

AVRC 0504 series for MIC

Amotech Multilayer Chip EMI and ESD filter



Overview

This product is a multi-functioned filter for EMI/ESD protection with C-R-C structure of type Π (pi), and mainly uses it to interrupt EMI noise at the end of camera and LCD, and uses to protect ESD of high voltage. Especially, it shows its excellent reduction characteristics band in the receiving base band of terminal.

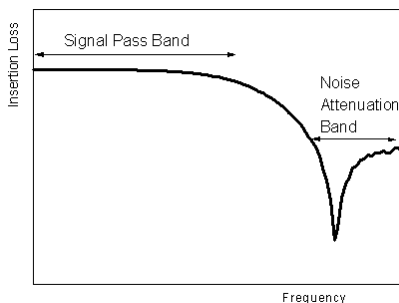


Fig 1 General characteristics of EMI & ESD filter

Features

- Lead free
- R-C type 2 channels array filter
- 0504 size
- IEC 61000-4-2 (ESD) Level #4,
- Multilayer laminated structure

Applications

- Possible to apply variously for elimination of high frequency noise, and protection of ESD.
- Intercept noise generating from control line and data line of PHF MIC & Speaker part.
- Interrupt ESD flowing into the PHF MIC & Speaker part.

Model Description

AVRC	5	S	04	D	200	100R
(1)	(2)	(3)	(4)	(5)	(6)	(7)

- (1) Series name : "AVRC" - R-C Type EMI & ESD filter
- (2) Maximum continuous working voltage (Vdc) : "5"- 5.5 V, "14"- 14V, "18"-18V
- (3) Varistor voltage tolerance : "S" - special order
- (4) Chip Size : "04" – 0504 (1.4 x 0.9 mm)
- (5) Configuration : "D"-Dual array (2 elements)
- (6) Capacitance : "200" - C1+C2 = 200 pF
- (7) Typical Resistance : "010R" - $10 \pm 3 \Omega$., "100R" – $100 \pm 30 \Omega$

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Electrical characteristics

Part No.	Vdc ⁽¹⁾	Varistor voltage (Vn) @1mA DC	Rdc Rseries between I/O ⁽²⁾	Rdc tolerance	Cp (@ 1MHz, V _{rms} =0.5V) C1+C2	Cp tolerance	IR (@3V DC)	IL Leakage current @Vdc	Cut-off Frequency (-3dB)	Minimum -20dB ATT. Band
	(V)	(V)	(Ω)	(%)	(pF)	(%)	(MΩ)	(uA)	(MHz)	(MHz)
AVRC 5S 04D 050 100R	5.5	14±4	100	±30	25+25	±30	>10	20max	100	500~2500
AVRC 5S 04D 200 100R	5.5	14±4	100	±30	100+100	±30	>10	20max	20	200~2500
AVRC 5S 04D 350 100R	5.5	14±4	100	±30	350	±30	> 10	20max	10	100~2500

(1) Maximum continuous DC working voltage

(2) Series resistance between input and output

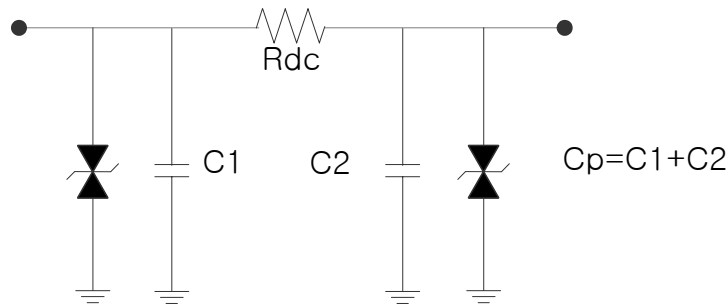
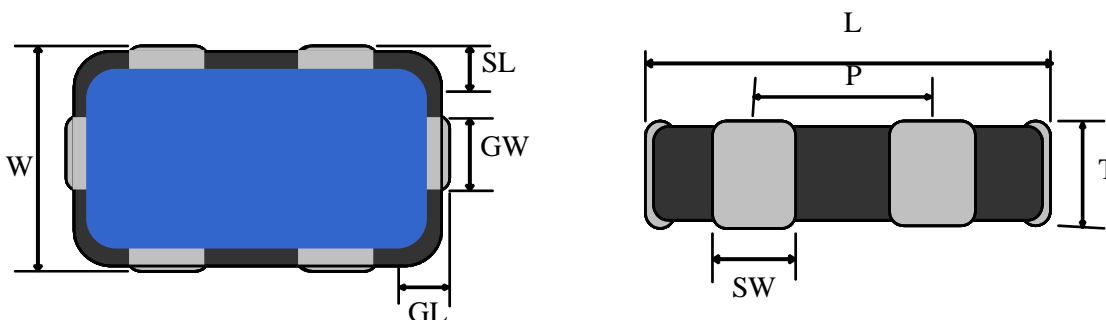


Fig.2 Equivalent Circuit

Appearance



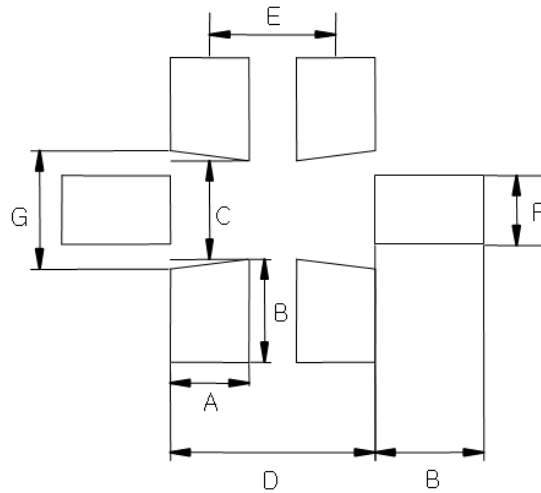
Symbol	L	W	T	GL	GW	SL	SW	P
Dimension (mm)	1.40±0.10	0.90±0.10	0.55±0.15	0.25±0.10	0.30±0.05	0.25±0.10	0.30±0.05	0.64±0.05

