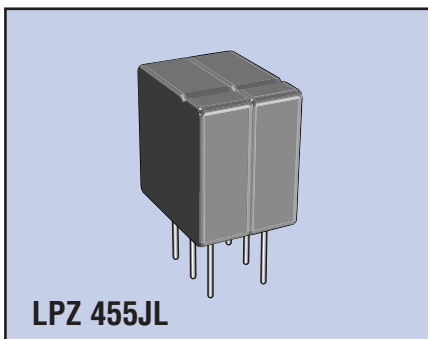
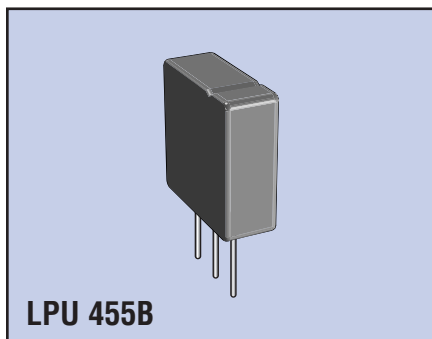




FEATURES

- 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 $\pm$ 3	5 (7.5)	3 (5.5)	5 (3)	1 Element with IFT
LPZ455JL - (connected with IFT)	5.5 $\pm$ 1	18 (20)	18 (20)	7 (3.5)	2 Elements Direct Coupling Type

• Center frequency (f_0) is available in a range of 450 to 470KHz. The standard tolerance of f_0 is ± 2 KHz. For synthesizers and digital indicators, ± 1 KHz 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.

() = Typical values

PACKAGE DIMENSIONS (mm)

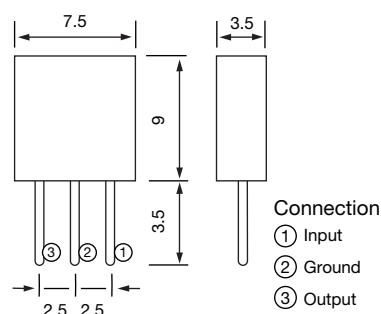


Figure 1) LPU455B – Front and Side views

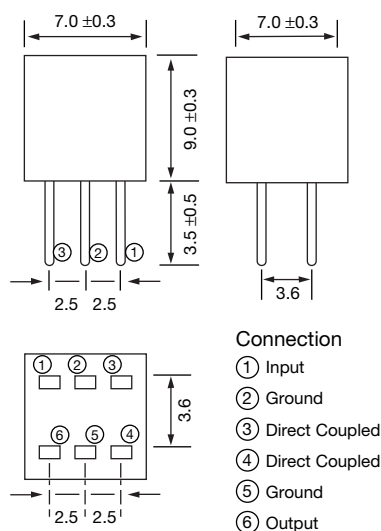


Figure 2) LPZ455JL – Front, Side and Bottom views

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

Figure 3) Recommended IFT Specifications

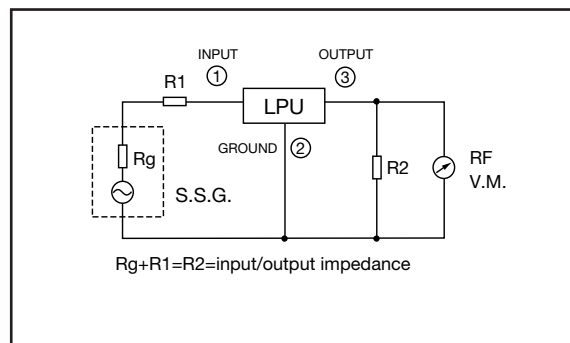


Figure 4) LPU Series – Measuring Circuit

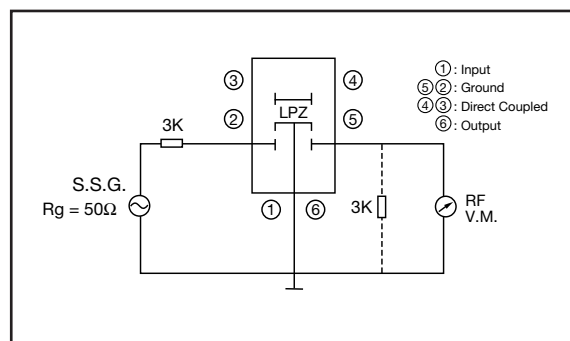


Figure 5) LPZ Series – Measuring Circuit



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

May 16, 2007

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

C E R A M I C R E S O N A T O R / F I L T E R

Application Information Request

Attention: All Customers

From: Mike Huennekens, Director of Marketing and OEM Sales

Subject: Ceramic Resonator Application Information Request

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.

Please complete the following and submit this form as soon as possible.

ECS Part Number	
Estimated Annual Usage	
Has this part already been approved for this application?	Yes ☐ No ☐
Has this part been ordered previously for this application?	Yes ☐ No ☐
End Customer	
Application Details <u>You Must Be Specific</u> or this may be returned for more information.	

I certify that the above information is true and correct to the best of my knowledge and acknowledge that ECS will be held harmless if this item is used in the restricted applications noted above.

Company Name

Print Your Name

Title

Signature

Date

**** If this item will be used by a 3rd party ECS may require a form be completed and signed by all parties.**

To be completed by ECS Inc., International

Approved: ☐ Disallowed: ☐ Date: _____ Approved By: _____

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.