

Single phase 250Vac 3 to 6A Fused Power Entry Module EMC Filters

https://product.tdk.com/en/search/emc/emc/power-line/tec_data/nf_rpe_f

<https://www.emea.lambda.tdk.com/uk/products/r-series>



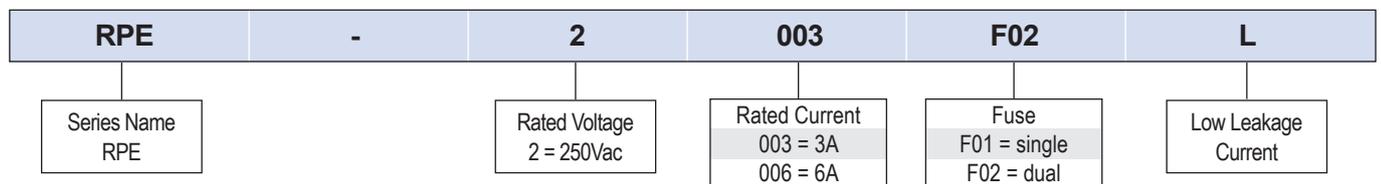
The RPE-F single-phase fused power entry module EMC filters are enclosed in a potted metal case and can be chassis mounted to accept an IEC320 line cord. They are rated for 250Vac with current ratings of 3A and 6A. The RPE-F series uses an amorphous core for enhanced differential and common mode noise. Amorphous materials offer a higher resistance to saturation from high voltage pulses and greater long term reliability than semiconductor clamps. Connection to the filters are made via faston terminals #250 (t=0.8mm). Models are available with single (line) or dual fuses (line and neutral) and a low leakage current option for medical applications.

Features	Benefits
• Panel Mount with IEC320 Inlet	• Combines a Fuse, Filter and Input Connector
• 3A and 6A Current Ratings	• Improved Noise Attenuation on Lower Current Models
• Low Leakage Current Option	• System Flexibility
• Amorphous Core Technology	• Reduces High Voltage Pulse Core Saturation
• Safety Certified	• Global Use

Model Selector							
Model	Rated Current (A)	HV Pulse Protection	Fuse	Leakage Current 250V/60Hz (mA)	Maximum DC Resistance (mΩ)	Attenuation frequency range (MHz)	
						Common mode at 25dB	Differential mode at 25dB
RPE-2003F01	3	N	Single	0.5	150	0.5 to 10	2 to 10
RPE-2006F01	6	N	Dual	0.5	100	2 to 10	3 to 10
RPE-2003F02	3	N	Single	0.5	150	0.5 to 10	2 to 10
RPE-2006F02	6	N	Dual	0.5	100	2 to 10	3 to 10

Model	Rated Current (A)	HV Pulse Protection	Fuse	Leakage Current 250V/60Hz (mA)	Maximum DC Resistance (mΩ)	Attenuation frequency range (MHz)	
						Common mode at 10dB	Differential mode at 15dB
RPE-2003F01L	3	N	Single	0.01	150	0.2 to 10	1 to 10
RPE-2006F01L	6	N	Dual	0.01	100	0.3 to 10	2 to 10
RPE-2003F02L	3	N	Single	0.01	150	0.2 to 10	1 to 10
RPE-2006F02L	6	N	Dual	0.01	100	0.3 to 10	2 to 10

