SPECIFICATION SHEET

DIP CERAMIC FILTER STANDARD CASE 6565 LTM U SERIES

SPECIFICATION SHEET NO.	S0916- LTM450HTU0L017	
ORIGINAL MFG/PART NO	TGS Crystals/CFM450HTU/LTM450HTU	
NEXTGEN PART CODE	LTM450HTU0L017	Indicate This Code For RFQ /Order
DATE	Sept. 16, 2025	
REVISION	A5	Updated With Most Recent Data
DESCRIPTION AND MAIN PARAMETRICS	KHz DIP Ceramic Filter, Standard Type, 4 Pins, LTM U Series Case 6565, Dimension L6.5*W6.5*H6.3mm 450KHz, Insertion Loss. 6.0dB Max.; 6dB Bandwidth: ±3.0KHz Min. Input/Output Impedance: 2000 ohm, Operating Temp. Range -20°C ~+80°C, Packed in Bulk RoHS/RoHS III compliant, RoHS Annex III lead Exemption (exempt per RoHS EU 2015/863)	
CUSTOMER		
CUSTOMER PART NUMBER		
CROSS REF. PART NUMBER		
MEMO		

VENDOR APPROVE
Issued/Checked/Approved       
Date: Sept. 16, 2025

CUSTOMER APPROVE
Date:

MAIN FEATURE

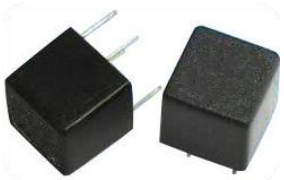


Image shown is a representation only.
Exact specifications should be obtained from the product dimension.

- KHz DIP Ceramic Filter, Standard Type, 4 pins, Case 6565
- Ultra Small Black Case, Dimension L6.5*W6.5*H6.3mm
- Low Cost And Short Shipment
- High Selectivity
- 450KHz is available
- Cross Main Competitors Parts CFULB series
- REACH/RoHS/RoHS III compliant, RoHS Annex III lead Exemption

  (Exempt per RoHS EU 2015/863)

APPLICATION

- Communication Electronics

ELECTRICAL CHARACTERISTICS

- See Page 5 ~Page 9 For Different Part Code
- All Parametric are Subject To NextGen Components' Final Confirmation

HOW TO ORDER

- Please follow up part code guide and indicate Part Code LTM450HTU0L017 when you order or RFQ.

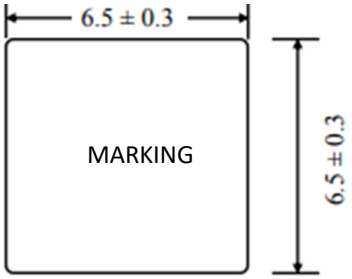
PART CODE GUIDE

RFQ
Request For Quotation

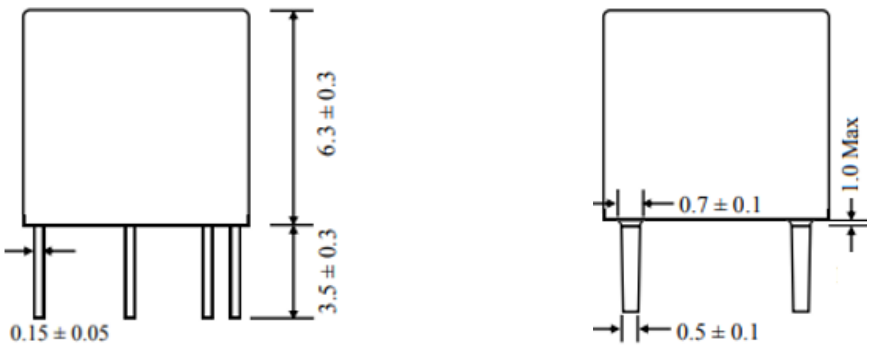
CODE	NAME	KEY SPECIFICATION OPTION
LTM	Product Index	KHz DIP Standard Ceramic Filter, Extra Small Case 6565, Dimension L6.5*W6.5*H6.3mm
450	Frequency Range	450: 450KHz; 455: 455KHz
HT	Parametric Code	Letter or Digits (A~Z, a~z or 0~9)
U	Pin Code	U: 4 pins; W: 5 pins
0L017	Internal Control	Letter or Digits (A~Z, a~z or 0~9)
- XX	Suffix	Blank: N/A XX: Internal Control Code, Letter A~Z, a~z or digits (0~9) for Special/Custom Parameters

