

# RES70 Chassis Mounted Filter

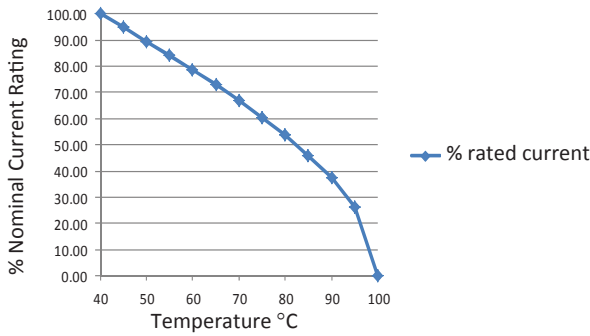
## Multi-Stage, High Differential, High Common Mode and High Frequency

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  
Rated at 40°C Ambient and 100°C Maximum



**Call us on:**  
**Tel: +44 (0) 1724 273200**

### 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

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# RES70 Chassis Mounted Filter

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

### Options Available:

Part Number	Rated Current @40°C A	Leakage Current @ 230V/50Hz mA	Inductance $\Sigma L$ mH	Capacitance $\Sigma Cx$ uF	Capacitance $\Sigma Cy$ nF	Resistance $\Sigma R$ K $\Omega$	Connection Type		
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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**RES70S25****Rev. 0****CHARACTERISTICS:**

Rated Voltage:	250VAC max
Rated Current at Ambient:	25A @ 40°C
Operating Frequency:	DC-400HZ
Climatic Class (IEC60068-1):	25/100/21
Temperature Range:	-25°C to +100°C
Over load Current:	1.5 x Rated Ct. for 1 Min
Operational Leakage current : ( at 230VAC/50Hz and Total C +/-20%)	0.734 mA max
Worst case Leakage current : ( N interrupted and Total C +/-20%)	<1.301 mA max
DCR @ 25°C (+/-25%) :	100 mΩ
Test Voltage (100%) for 2 sec:-	L-N: 1100VDC
	L-GND: 3000VDC
Ingress Protection:	IP 00
Weight (Approximate):	790 gr

**FILTER PARAMETERS:**

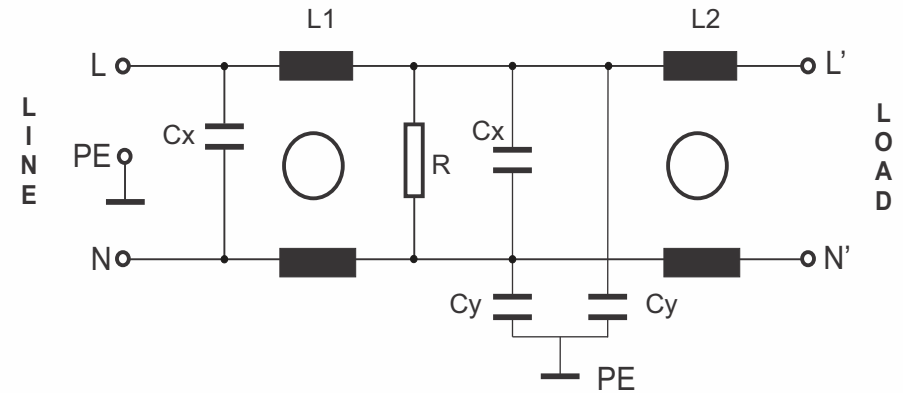
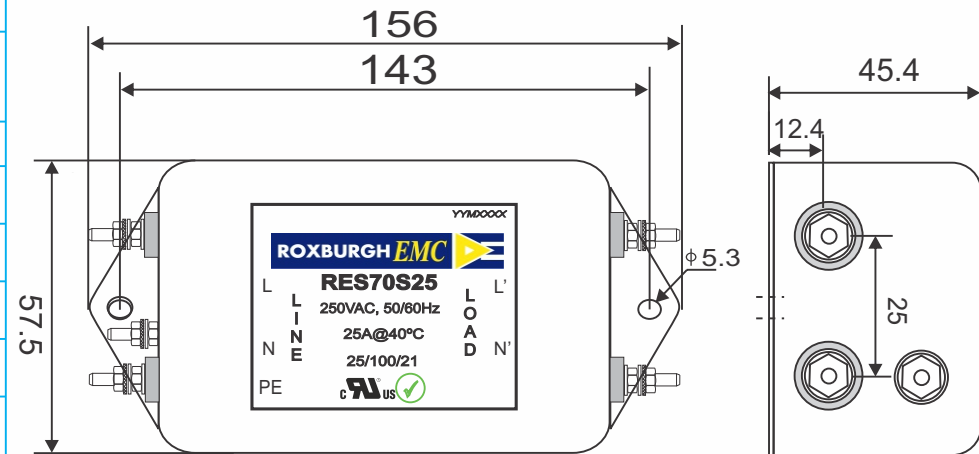
Total Inductance (L-L'+N-N') @10KHz:	4.0mH +50%,-30%
Total Capacitance (L-L/L-N) @1KHz:	4.4μF +/- -20%
Total Capacitance (L/N-GND) @1KHz:	9.4nF +/- -20%
Total Resistance (L-L/L-N):	0.22MΩ +/- -10%
Total Resistance (L/N-GND):	

