

# RES70 Chassis Mounted Filter

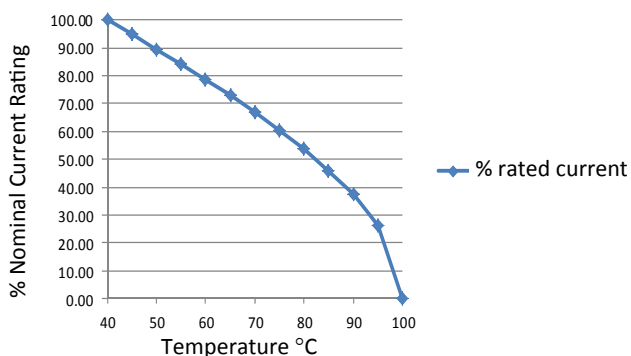
## Multi-Stage, High Differential, High Common Mode and High Frequency

Roxburgh's RES70 series is a multi-stage EMC filter offering high differential mode, high common mode and high frequency attenuation.

Designed for quick and easy chassis mounting, these general purpose filters are suitable for a broad range of applications including noisy environments where increased filter performance is required.



Temperature Derating Curve for EMC Filters



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### Features:

- Multi-stage
- High differential and high common mode attenuation
- High frequency attenuation
- UL approved E191581
- For use from DC to 400Hz
- 1 Amp to 36 Amp

### Benefits:

- Compact size for rated current
- Fast-on, screw or wire terminations
- Quick and Easy Mounting
- Available from UK Stock

### Application Examples:

- Lighting
- Drives
- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Building automation
- Machinery
- Electronic data/communication processing equipment
- Office automation

**Full technical specification on page 2**

**Performance curves on page 3**

**Other options in this range on page 4**

### DEM Manufacturing

Deltron Emcon House  
Hargreaves Way  
Sawcliffe Industrial Park  
Scunthorpe, North Lincolnshire.  
DN15 8RF

**ROXBURGH EMC**

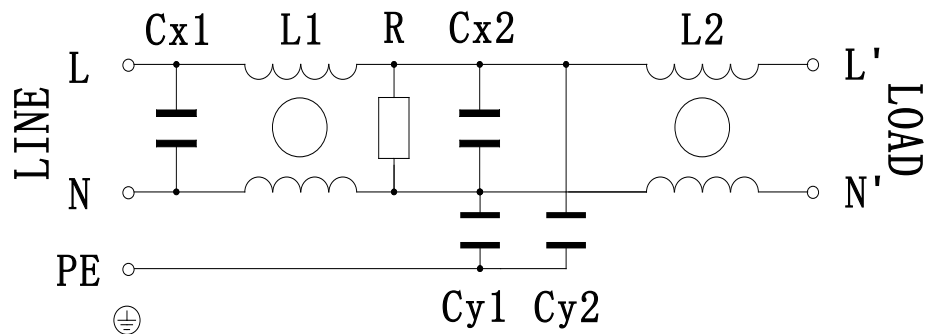


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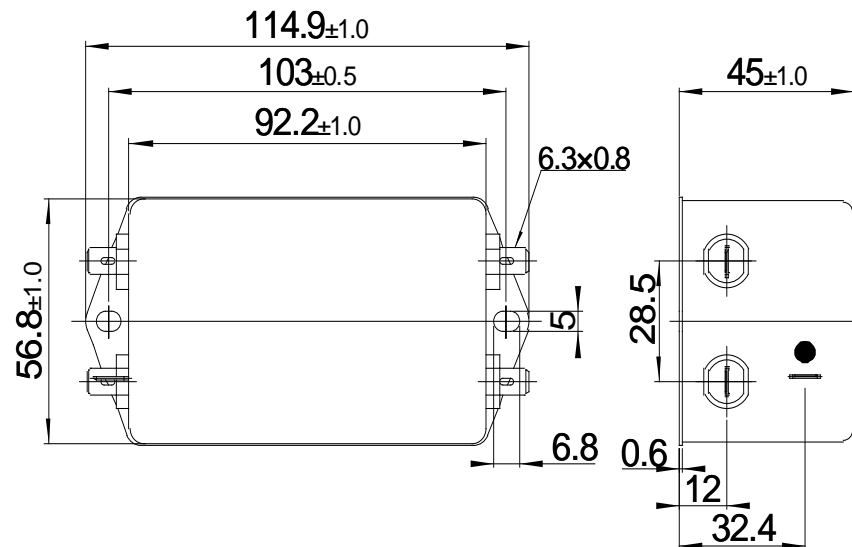
Email: [sales@dem-uk.com](mailto:sales@dem-uk.com)

Web: [www.dem-uk.com/roxburgh](http://www.dem-uk.com/roxburgh)

### Circuit diagram:



### Dimensions(mm):



### Electrical parameters:

Rated Voltage:	120/250VAC
Rated Current at an ambient temp:	6A@40°C
Operating Frequency:	50/60Hz
Climatic Class(IEC60068-1):	25/100/21
Operational Leakage current: (at 250VAC/50Hz and Total C +/-20%)	0.8mA max (RES70F06-M 0mA)
Operational Leakage current: (at 120VAC/60Hz and Total C +/-20%)	0.46mA max (RES70F06-M 0mA)
Test Voltage(100%)for 2 sec:	L-N:
	L/N-PE:

1100VDC/20mA
2250VDC/20mA

### Filter parameters:

Total Inductance(L-L'/N-N'):	15.6mH +50%,-35%
Total Capacitance(L-N/L'-N'):	2uF +/-20%
Total Capacitance(L/N-PE) (RES70F06-M):	9.4nF +/-20% (0nF)
Total Resistance(L-N/L'-N'):	220KΩ +/-10%
Weight(Approximate):	430g

