

# ERP610

- Ceramic AC Capacitors
- Class X1, 760V AC/Class Y1, 500VAC

## TYPICAL APPLICATIONS

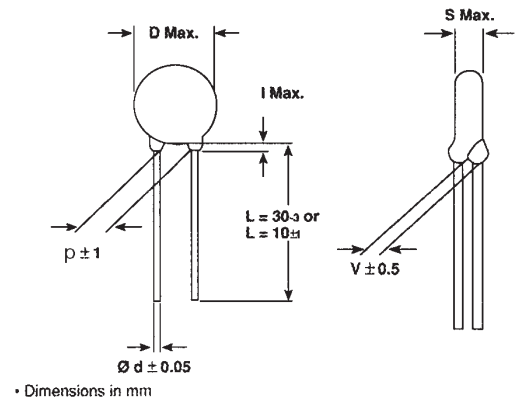
For worldwide use as electromagnetic interference suppressor in all X1 and Y1 applications.

## CONSTRUCTION

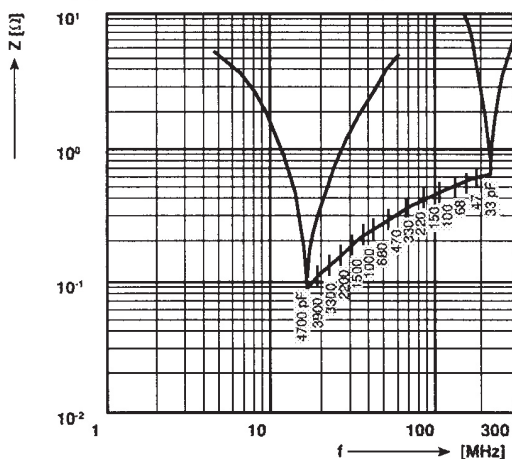
Disc capacitors with epoxy coating. Epoxy dipped, insulating, flame retarding according to UL 94V-0.

## TECHNICAL DATA

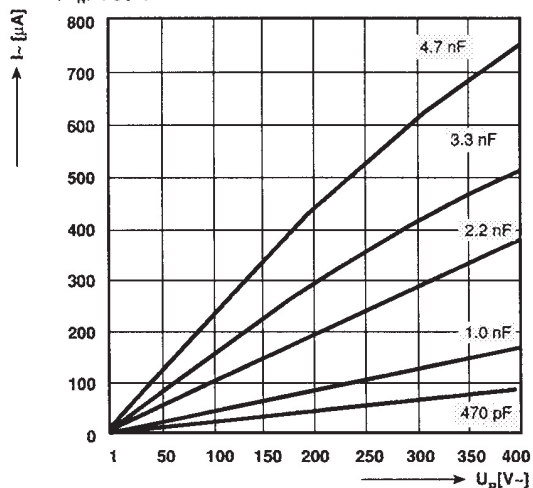
	X1	Y1
<b>Rated voltage <math>U_R</math></b> (IEC 60384-14.2)	760 VAC, 50 Hz	500 VAC, 50 Hz
<b>Capacitance range</b>	33-4700 pF	
<b>Capacitance tolerance</b>	$\pm 10\%$ , $\pm 20\%$	
<b>Temperature range</b>	$(-40$ to $+125)^\circ\text{C}$	
<b>Climatic category</b>	IEC 40/125/21	
<b>Approvals</b>	VDE, UL, CSA	
<b>Dissipation factor <math>\tan\delta</math></b>	$\leq 25 \cdot 10^{-3}$	
<b>Test voltage between terminals</b>	Component test: 4000 VAC, 50 Hz, 2 s As repeated test admissible only once with 3600 VAC, 50 Hz, 2 s Random sampling test (destructive test): 4000 VAC, 50 Hz, 60 s	
<b>Dielectric strength of body insulation</b>	4000 VAC, 50 Hz, 60 s (destructive test)	
<b>Insulation resistance</b>	$\geq 10 \cdot 10^9 \Omega$	
<b>Taping and special lead configurations</b>	On request	



Impedance (Z) as a function of frequency (f) at  $T_a = 20^\circ\text{C}$  (average). Measurement with lead length 6mm.