**APPROVALS:**

REACH  
RoHS  
UL



APPROVED  
BY  
AJAY  
Date: 29-03-2014

**CIRCUIT DIAGRAM:****MECHANICAL DIMENSION (mm):****Note:**

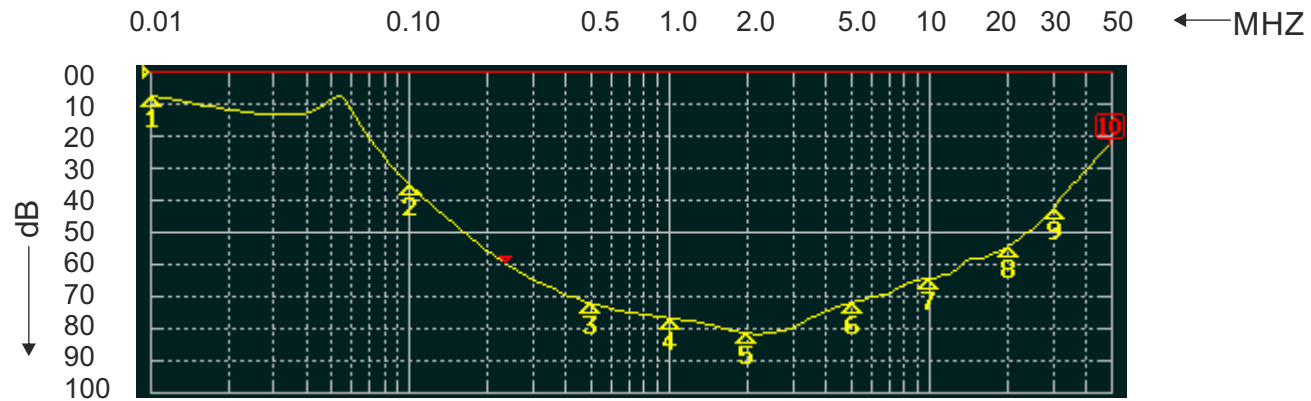
Housing matl. Fe with Ni Plated  
Screw M4 (1.3Nm max) Connections

TOLERANCE: +/-1.0 mm

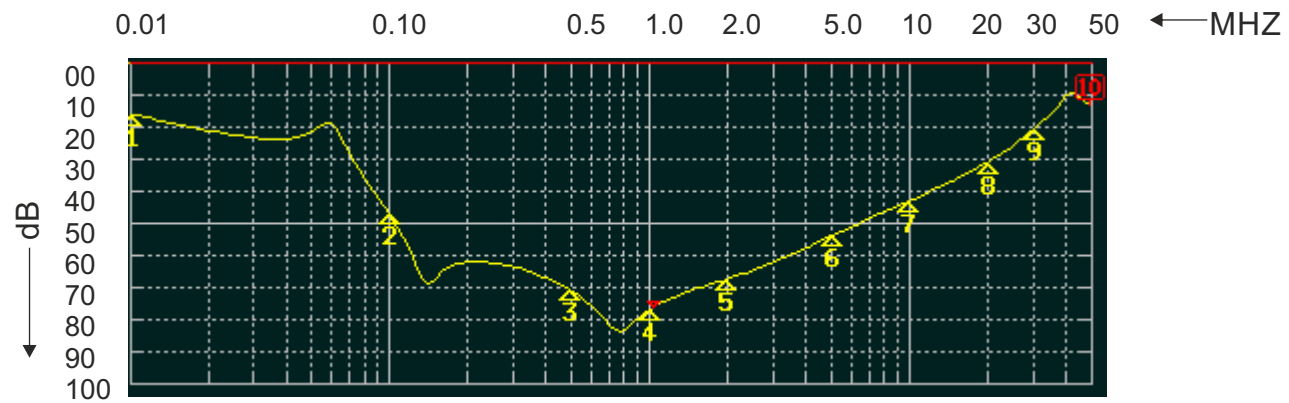


**ROXBURGH EMC**  
FILTER INSERTION LOSS CHARACTERISTICS  
CISPR 17 - 50 OHM METHOD

**RES70S25**



COMMON MODE



DIFFERENTIAL MODE