DIMENSION (Unit: mm) – Case 6565, 4 Pins, L6.5*W6.5*H6.3mm

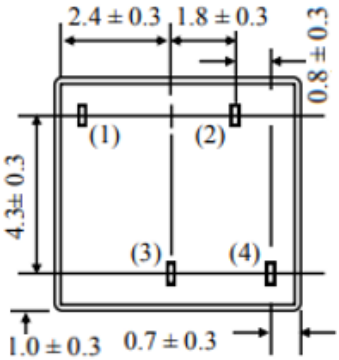
Top View



Side View



Bottom View



Connection

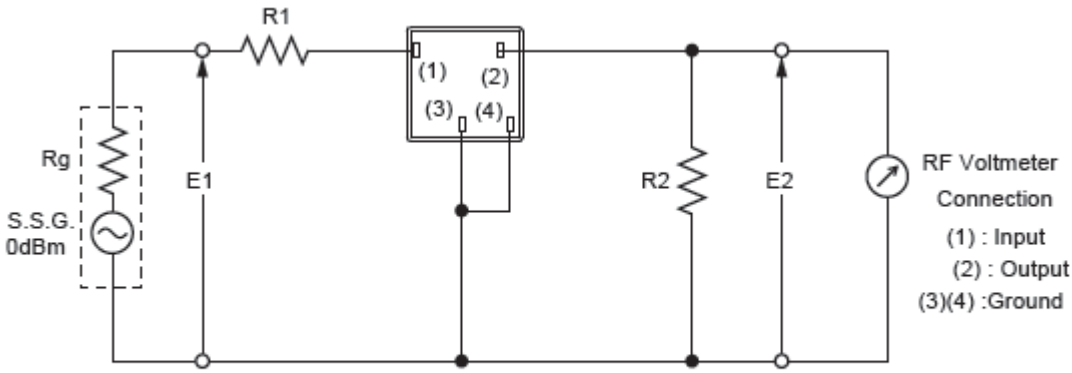
① Input

② Output

③④ Ground

MEASUREMENT

- Measurement shall be carried out at the standard temperature of 25±2℃. If no specific requirements, Test can be carried out under 5-35℃.
- Measuring Circuit



Rg+R1=R2=Input/Output Impedance

GENERAL ELECTRICAL PARAMETERS

PARAMETER	UNITS	VALUE			CONDITION
		MIN.	TYPICAL	MAX.	
Operating Temperance	°C	-20		+80	
Storage Temperance	°C	-40		+85	
Temperature Stability	%			±0.5	@ -20°C ~+80°C
Insulation Resistance	MΩ	100			@DC 25V 1 minute