Part Numbering Scheme



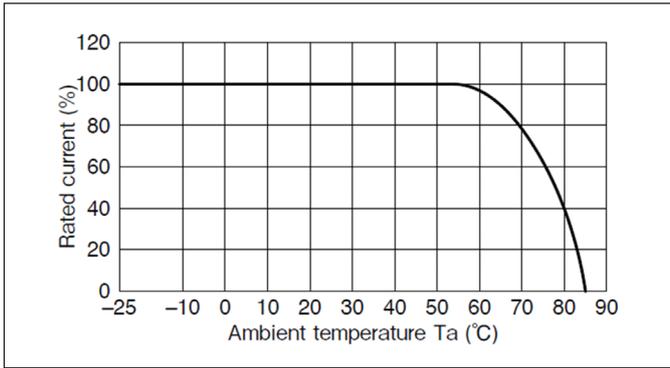
Related Products									
Type	Current Rating (A)	Series	Low Leakage	Faston on Terminals	Wire Leads	DIN Rail Mount	Fused	Discharge Resistor	Metal Case
Board mount line filter, HV Pulse	0.5 - 6	RSAG							
Board mount line filter	0.5 - 6	RSEG							
General purpose with faston terminals	6	RSEC							
General purpose	0.5 - 6	RSEL	Y	Y	Y				Y
HV pulse protection	0.5 - 6	RSAL	Y	Y	Y				
Power Entry Module with line filter	3, 6, 10	RPE	Y				(RPE-F)	Y	
Power Entry Module with line filter, HV Pulse	3, 6, 10	RPA	Y					Y	
Compact size with screw terminals	6 - 30	RSEV				DIN-RSEV*			
Multipurpose	3 - 300	RSEN	Y (Up to 30A)			Y (Up to 30A)			
Multipurpose with HV pulse protection	3 - 60	RSAN	Y (Up to 30A)			Y (Up to 30A)			
High attenuation	3 - 300	RSHN	Y (Up to 30A)			Y (Up to 30A)			
High attenuation with pulse protection	3 - 300	RSMN	Y (Up to 30A)			Y (Up to 30A)			
Wide band, high attenuation	6 - 30	RSKN							

* Separate mounting bracket
[Click here for TDK-Lambda three phase filters.](#)

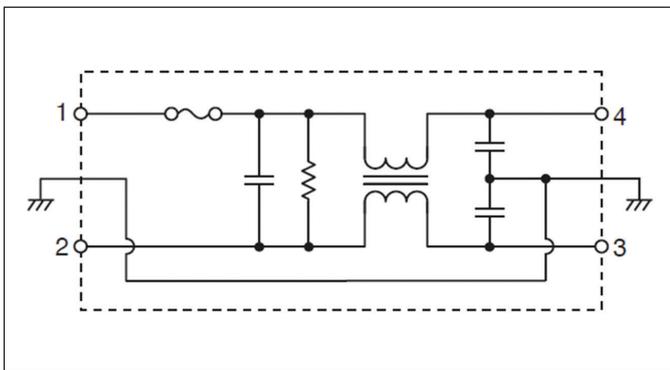
Specification		
Model		
Input		
Rated Voltage	Vac/Vdc	250 (Safety certified for AC input only)
Input Frequency	Hz	47 - 63
Leakage Current (250Vac, 60Hz)	-	See model selector
Safety Certifications and Markings	-	UL1283, CSA C22.2 No.8 (cUL), EN60939-1/-2 (NEMKO), conforms to RoHS Directive
Environmental		
Operating Temperature	°C	-25 to +85, derating above 55. See derating curve below
Storage Temperature	°C	-25 to +85
Humidity (non condensing)	%RH	Operating: 15 - 85, Storage 5 - 85
Cooling	-	Convection
Withstand Voltage	Vac	1,500 input to earth
Isolation Resistance (For 1 minute)	MΩ	>100 at 500Vdc
Vibration	-	10-55Hz Amplitude 1.5mm, Sweep for 1 min. X, Y and Z directions for 2 hours each
Other		
Weight (Typ)	g	70
Size (LxWxH excluding flange)	mm	53.3 x 28.5 x 27.8
Size (LxWxH excluding flange)	Inches	2.1 x 1.12 x 1.09
Connectors		Faston #250 (t=0.8mm)
Case Material	-	Metal (potted)
MTBF - MIL-HDBK-217F NOTICE2 GF	Hours	RPE-2003F02: 7,276,961, RPE-2006F01L: 15,918,497
Warranty	Years	5

Notes
 See website for detailed specifications, test methods and installation manual.
[RPE-F technical files](#)

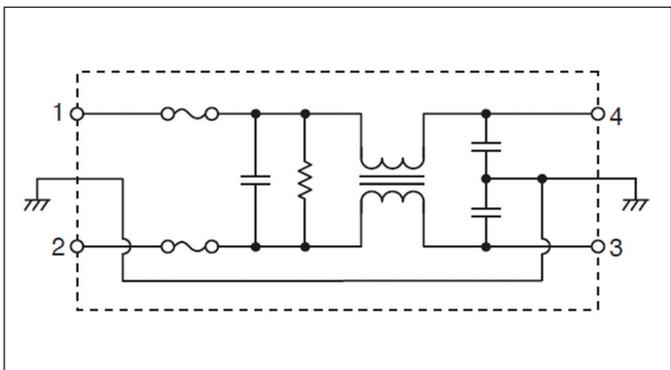
Derating Curve (All models)



