electronic equipment

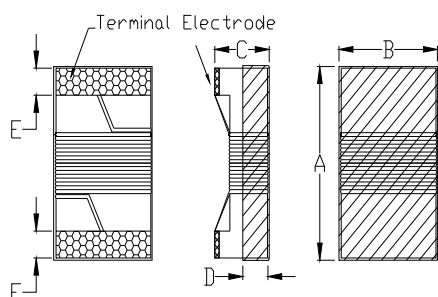
Personal computers, Hard disk drives

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

<b>SWF</b>	<b>1608</b>	<b>R</b>	<b>I</b>	<b>V</b>	-	<b>2R2</b>	<b>K</b>
A	B	C	D	E		F	G

A: Series

B: Dimension L x W

C: Control S/N

D: Material I3C

E: Category Code V=Vehicle

F: Inductance 2R2=2.20uH

G: Inductance Tolerance 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.
SWF1608RIV-R10□	0.10	K,M	0.5V/7.9M	13/7.9	1150	0.063	1700	1400
SWF1608RIV-R15□	0.15	K,M	0.5V/7.9M	13/7.9	1050	0.074	1700	1300
SWF1608RIV-R27□	0.27	K,M	0.5V/7.9M	13/7.9	1000	0.12	1400	1100
SWF1608RIV-R33□	0.33	K,M	0.5V/7.9M	13/7.9	1100	0.13	1300	1000
SWF1608RIV-R47□	0.47	K,M	0.5V/7.9M	13/7.9	900	0.18	1100	900
SWF1608RIV-R56□	0.56	K,M	0.5V/7.9M	13/7.9	630	0.20	1100	800

TAI-TECH Part Number	Inductance ( $\mu$ H)	Tolerance	Test Frequency (Hz)	Q/MHz Typ.	SRF (MHz) Typ.	DCR ( $\Omega$ ) $\pm$ 30%	Isat (mA) Typ.	Irms (mA) Typ.
SWF1608RIV-R68□	0.68	K,M	0.5V/7.9M	13/7.9	510	0.22	900	750
SWF1608RIV-1R0□	1.0	K,M	0.5V/7.9M	16/7.9	390	0.32	860	700
SWF1608RIV-1R5□	1.5	K,M	0.5V/7.9M	16/7.9	160	0.40	720	600
SWF1608RIV-2R2□	2.2	K,M	0.5V/7.9M	16/7.9	103	0.56	600	580
SWF1608RIV-3R3□	3.3	K,M	0.5V/7.9M	16/7.9	66	0.70	500	500
SWF1608RIV-4R7□	4.7	K,M	0.5V/7.9M	16/7.9	51	0.97	400	420
SWF1608RIV-5R6□	5.6	K,M	0.5V/7.9M	16/7.9	47	1.10	380	380
SWF1608RIV-6R8□	6.8	K,M	0.5V/7.9M	16/7.9	43	1.50	340	340
SWF1608RIV-8R2□	8.2	K,M	0.5V/7.9M	16/7.9	40	1.68	300	300
SWF1608RIV-100□	10	K,M	0.5V/2.5M	14/2.5	36	1.85	280	280
SWF1608RIV-150□	15	K,M	0.5V/2.5M	14/2.5	29	2.60	240	240
SWF1608RIV-180□	18	K,M	0.5V/2.5M	14/2.5	28	2.90	220	220
SWF1608RIV-220□	22	K,M	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  $\mu$ 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