455KHZ MAIN ELECTRICAL PARAMETRICS PART I - Ta = 25℃

Part Code	Center Frequency (f0)	Bandwidth (3dB) Min.	Bandwidth (6dB) Min.	Bandwidth (40dB) Min	Stop Band Attenuation Min.
	@ 6dB Bandwidth				@ f0 ±100KHz
	KHz	KHz	KHz	KHz	dB
LTM455BU00L001	455 ±2.0	±12.5	±15.0	±30.0	27
LTM455CU00L002	455 ±2.0	±10.0	±12.5	±24.0	27
LTM455DU00L003	455 ±1.5	±7.0	±10.0	±20.0	27
LTM455EU00L004	455 ±1.5	±6.0	±7.5	±15.0	27
LTM455FU00L005	455 ±1.0	±4.5	±6.0	±12.5	27
LTM455GU00L006	455 ±1.0	±3.0	±4.5	±10.0	27
LTM455HU00L007	455 ±1.0	±2.0	±3.0	±9.0	27
LTM455IU00L008	455 ±1.0	±1.5	±2.0	±7.5	27
LTM455HTU0L017	455 ±1.0	±2.0	±3.0	±9.0	35
LTM455ITU0L018	455 ±1.0	±1.5	±2.0	±7.5	35

455KHZ MAIN ELECTRICAL PARAMETRICS PART II - Ta = 25℃

Part Code	Center Frequency (f0)	Ripple Max.	Insertion Loss Max.	Input/Output Impedance
	@ 6dB Bandwidth		@ loss Point	
	KHz	dB	dB	Ω
LTM455BU00L001	455 ±2.0	2 @ f0 ±12.5KHz	4	1500
LTM455CU00L002	455 ±2.0	2 @ f0 ±12.5KHz	4	1500
LTM455DU00L003	455 ±1.5	2 @ f0 ±7.0KHz	4	1500
LTM455EU00L004	455 ±1.5	2 @ f0 ±5.0KHz	4	1500
LTM455FU00L005	455 ±1.0	2 @ f0 ±5.0KHz	4	2000
LTM455GU00L006	455 ±1.0	2 @ f0 ±5.0KHz	4	2000
LTM455HU00L007	455 ±1.0	2 @ f0 ±2.3KHz	6	2000
LTM455IU00L008	455 ±1.0	2 @ f0 ±1.5KHz	6	2000
LTM455HTU0L017	455 ±1.0	2 @ f0 ±2.3KHz	6	2000
LTM455ITU0L018	455 ±1.0	2 @ f0 ±1.5KHz	6	2000

450KHZ MAIN ELECTRICAL PARAMETRICS PART I - Ta = 25℃

Part Code	Center Frequency (f0)	Bandwidth (3dB) Min.	Bandwidth (6dB) Min.	Bandwidth (40dB) Min	Stop Band Attenuation Min.
	@ 6dB Bandwidth				@ f0 ±100KHz
	KHz	KHz	KHz	KHz	dB
LTM450BU00L001	450 ±2.0	±12.5	±15.0	±30.0	27
LTM450CU00L002	450 ±2.0	±10.0	±12.5	±24.0	27
LTM450DU00L003	450 ±1.5	±7.0	±10.0	±20.0	27
LTM450EU00L004	450 ±1.5	±6.0	±7.5	±15.0	27
LTM450FU00L005	450 ±1.0	±4.5	±6.0	±12.5	27
LTM450GU00L006	450 ±1.0	±3.0	±4.5	±10.0	27
LTM450HU00L007	450 ±1.0	±2.0	±3.0	±9.0	35
LTM450IU00L008	450 ±1.0	±1.5	±2.0	±7.5	27
LTM450HTU0L017	450 ±1.0	±2.0	±3.0	±9.0	35
LTM450ITU0L018	450 ±1.0	±1.5	±2.0	±7.5	35