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Recommended Land pattern (Typical Dimensions)

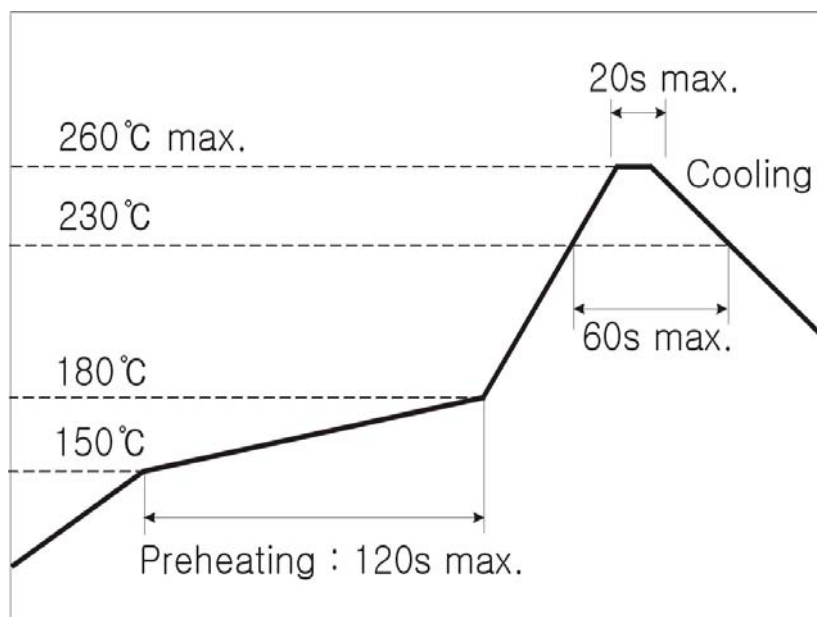


(Unit : mm)

A	B	C	D	E	F	G
0.35	0.5	0.5	1.04	0.64	0.35	0.65

Recommended Soldering Profile

- Pb Free Solder Paste : Sn/Ag/Cu (96.5 / 3.0 / 0.5)

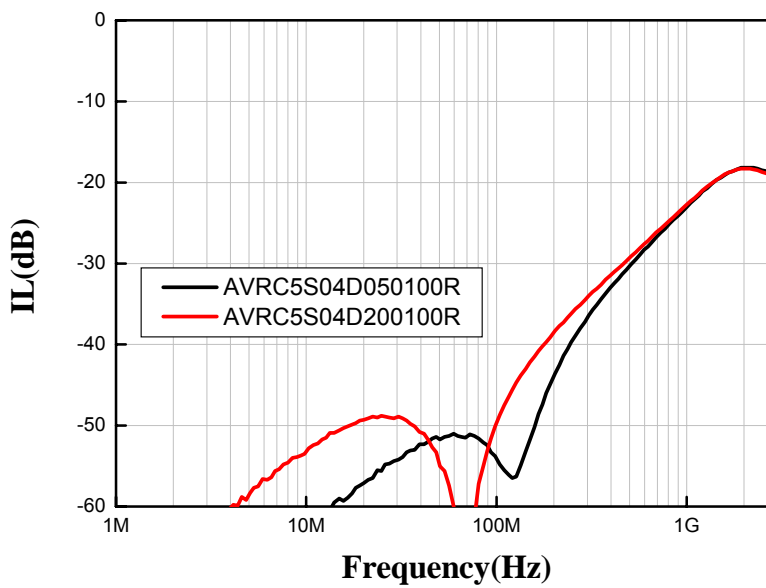
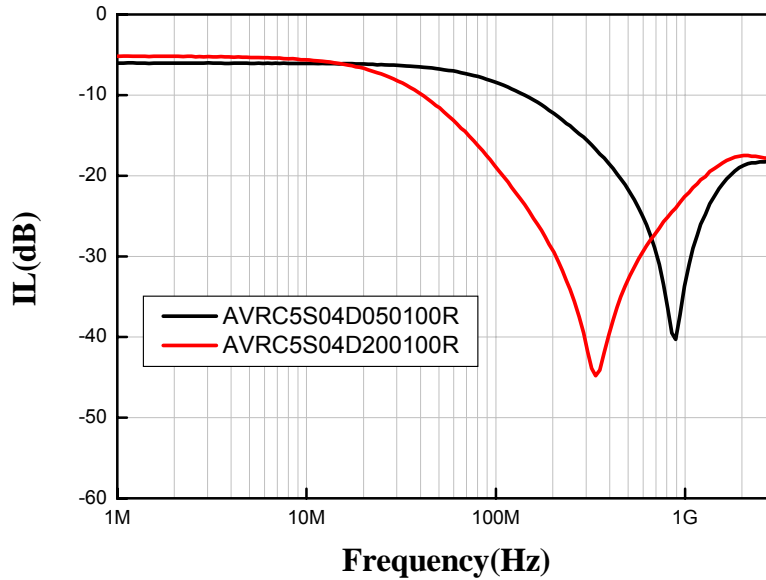


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EMI Characteristics (Typical data)



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ESD absorption characteristics (voltage waveform)

