

## Multi-Line Board Mount Filters

**Steward's** multi-line ferrite products provide economical EMI filtering of differential mode noise in surface mount and through-hole PCB applications. They are designed to provide high frequency suppression of both common and differential mode EMI noise on groups of data/power lines. Steward's multi-line ferrites, are rated up to 10 amperes per filtered channel. Their rugged construction provides superior protection against transient events as well as much higher peak current handling capability than other EMI suppression devices.

### Features:

- Available in both through-hole and low profile surface mount configurations
- Higher current carrying capability than comparable products
- Most economical component for filtering groups of signals
- Can be used as multi-turn device
- Parts available in broad band and high frequency materials

### Applications:

- Filtering DC power to external peripherals
- Filtering low frequency input/output signals of shielded enclosures
- Applications where low DCR is needed
- Data Bus filter

### Test Specifications:

- Maximum current ratings are determined by testing to a maximum temperature rise of 40°C with continuous operating current
- Board level components are rated up to a maximum of 75 volts
- Impedance is rated at  $\pm 25\%$

**Tested with:** • HP4396A Network/Spectrum Analyzer • HP43961A Impedance Test Kit • HP16192A Test Fixture • HP16200A DC Bias Adapter • Philips PM2811 DC Power Supply • Ambient Temperature 23.5°C • Bandwidth 3 kHz • Sweep Time 423 ms

### PART NUMBERING SYSTEM

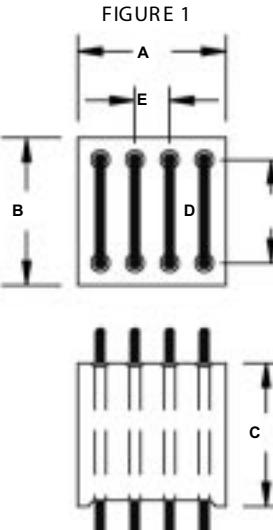
28	F	0308	-	0	T	
MATERIAL TYPE	PRODUCT SIZE CODE	PART NUMBER	SELECTED DIMENSION	ADDITIONAL PART DESCRIPTION	PACKAGING OR FINISHED CODE	

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

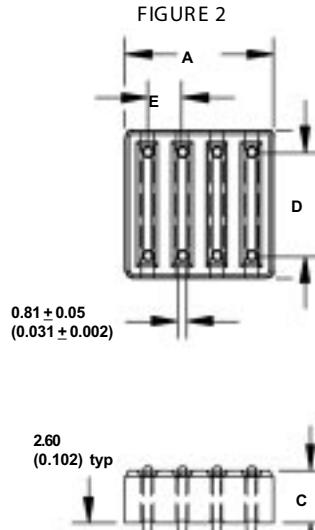
DC Resistance Maximum: 0.006 Ohms

PART NUMBER	# of Lines	Fig #	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	E mm (inches)	Typical Impedance (Ohms)		RATED I MAX (Continuous) mA
								25 Material @ 300 MHz	29 Material @ 100 MHz	
_F0303-OTO	3	2	7.62 ± 0.13 (0.300 ± .005)	5.08 ± 0.08 (0.200 ± .010)	10.01 ± 0.15 (0.394 ± .006)	2.54 ± TYP (0.100 ± .TYP)	2.54 ± 0.08 (0.100 ± .003)		266	10,000
_F0318-OSR	3	3	4.83 ± 0.08 (0.190 ± .003)	4.50 ± 0.08 (0.177 ± .003)	2.92 ± 0.08 (0.115 ± .003)	2.24 ± 0.08 (0.088 ± .003)	1.27 ± 0.08 (0.050 ± .003)		83	6,000
_F0318-1SR	3	3	4.83 ± 0.08 (0.190 ± .003)	4.50 ± 0.08 (0.177 ± .003)	4.19 ± 0.08 (0.165 ± .003)	2.24 ± 0.08 (0.088 ± .003)	1.27 ± 0.08 (0.050 ± .003)	120		6,000
_F0328-OTO	3	1	8.34 ± 0.13 (0.328 ± .005)	10.88 ± 0.15 (0.428 ± .006)	10.15 ± 0.15 (0.399 ± .006)	7.62 ± 0.13 (0.300 ± .005)	2.54 ± 0.05 (0.100 ± .002)		342	10,000
_F0330-OT0	3	2	8.33 ± 0.13 (0.328 ± .005)	10.87 ± 0.15 (0.428 ± .006)	3.81 ± 0.08 (0.150 ± .006)	7.62 ± 0.13 (0.30 ± .005)	2.54 ± 0.05 (0.100 ± .002)	177	126	10,000
_F0330-2SR	3	3	8.33 ± 0.13 (0.328 ± .005)	10.87 ± 0.15 (0.428 ± .006)	6.35 ± 0.13 (0.250 ± .005)	7.62 ± 0.13 (0.30 ± .005)	2.54 ± 0.05 (0.100 ± .002)	185		9,000
_F0330-2T0	3	2	8.33 ± 0.13 (0.328 ± .005)	10.87 ± 0.15 (0.428 ± .006)	6.35 ± 0.13 (0.250 ± .005)	7.62 ± 0.13 (0.30 ± .005)	2.54 ± 0.05 (0.100 ± .002)	255		10,000

