

# EMI Suppression

## Ferrite Components for Printed Circuit Boards

Single Line Surface Mount Chokes										
Mounting: SMT			Ambient Temperature Range: -55 ° C to +125 ° C					Mode: Differential		
Part No.	Package Size	Mounting	Typical Impedance (z) ohms			iMax (mA)	Filtered Circuits	Length (mm)	Width (mm)	Height (mm)
			25 @ 300 MHz	28 @ 100 MHz	35 @ 25 MHz					
<a href="#">25F0121-1SR</a>	0121	SMT	106			5,000	1	3.05	8.51	2.74
<a href="#">28F0121-1SR</a>	0121	SMT		96		5,000	1	3.05	8.51	2.74
<a href="#">35F0121-1SR</a>	0121	SMT			71	5,000	1	3.05	8.51	2.74
<a href="#">25F0121-0SR</a>	0121	SMT	52			5,000	1	3.05	4.06	2.74
<a href="#">28F0121-0SR</a>	0121	SMT		56		5,000	1	3.05	4.06	2.74
<a href="#">35F0121-0SR</a>	0121	SMT			35	5,000	1	3.05	4.06	2.74
<a href="#">25F0181-1SR</a>	0181	SMT	133			5,000	1	4.57	8.51	2.74
<a href="#">28F0181-1SR</a>	0181	SMT		120		5,000	1	4.57	8.51	2.74
<a href="#">35F0181-1SR</a>	1SR	SMT			89	5,000	1	4.57	8.51	2.74

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# Single Line Surface Mount Chokes

Two-terminal surface mount ferrites provide compact, cost effective EMI filtering for today's densely packed single and double sided surface mount PCB designs. Our small footprint SMT ferrite enables designers to place high performance filtering very close to troublesome high frequency devices.

## Features:

- Small footprint permits use in densely populated surface mount designs
- Hi current carrying capabilities
- Economical component for applications requiring discrete signal filtering
- Parts available in broad band, low and high frequency materials

## Applications:

- Discrete component filtration in power supplies
- Filtering of power input pins of oscillators and logic devices using high speed clocks
- Filtering of low frequency input/output signals entering/leaving shielded enclosures
- High frequency filtering of medium speed clocks and video signals
- Preventing oscillations in high frequency amplifiers
- Disc drives

## Test Specifications:

- Maximum current ratings (rated I Max) are determined by testing to a maximum temperature rise of 40°C with continuous current.
- Board level components are rated up to a maximum of 75 volts
- **Tested with:** HP4396A (100KHz - 1.8 GHz) or (to 6 GHz) Network/Spectrum Analyzer • HP43961A Impedance Test Kit • HP16192A Test Fixture or Inter-Continental Microwave custom fixtures
- HP16200A DC Bias Adapter • Phillips PM2811 DC Power Supply
- Ambient Temperature 23.5°C + 2°
- Bandwidth 3 kHz
- Sweep Time 423 ms
- Impedance is rated at + 25% @ 100MHz

PART NUMBERING SYSTEM						
<u>28</u>	<u>F</u>	<u>0121</u>	<u>-</u>	<u>1</u>	<u>S</u>	<u>R</u>
MATERIAL TYPE	PRODUCT CODE	PART SIZE CODE	SELECTED DIMENSION (Usually Height)	ADDITIONAL DESCRIPTION	PACKAGING OR FINISH CODE	

Ambient Operating Temperature Range: -55° C to +125° C

PART NUMBER	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	E mm (inches)	Typical Impedance (z) ohms			RATED I MAX (continuous) mA
						25 Material @ 300 MHz	28 Material @ 100 MHz	35 Material @ 25 MHz	
--F0121-1SR	3.05 + 0.10 (0.120 + 0.004)	2.74 + 0.13 (0.108 + 0.005)	8.51 + 0.25 (0.335 + 0.010)	1.46 + 0.06 (0.058 + 0.003)	1.27 + 0.05 (0.050 + 0.005)	106	96	71	5,000
--F0121-0SR	3.05 + 0.10 (0.120 + 0.004)	2.74 + 0.13 (0.108 + 0.005)	4.06 + 0.25 (0.160 + 0.010)	1.46 + 0.06 (0.058 + 0.003)	1.27 + 0.05 (0.050 + 0.005)	52	56	35	5,000
--F0181-1SR	4.57 + 0.10 (0.180 + 0.004)	2.74 + 0.13 (0.108 + 0.005)	8.51 + 0.25 (0.335 + 0.010)	1.46 + 0.06 (0.058 + 0.003)	1.27 + 0.05 (0.050 + 0.005)	133	120	89	5,000