450KHZ MAIN ELECTRICAL PARAMETRICS PART II - Ta = 25℃

Part Code	Center Frequency (f0)	Ripple Max.	Insertion Loss Max.	Input/Output Impedance
	@ 6dB Bandwidth		@ loss Point	
	KHz	dB	dB	Ω
LTM450BU00L001	450 ±2.0	2 @ f0 ±12.5KHz	4	1500
LTM450CU00L002	450 ±2.0	2 @ f0 ±12.5KHz	4	1500
LTM450DU00L003	450 ±1.5	2 @ f0 ±7.0KHz	4	1500
LTM450EU00L004	450 ±1.5	2 @ f0 ±5.0KHz	4	1500
LTM450FU00L005	450 ±1.0	2 @ f0 ±5.0KHz	4	2000
LTM450GU00L006	450 ±1.0	2 @ f0 ±5.0KHz	4	2000
LTM450HU00L007	450 ±1.0	2 @ f0 ±2.3KHz	6	2000
LTM450IU00L008	450 ±1.0	2 @ f0 ±1.5KHz	6	2000
LTM450HTU0L017	450 ±1.0	2 @ f0 ±2.3KHz	6	2000
LTM450ITU0L018	450 ±1.0	2 @ f0 ±1.5KHz	6	2000

PHYSICAL CHARACTERISTICS

TEST ITEMS	MEASUREMENT CONDITION	REQUIREMENT
Random Drop	Filter shall be measured after 3 times random drops from the height of 30cm on concrete floor	No visible damage and it meet Table at Page 5~9
Vibration	Filter shall be measured after being applied vibration of amplitude of 1.5mm with 10-55Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours	No damage and it meet Table at Page 5~9
Solderability	Lead terminals are immersed in aide solder for 5 sec and then immersed in soldering bath of 230±5℃, for 3±0.5 sec.	At least 95% lead terminals shall be covered with solder.
Substrate Bending Test	Apply pressure in the direction of arrow at a rate of about 0.5mm per second until it reaches a bend of 3mm and hold for 30s.	No damage, no cut-off and it meet Table at Page 5~9
Adhesion	A static load of 20N to the direction of the arrow shall be applied on the core of the component and hold for 10 seconds. Filter shall be soldered correctly and tightly to PCB.	No damage, no cut-off and it meet Table at Page 5~9
Reflow Soldering	Put on the solder paste on the printed wiring board the samples shall be mounted and soldered under the condition, then it shall be subjected to the room atmosphere for 24 hours prior to the measurement.	No damage, no cut-off and it meet Table at Page 5~9

ENVIRONMENTAL CHARACTERISTICS

TEST ITEMS	MEASUREMENT CONDITION	REQUIREMENT
Humidity	After being placed in a chamber with 90-95% R.H. at 40±2℃ for 100 hours and then being placed in room temperature for 1 hour, filter shall be measured.	It shall meet Table at Page 5~9
Resistance to Solder Heat	After being placed in a chamber with 80±2℃,for 100 hours and then being placed in room temperature for 1 hour , filter shall be measured.	It shall meet Table at Page 5~9
High Temperature	After being placed in a chamber with 80±2℃,for 100 hours and then being placed in room temperature for 1 hour , filter shall be measured.	It shall meet Table at Page 5~9
Low Temperature	After being placed in a chamber with -20±2℃,for 100 hours and then being placed in room temperature for 1 hour, filter shall be measured.	It shall meet Table at Page 5~9
Heat Shock	After being kept at room temperature, filter shall be placed at temperature of –55 ℃ , for 30 minutes, then be placed at temperature. 85℃, for 30 minutes. After that returned to –55℃ again. Repeated above cycle for 5 times. After being kept in room temp. for 1 hour, filter shall be measured	It shall meet Table at Page 5~9

IMPORTANT NOTES AND DISCLAIMER

1. ROHS COMPLIANCE: The levels of RoHS restricted materials in this product are below the maximum concentration values (also referred to as the threshold limits) permitted for such substances, or are used in an exempted application, in accordance with EU RoHS Directive (EU) 2015/863 EC (RoHS3). RoHS Test Report for this product can be obtained can be obtained at Download Center.
2. REACH COMPLIANCE: REACH substances of high concern (SVHCs) information is available for this product. Since the European Chemical Agency (ECHA) has published notice of their intent to frequently revise the SVHC listing for the foreseeable future, REACH Test Report for this product can be obtained can be obtained at Download Center.
3. All Product parametric performance is indicated in the Electrical Characteristics for the listed herein test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.
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