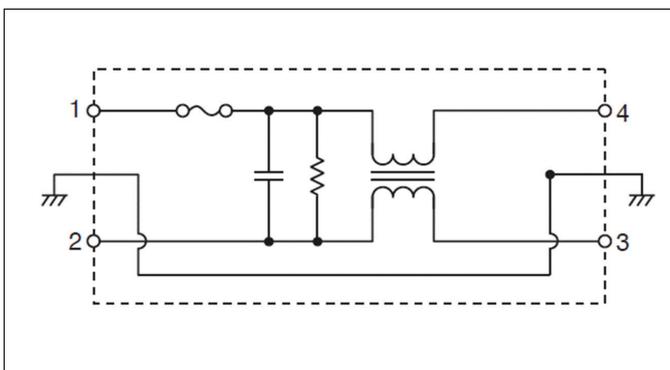
Schematic RPE-2xxxF01



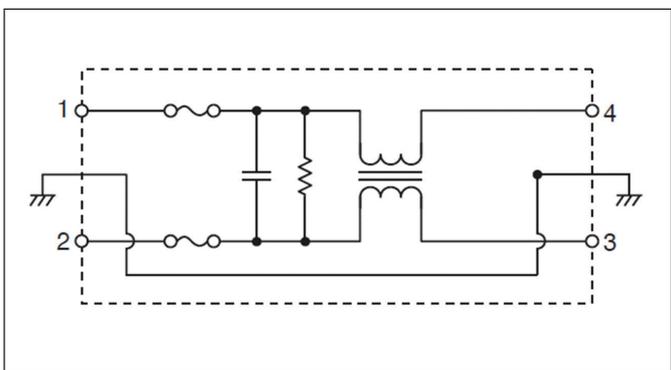
Schematic RPE-2xxxF02



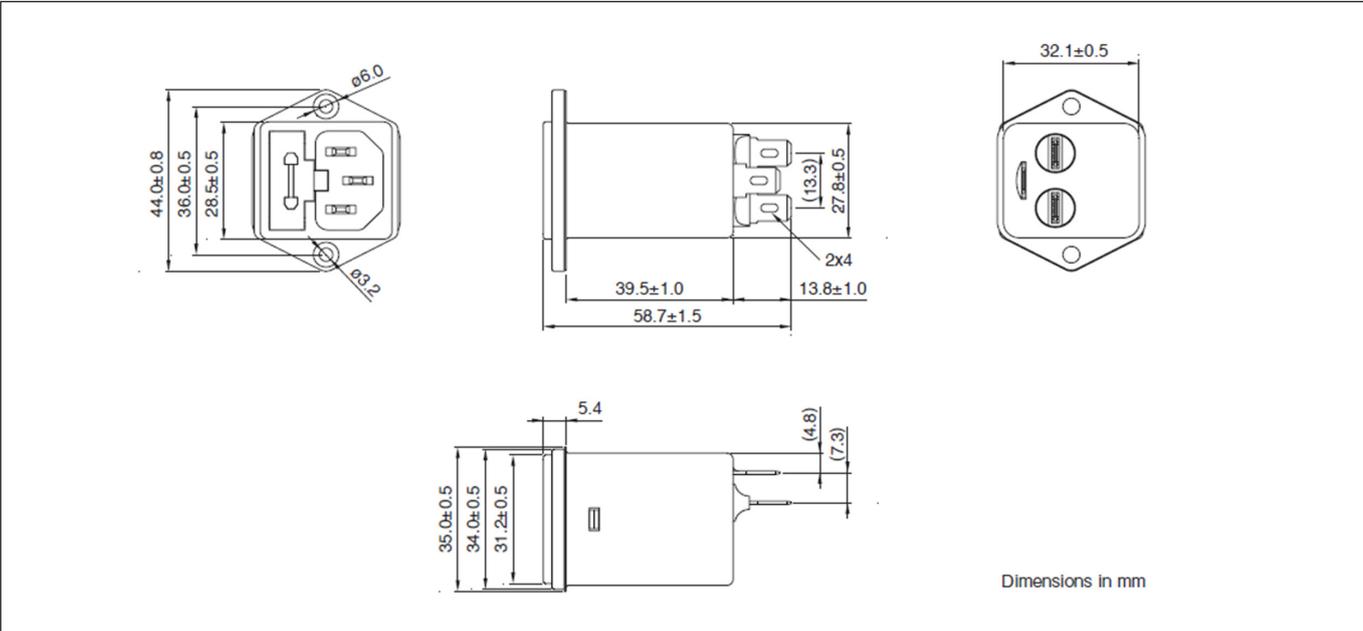
Schematic RPE-2xxxF01L