$I = f(U_R)$  (typ.)



Statements of suitability for certain applications are based on our knowledge of typical operating conditions for such applications, but are not intended to constitute – and we specifically disclaim – any warranty concerning suitability for a specific customer application or use. This Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by us with reference to the use of our products is given gratis, and we assume no obligation or liability for the advice given or results obtained.

## ARTICLE TABLE

Capacitance pF	Dimensions D x s Max (mm)	p±1* (mm)	d±0.05* (mm)	V±0.5* (mm)	Article code 1 st block	Ceramic dielectric
33	8.0 x 6.0	12.5	0.6	1.9	ERP610VH2330M	N 750
47	8.0 x 6.0	12.5	0.6	2.3	ERP610VH2470M	K 1200
68	8.0 x 6.0	12.5	0.6	2.3	ERP610VH2680M	K 1200
100	8.0 x 6.0	12.5	0.6	2.3	ERP610VH3100M	K 1500
150	8.0 x 6.0	12.5	0.6	2.3	ERP610VH3150M	K 2000
220	8.0 x 6.0	12.5	0.6	2.3	ERP610VH3220M	K 2000
330	8.0 x 6.0	12.5	0.6	2.5	ERP610VH3330M	K 2000
470	8.0 x 5.0	12.5	0.6	2.1	ERP610VH3470M	K 4000
680	8.0 x 5.0	12.5	0.6	2.1	ERP610VH3680M	K 4000
1000	9.0 x 5.0	12.5	0.8	2.1	ERP610VH4100M	K 4000
1500	10.0 x 5.0	12.5	0.8	2.1	ERP610VH4150M	K 4000
2200	12.0 x 5.0	12.5	0.8	2.1	ERP610VH4220M	K 4000
2700	13.0 x 5.0	12.5	0.8	2.1	ERP610VH4270M	K 4000
3300	15.0 x 5.0	12.5	0.8	2.1	ERP610VH4330M	K 4000
3900	15.0 x 5.0	12.5	0.8	2.1	ERP610VH4390M	K 4000
4700	17.0 x 5.0	12.5	0.8	2.1	ERP610VH4470M	K 4000

\* Standard lead configuration, other lead spacing and diameter available on request.

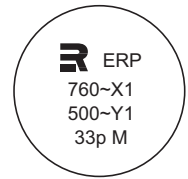
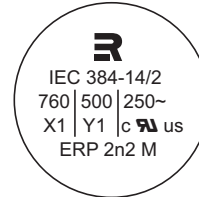
## APPROVALS/REFERENCE DOCUMENTS

Certification Body	Specification	Approval reference
VDE UL	EN 132400 UL 1414 (U <sub>R</sub> = 250 VAC)	40001993, 40001996 E73869
CSA (cUL recognition)	C 22.2 No. 1-M90 (U <sub>R</sub> =250 VAC)	216038

## MARKING

2.2 nF to 4.7 nF

33 pF to 1.5 nF



All approval marks are also shown on the label.

## ORDERING INFORMATION

Article code  
1st block

See article table  
Pos. 13 Capacitance tolerance code:  
M = ± 20% standard  
K = ± 10% option

## 2nd block

See separate brochure:  
Ceramic Disc, EMI and Safety Capacitors,  
General information  
Page 5

See article table and page 19 in the Evox Rifa Film Capacitors 2003 catalogue. For options, see Ceramic Disc, EMI and Safety Capacitors, General information, Page 5.

## PACKING

The box dimensions for bulk packaging are 245 x 145 x 80 mm. Quantity/package as per article table.

Reels with taped capacitors are packed 10 in a box with dimension 370 x 370 x 560 mm. Quantity/reel according to article table. The standard quantity/reel is for 360 mm reel. If 500 mm reel is required, it must be specified when ordering and the quantity is 2 x the given quantity.

## DATA SHEET ERP610

Specifications subject to change without notice

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