### Safety certification

UL	<input checked="" type="checkbox"/>	CSA	<input checked="" type="checkbox"/>
ENEC	<input checked="" type="checkbox"/>	CQC	<input type="checkbox"/>
CE	<input checked="" type="checkbox"/>	VDE	<input type="checkbox"/>

### Technical Specification

compiled by	Jay Zhang	2020-8-5
reviewed by	Pallas Wang	2020-8-5
approved by	Henry Huang	2020-8-5



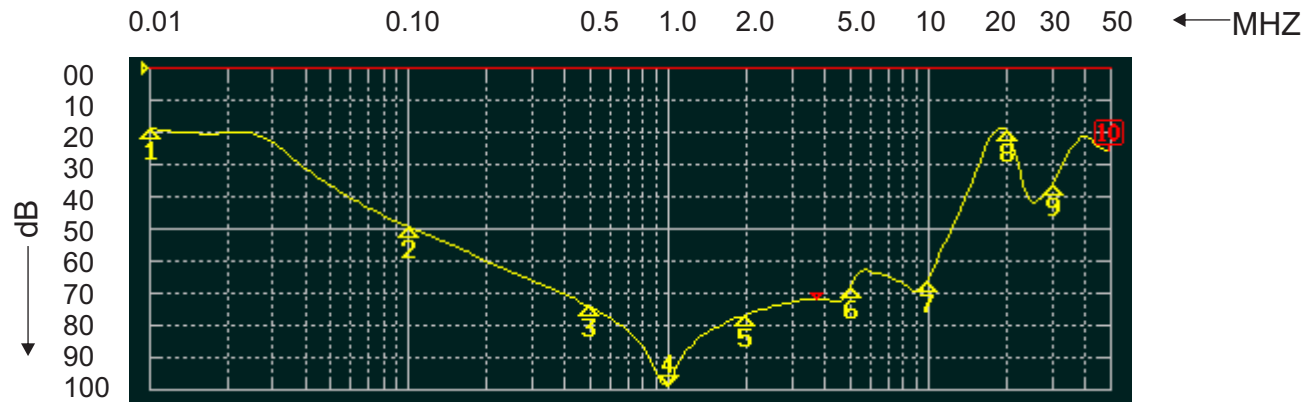
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Part **RES70F06**  
Number (Alternate RES70F06-M - no Y caps)

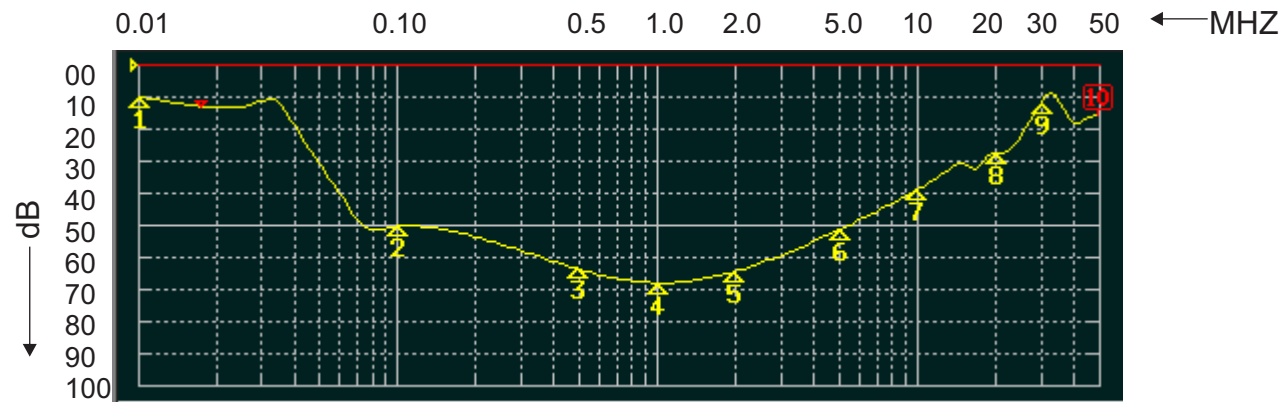
single-phase emc filter  
stage marker V1.03

**ROXBURGH EMC**  
FILTER INSERTION LOSS CHARACTERISTICS  
CISPR 17 - 50 OHM METHOD

**RES70F06**



COMMON MODE






DIFFERENTIAL MODE



# RES70 Chassis Mounted Filter

## Multi-Stage, High Differential, High Common Mode and High Frequency

### Options Available:

Part Number	Rated Current @40°C	Leakage Current @ 230V/50Hz	Inductance $\Sigma L$	Capacitance $\Sigma Cx$	Capacitance $\Sigma Cy$	Resistance $\Sigma R$	Connection Type		
	A	mA	mH	uF	nF	K $\Omega$			
RES70F01	1	0.73	44	0.66	9.4	1000	F	W	
RES70F03	3	0.73	19.6	0.94	9.4	470	F	W	
RES70F06	6	0.73	15.6	2	9.4	220	F	W	
RES70F10	10	0.73	9	2	9.4	220	F	W	
RES70F12	12	0.73	6.5	2	9.4	220	F	W	
RES70F16	16	0.73	3.6	2	9.4	220	F	W	S
RES70S25	25	0.73	4	4.4	9.4	220			S
RES70S36	36	0.86	2.46	4.4	9.4	220			S

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