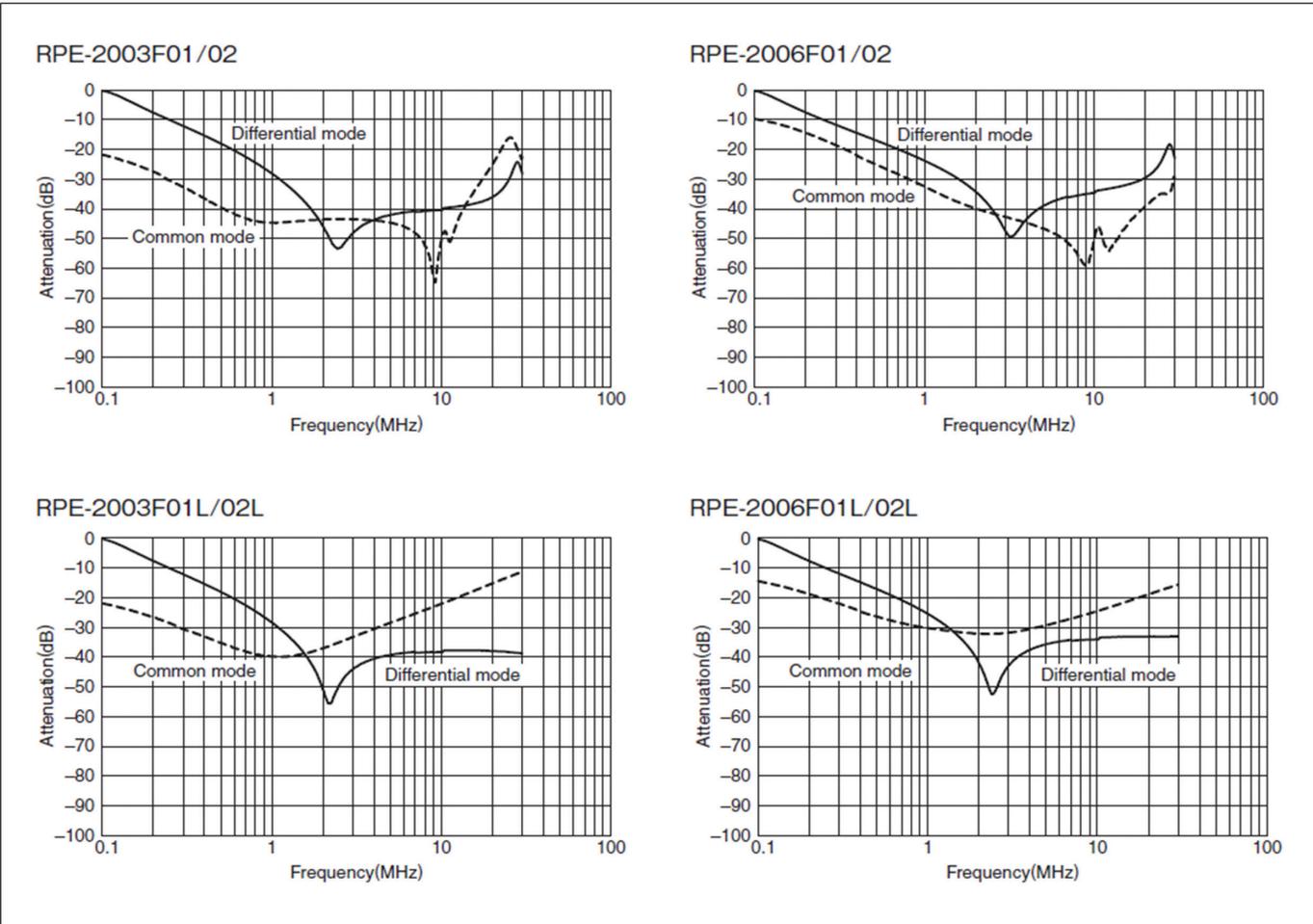
Schematic RPE-2xxxF02L



Outline Drawing & Pin Out



RPE-F Attenuation vs. Frequency





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