PART NUMBER	# of Lines	Fig #	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	E mm (inches)	Typical Impedance (Ohms)		RATED I MAX (Continuous) mA
								25 Material @ 300 MHz	29 Material @ 100 MHz	
_F0418-0SR	4	3	6.10 ± 0.10 (0.240 ± .004)	4.50 ± 0.08 (0.117 ± .003)	2.92 ± 0.08 (0.115 ± .003)	2.24 ± 0.08 (0.088 ± .003)	1.27 ± 0.08 (0.05 ± .003)	77	83	6,000
_F0418-1SR	4	3	6.10 ± 0.10 (0.240 ± .004)	4.50 ± 0.08 (0.117 ± .003)	4.19 ± 0.08 (0.165 ± .003)	2.24 ± 0.08 (0.088 ± .003)	1.27 ± 0.08 (0.05 ± .003)	120	119	6,000
_F0418-2SR	4	3	6.10 ± 0.10 (0.240 ± .004)	4.50 ± 0.08 (0.177 ± .003)	5.08 ± 0.10 (0.200 ± .004)	2.24 ± 0.08 (0.088 ± .003)	1.27 ± 0.08 (0.05 ± .003)	75		6,000
_F0418-3SR	4	3	6.10 ± 0.10 (0.240 ± .004)	4.50 ± 0.08 (0.177 ± .003)	6.35 ± 0.13 (0.250 ± .005)	2.24 ± 0.08 (0.088 ± .003)	1.27 ± 0.08 (0.05 ± .003)	100		6,000
_F0428-0TO	4	2	10.88 ± 0.15 (0.428 ± .006)	10.88 ± 0.15 (0.428 ± .006)	10.14 ± 0.15 (0.399 ± .006)	7.62 ± 0.13 (0.300 ± .005)	2.54 ± 0.05 (0.100 ± .002)	385	342	10,000
_F0429-0TO	4	1	10.88 ± 0.15 (0.428 ± .006)	5.49 ± 0.08 (0.216 ± .003)	10.00 ± 0.15 (0.394 ± .006)	2.54 ± 0.05 (0.100 ± .002)	2.54 ± 0.05 (0.100 ± .002)	285		10,000
_F0430-0TO	4	2	10.87 ± 0.15 (0.428 ± .006)	10.87 ± 0.15 (0.428 ± .006)	3.81 ± 0.08 (0.150 ± .003)	7.62 ± 0.13 (0.300 ± .005)	2.54 ± 0.05 (0.100 ± .002)	177	126	10,000
_F0430-2SR	4	3	10.87 ± 0.15 (0.428 ± .006)	10.87 ± 0.15 (0.428 ± .006)	6.35 ± 0.13 (0.250 ± .005)	7.62 ± 0.13 (0.300 ± .005)	2.54 ± 0.05 (0.100 ± .002)	185	200	9,000
_F0430-4SR	4	3	10.87 ± 0.15 (0.428 ± .006)	10.87 ± 0.15 (0.428 ± .006)	8.89 ± 0.15 (0.350 ± .006)	7.62 ± 0.13 (0.300 ± .005)	2.54 ± 0.05 (0.100 ± .002)	165	294	9,000
_F0528-0TO	5	2	13.42 ± 0.20 (0.528 ± .008)	10.88 ± 0.15 (0.428 ± .006)	10.15 ± 0.15 (0.399 ± .006)	7.62 ± 0.13 (0.300 ± .005)	2.54 ± 0.05 (0.100 ± .002)	342		10,000
_F0530-2SR	5	3	13.41 ± 0.20 (0.528 ± .008)	10.87 ± 0.15 (0.428 ± .006)	6.35 ± 0.13 (0.250 ± .005)	7.62 ± 0.13 (0.300 ± .005)	2.54 ± 0.05 (0.100 ± .002)	185	200	9,000
_F0818-0SR	8	3	11.43 ± 0.18 (0.450 ± .007)	4.50 ± 0.08 (0.177 ± .003)	2.92 ± 0.08 (0.155 ± .003)	2.24 ± 0.08 (0.088 ± .003)	1.27 ± 0.08 (0.05 ± .003)		83	6,000
_F0818-1SR	8	3	11.43 ± 0.18 (0.450 ± .007)	4.50 ± 0.08 (0.177 ± .003)	4.19 ± 0.08 (0.165 ± .003)	2.24 ± 0.08 (0.088 ± .003)	1.27 ± 0.08 (0.05 ± .003)	120	119	6,000



Thru Hole (T) Parts



Surface Mount (SR) Parts

