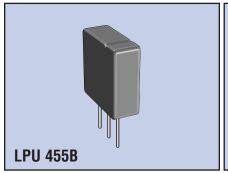
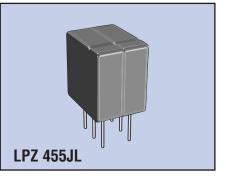
LPUB / LPZJL SERIES CERAMIC FILTER







FEATURES

- AM use
- RoHS Compliant (Note 7 exemption)

OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PART NUMBER	3dB Bandwidth (KHz)	SELECTIVITY -9 KHZ OFF (dB) MIN.	SELECTIVITY +9 KHZ OFF (dB) MIN.	INSERTION LOSS (dB) MAX.	COMPOSITION
LPU455B - (connected with IFT)	10 ±3	5 (7.5)	3 (5.5)	5 (3)	1 Element with IFT
LPZ455JL - (connected with IFT)	5.5 ±1	18 (20)	18 (20)	7 (3.5)	2 Elements Direct Coupling Type

- Center frequency (fo) is available in a range of 450 to 470KHz. The standard tolerance of fo is ±2KHz. For synthesizers and digital indicators, ±1KHz tolerance is also available.
- The LPZ455JL series, with its two directly coupled elements, has a high degree of selectivity. The series features excellent matching characteristics for IFT.

PACKAGE DIMENSIONS (mm)

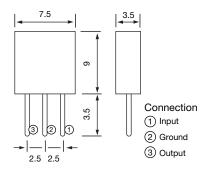


Figure 1) LPU455B - Front and Side views

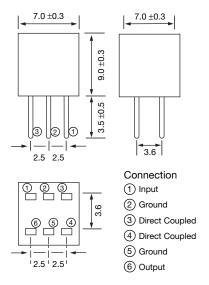


Figure 2) LPZ455JL - Front, Side and Bottom views

ITEM \ TYPE	LPU □□□B			LPZ 🗆 🗆 🗆 JL		
WINDING SPECIFICATIONS	1)—2	2-3	4-6	1)—2	2-3	4-6
Bottom view	70 T	115 T	7 T	68 T	84 T	14 T
UNLOADED Qu		105			90	
TUNING CAPACITY	180pF			180pF		

Figure 3) Recommended IFT Specifications

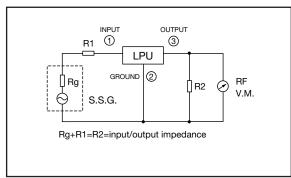


Figure 4) LPU Series - Measuring Circuit

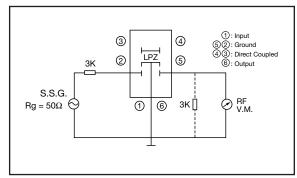


Figure 5) LPZ Series – Measuring Circuit

^{() =} Typical values



May 16, 2007

ECS, Inc. International 1105 South Ridgeview Road Olathe, KANSAS, 66062 USA www.ecsxtal.com

913-782-7787 1-800-237-1041 Fax: 913-782-6991

Mike Huennekens Director of Marketing and OEM Sales E-mail: mikeh@ecsxtal.com Phone: 1-800-237-1041

CERAMIC RESONATOR/FILTER

Application Information Request

Attention: All Customers

From: Mike Huennekens, Director of Marketing and OEM Sales

Subject: Ceramic Resonator Application Information Request

Disallowed:

Date:

Approved:

ECS is requesting that you complete the section below that will allow us to determine if the specific application is suitable for the ceramic resonator/filters that you have requested.

Ceramic Resonators/Filters, both surface mount and through-hole type, are a much different frequency control solution than that of a crystal based device. Not only are there "matching" issues to specific integrated circuits and processors with ceramic based piezoelectric components but for multiple reasons ceramics are not the most advantageous nor robust frequency control solution for certain applications.

In addition, ECS does not approve the use of its ceramic products in Automotive, Military, Avionics, Life Sustaining or Life Support systems or any other related medical application.

If the customer chooses to use this product in one or more of the noted applications without the written consent of ECS, Inc., ECS, Inc. shall be held harmless, and given release of liability and indemnification from claims of any nature.

Title Signature	e Date		
Title			
Print You	ur Name		
Company Name		** If this item will be used by a a form be completed and sign	
	that the above information is true a sed in the restricted applications not	d correct to the best of my knowledge and acknowledge that ECS d above.	will be held harmless if this
	Application Details You Must Be Specific or this may be returned for more information.		
	previously for this application? End Customer	Yes No No	
	Has this part already been approved for this application? Has this part been ordered	Yes No No	
	Estimated Annual Usage		

Please direct any further inquires to Brad Slatten at brads@ecsxtal.com or Carla Williams at carlaw@ecsxtal.com. We thank you for your understanding and patience in this process.

Approved By: