

DATA SHEET 2023

- FILTER & RESONATORS



- **MHZ SMD CERAMIC RESONATOR**
- **MHZ THRU HOLE CERAMIC RESONATOR**
- **KHZ SMD CERAMIC RESONATOR**
- **KHZ THRU HOLE CERAMIC RESONATOR**
- **MHZ SMD DISCRIMINATOR**
- **KHZ SMD DISCRIMINATOR**
- **MHZ SMD CERAMIC FILTER**
- **MHZ THRU HOLE CERAMIC FILTER**
- **KHZ SMD CERAMIC FILTER**
- **KHZ THRU HOLE CERAMIC FILTER**

MHZ SMD CERAMIC RESONATORS

MAIN FEATURE

- Extra SMD Package, 2 pads
- Low Cost and short lead time

APPLICATION

- Clock oscillators for microprocessors
- Small electronic equipment and more

STANDARD SPECIFICATION

RFQ
Request For Quotation



L2.5*W2.0*H0.9mm

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	20.00		60.00	MHz	see p/n guide or Specify
Frequency Accuracy		±0.5		%	@25 °C
Operating Temperature Range	-25	-	+85	°C	
Storage Temperature Range	-55	-	+85	°C	
Capacitance (C1/C2)		-	-	pF	
		15	-		MX: 20.00~25.99MHz
	-	5	-		MX: 26.00~60.00MHz
Temperature Coefficient	-	±0.3	-	%	Oscillation Freq. drift @-25 °C ~+85 °C
Resonant Impedance	-	-	60	ohm	
Aging per year*	-	-	±0.3	%	From initial value
Withstanding Voltage		50		V	DC, 5s Max.
Insulation Resistance Ri	500			MΩ	10V, 1min
Rating Voltage UR		6		V	DC
		15		V	p-p AC
IC	MX: 1/6TC74HCU04				

* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

PART NUMBER GUIDE

Example: CRAW30.0MX TLF

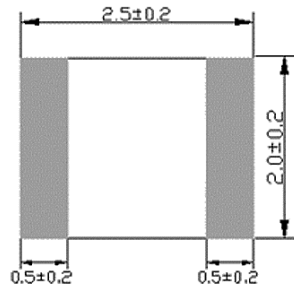
CR	A	W	30.0	MX	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CR: Ceramic Resonator
- 2) A: Without Built-in Capacitance, 2 Pads
- 3) W: Outline Dimensions L2.5*W2.0*H0.9mm
- 4) 30.0: Frequency Range in MHz, 30.000MHz or Specify
- 5) MX: Design Mode for different Frequency range, MX: 20.00~60.00MHz
- 6) T: Package in Tape/Reel
- 10) LF: RoHS Compliant
- 11) XX: Internal Control Code, 2 letter or digits; Blank: N/A

MHZ SMD CERAMIC RESONATORS

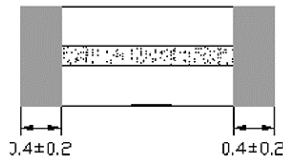
DIMENSION (Unit: mm)

Top View

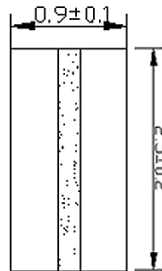


Connection
#1 In/Output
#2 Out/Input

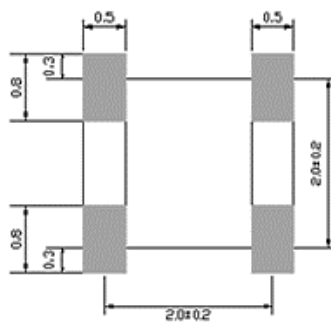
Bottom View



Side View



Solder Pattern



MHZ SMD CERAMIC RESONATORS

MAIN FEATURE

- Extra SMD Package, 3 pads
- Low Cost and short lead time

APPLICATION

- Clock oscillators for microprocessors
- Small electronic equipment and more

STANDARD SPECIFICATION

RFQ
Request For Quotation



L2.5*W2.0*H1.1mm

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	20.00		60.00	MHz	see p/n guide or Specify
Frequency Accuracy		±0.5		%	@25 °C
Operating Temperature Range	-25	-	+85	°C	
Storage Temperature Range	-55	-	+85	°C	
Built-in Capacitance		-	-	pF	-
		15	-		MX: 20.00~25.99MHz
	-	5	-		MX: 26.00~60.00MHz
Temperature Coefficient	-	±0.3	-	%	Oscillation Freq. drift @-25 °C ~+85 °C
Resonant Impedance	-	-	60	ohm	
Aging per year*	-	-	±0.3	%	From initial value
Withstanding Voltage		50		V	DC, 5s Max.
Insulation Resistance Ri	500			MΩ	10V, 1min
Rating Voltage UR		6		V	DC
		15		V	p-p AC
IC	MX: 1/6TC74HCU04				

* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

PART NUMBER GUIDE

Example: CRTW25.0MX TLF

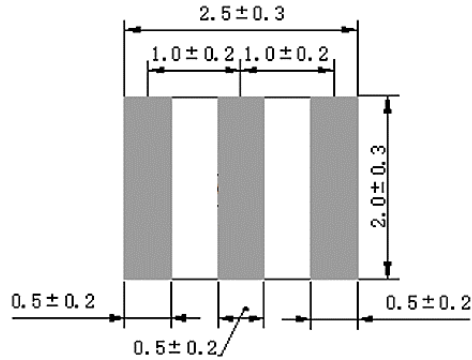
CR	T	W	25.0	MX	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CR: Ceramic Resonator
- 2) T: With Built-in Capacitance, 3 Pads
- 3) W: Outline Dimensions L2.5*W2.0*H1.1mm
- 4) 30.0: Frequency Range in MHz, 30.000MHz or Specify
- 5) MX: Design Mode for different Frequency range, MX: 20.00~60.00MHz
- 6) T: Package in Tape/Reel
- 10) LF: RoHS Compliant
- 11) XX: Internal Control Code, 2 letter or digits; Blank: N/A

MHZ SMD CERAMIC RESONATORS

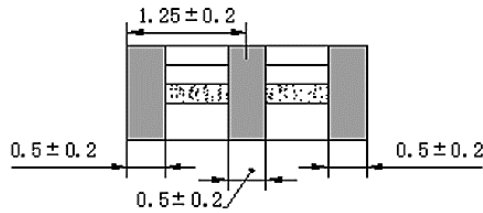
DIMENSION (Unit: mm)

Top View



Connection
#1 In/Output
#2 Ground
#3 Output/Input

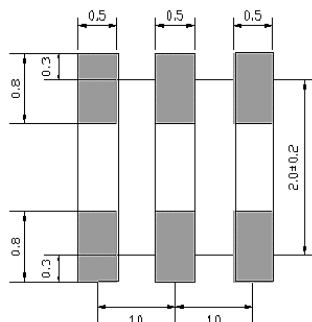
Bottom View



Side View



Solder Pattern



MHZ SMD CERAMIC RESONATORS

MAIN FEATURE

- Extra SMD Package, 3 pads
- Built-in Capacitance

APPLICATION

- Clock oscillators for microprocessors
- Small electronic equipment and more

RFQ

Request For Quotation



L3.2*W1.3*H1.0mm

STANDARD SPECIFICATION

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	8.00		12.00	MHz	see p/n guide or Specify
Frequency Accuracy		±0.5		%	@25 °C
Operating Temperature Range	-25	-	+85	°C	
Storage Temperature Range	-55	-	+85	°C	
Built-in Capacitance		30	-	pF	MG: 8.00~12.00MHz
		-	-		-
		-	-		-
Temperature Coefficient	-	±0.3	-	%	Oscillation Freq. drift @-25 °C ~+85 °C
Resonant Impedance	-	-	40	ohm	
Aging per year*	-	-	±0.3	%	From initial value
Withstanding Voltage		50		V	DC, 5s Max.
Insulation Resistance Ri	500			MΩ	10V, 1min
Rating Voltage UR		6		V	DC
		15		V	p-p AC
IC	MG: 1/6TC4069UBP				

* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

PART NUMBER GUIDE

Example: CRTE8.0.0MG TLF

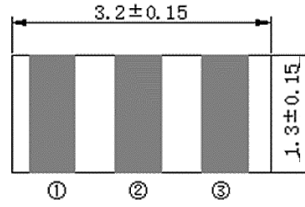
CR	T	E	8.0	MG	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CR: Ceramic Resonator
- 2) T: With Built-in Capacitance, 3 Pads
- 3) E: Outline Dimensions L3.2*W1.3*H1.0mm
- 4) 8.0: Frequency Range in MHz, 8.000MHz or Specify
- 5) MG: Design Mode for different Frequency range, MG: 8.00~12.00MHz
- 6) T: Package in Tape/Reel
- 10) LF: RoHS Compliant
- 11) XX: Internal Control Code, 2 letter or digits; Blank: N/A

MHZ SMD CERAMIC RESONATORS

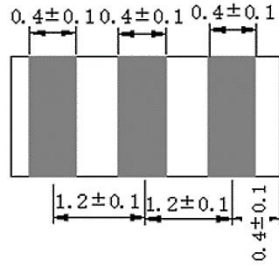
DIMENSION (Unit: mm)

Top View

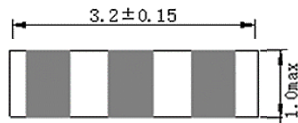


Connection
#1 In/Output
#2 Ground
#3 Output/Input

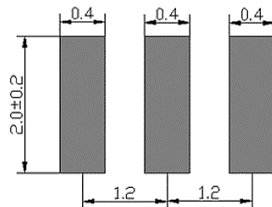
Bottom View



Side View



Solder Pattern



MHZ SMD CERAMIC RESONATORS

MAIN FEATURE

- Extra SMD Package, 2 pads
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APPLICATION

- Clock oscillators for microprocessors
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STANDARD SPECIFICATION

RFQ
Request For Quotation



L3.7*W3.1*H1.2mm

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	8.00		60.00	MHz	see p/n guide or Specify
Frequency Accuracy		±0.5		%	@25 °C
Operating Temperature Range	-25	-	+85	°C	
Storage Temperature Range	-55	-	+85	°C	
Capacitance (C1/C2)		N/A	-	pF	MT(8.00~13.00MHz)/MX (16.00~20.00MHz)
		-	-		MX: 20.01~25.99MHz
	-	-	-		MX: 26.00~60.00MHz
Temperature Coefficient	-	±0.3	-	%	Oscillation Freq. drift @-25 °C ~+85 °C
Resonant Impedance	-	-	40	ohm	
Aging per year*	-	-	±0.3	%	From initial value
Withstanding Voltage		50		V	DC, 5s Max.
Insulation Resistance Ri	500			MΩ	10V, 1min
Rating Voltage UR		6		V	DC
		15		V	p-p AC
IC	MX: 1/6TC74HCU04. MT: 1/6TC4069UBP				

* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

PART NUMBER GUIDE

Example: CRAW8.0MX TLF

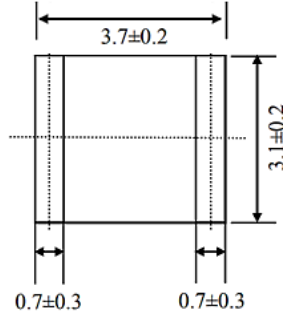
CR	A	V	8.0	MT	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CR: Ceramic Resonator
- 2) A: Without Built-in Capacitance, 2 Pads
- 3) V: Outline Dimensions L3.7*W3.1*H1.2mm
- 4) 8.0: Frequency Range in MHz, 8.000MHz or Specify
- 5) MX: Design Mode for different Frequency range, ; MT: 8.00~13.00MHz; MX:16.00~60.00MHz
- 6) T: Package in Tape/Reel, 4000pcs/reel
- 10) LF: RoHS Compliant
- 11) XX: Intenal Control Code, 2 letter or digits; Blank: N/A

MHZ SMD CERAMIC RESONATORS

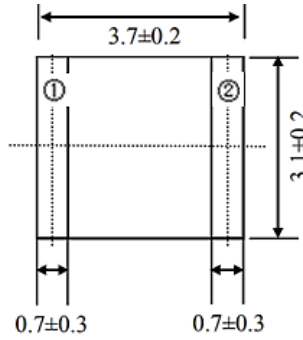
DIMENSION (Unit: mm)

Top View

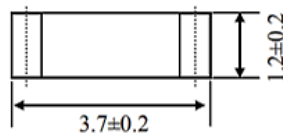


Connection
#1 In/Output
#2 Output/Input

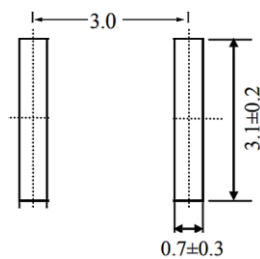
Bottom View



Side View



Solder Pattern



MHZ SMD CERAMIC RESONATORS

MAIN FEATURE

- Extra SMD Package, 3 pads
- Built-in Capacitance

RFQ

Request For Quotation



APPLICATION

- Clock oscillators for microprocessors
- Small electronic equipment and more



L3.7*W3.1*H1.5mm

STANDARD SPECIFICATION

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	8.00		60.00	MHz	see p/n guide or Specify
Frequency Accuracy		±0.5		%	@25 °C
Operating Temperature Range	-25	-	+85	°C	
Storage Temperature Range	-55	-	+85	°C	
Built-in Capacitance		30	-	pF	MT(8.00~13.00MHz)/MX (16.00~20.00MHz)
		15	-		MX: 20.01~25.99MHz
	-	5	-		MX: 26.00~60.00MHz
Temperature Coefficient	-	±0.3	-	%	Oscillation Freq. drift @-25 °C ~+85 °C
Resonant Impedance	-	-	40	ohm	
Aging per year*	-	-	±0.3	%	From initial value
Withstanding Voltage		50		V	DC, 5s Max.
Insulation Resistance Ri	500			MΩ	10V, 1min
Rating Voltage UR		6		V	DC
		15		V	p-p AC
IC	MX: 1/6TC74HCU04. MT: 1/6TC4069UBP				

* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

PART NUMBER GUIDE

Example: CRTV8.0.0MT TLF

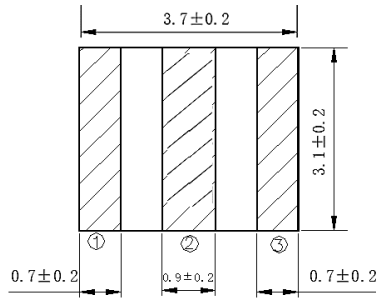
CR	T	V	8.0	MT	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CR: Ceramic Resonator
- 2) T: With Built-in Capacitance, 3 Pads
- 3) V: Outline Dimensions L3.7*W3.1*H1.5mm
- 4) 8.0: Frequency Range in MHz, 8.000MHz or Specify
- 5) MT: Design Mode for different Frequency range
- 6) T: Package in Tape/Reel.4000pcs/Reel
- 10) LF: RoHS Compliant
- 11) XX: Intenal Control Code, 2 letter or digits; Blank: N/A

MHZ SMD CERAMIC RESONATORS

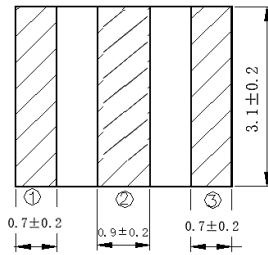
DIMENSION (Unit: mm)

Top View

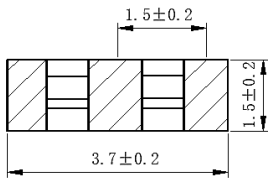


Connection
#1 In/Output
#2 Ground
#3 Output/Input

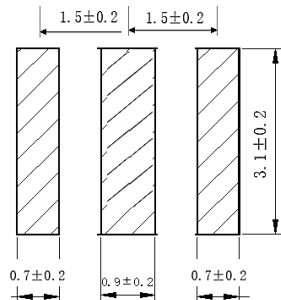
Bottom View



Side View



Solder Pattern



MHZ SMD CERAMIC RESONATORS

MAIN FEATURE

- Extra SMD Package, 2 pads
- Low Cost and short lead time

RFQ

Request For Quotation



APPLICATION

- Clock oscillators for microprocessors
- Small electronic equipment and more



L4.5*W2.0*H1.2mm

STANDARD SPECIFICATION

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	4.00		8.00	MHz	see p/n guide or Specify
Frequency Accuracy		±0.5		%	@25 °C
Operating Temperature Range	-25	-	+85	°C	
Storage Temperature Range	-55	-	+85	°C	
Capacitance (C1/C2)		30	-	pF	MG: 4.00~8.00MHz
		-	-		-
		-	-		-
Temperature Coefficient	-	±0.3	-	%	Oscillation Freq. drift @-25 °C~+85 °C
Resonant Impedance	-	-	40	ohm	
Aging per year*	-	-	±0.3	%	From initial value
Withstanding Voltage		50		V	DC, 5s Max.
Insulation Resistance Ri	500			MΩ	10V, 1min
Rating Voltage UR		6		V	DC
		15		V	p-p AC
IC	MG: 1/6TC4069UBP				

* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

PART NUMBER GUIDE

Example: CRAR8.0MG TLF

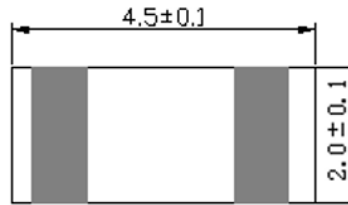
CR	A	R	8.0	MG	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CR: Ceramic Resonator
- 2) A: Without Built-in Capacitance, 2 Pads
- 3) R: Outline Dimensions L4.5*W2.0*H1.2mm
- 4) 8.0: Frequency Range in MHz, 8.000MHz or Specify
- 5) MG: Design Mode for different Frequency range
- 6) T: Package in Tape/Reel, 3000pcs/reel
- 10) LF: RoHS Compliant
- 11) XX: Internal Control Code, 2 letter or digits; Blank: N/A

MHZ SMD CERAMIC RESONATORS

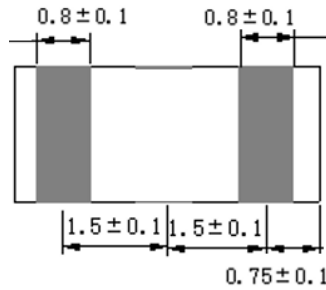
DIMENSION (Unit: mm)

Top View

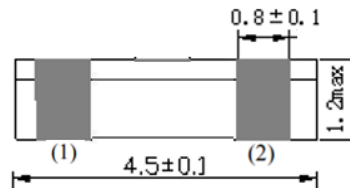


Connection
#1 In/Output
#2 Output/Input

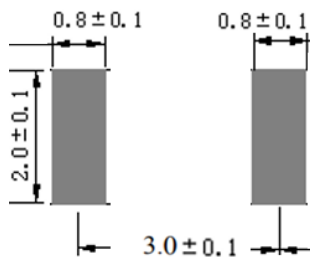
Bottom View



Side View



Solder Pattern



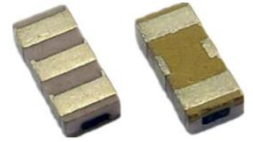
MHZ SMD CERAMIC RESONATORS

MAIN FEATURE

- Extra SMD Package, 3 pads
- Built-in Capacitance

APPLICATION

- Clock oscillators for microprocessors
- Small electronic equipment and more



L4.5*W2.0*H1.2mm

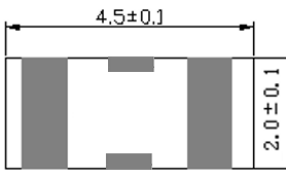
STANDARD SPECIFICATION

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	4.00		8.00	MHz	see p/n guide or Specify
Frequency Accuracy		±0.5		%	@25 °C
Operating Temperature Range	-25	-	+85	°C	
Storage Temperature Range	-55	-	+85	°C	
Built-in Capacitance		30	-	pF	MG: 4.00~8.00MHz
		-	-		-
		-	-		-
Temperature Coefficient	-	±0.3	-	%	Oscillation Freq. drift @-25 °C ~+85 °C
Resonant Impedance	-	-	40	ohm	
Aging per year*	-	-	±0.3	%	From initial value
Withstanding Voltage		50		V	DC, 5s Max.
Insulation Resistance Ri	500			MΩ	10V, 1min
Rating Voltage UR		6		V	DC
		15		V	p-p AC
IC	MG: 1/6TC4069UBP				

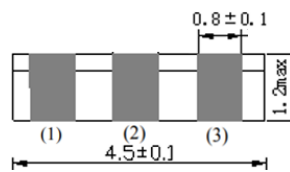
* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

DIMENSION (mm)

Top View

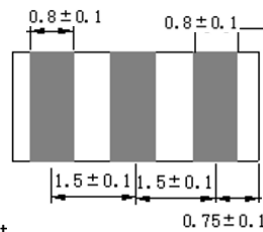


Side View

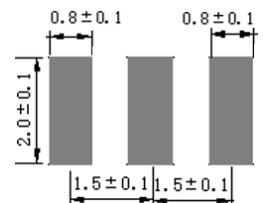


#1 In/Output #2 Ground #3 Output/Input

Bottom View



Solder Pattern



PART NUMBER GUIDE

Example: CRTR 8.0MX TLF

CR	T	R	8.0	MG	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CR: SMD Ceramic Resonator
- 2) T: Built-in Capacitance , 3 Pads, different value pF for frequency range
- 3) R: Outline Dimensions L4.5*W2.0*H1.2mm
- 4) 8.0: Frequency Range in MHz, 8.000MHz or Specify
- 5) MX: Design Mode for different Frequency range; MG: 4.00~83.00MHz
- 6) T: Package in Tape/Reel, 3000pcs/Reel
- 7) LF: RoHS Compliant
- 8) XX: Intenal Control Code; Blank: N/A

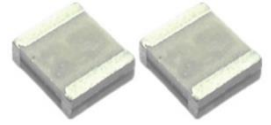
MHZ SMD CERAMIC RESONATORS

MAIN FEATURE

- Extra SMD Package, 2 pads • Low Cost and short lead time

APPLICATION

- Clock oscillators for microprocessors
- Small electronic equipment and more



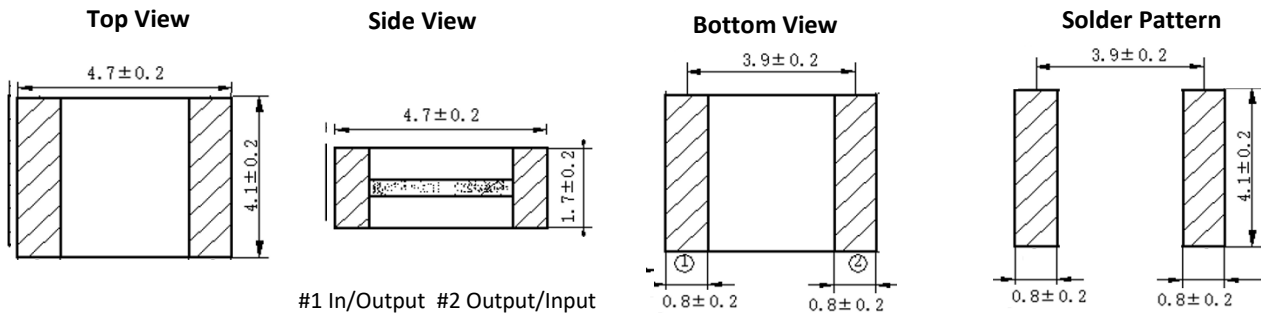
L4.7*W4.1*H1.7mm

STANDARD SPECIFICATION

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	6.00		60.00	MHz	see p/n guide or Specify
Frequency Accuracy		±0.5		%	@25 °C
Operating Temperature Range	-25	-	+85	°C	
Storage Temperature Range	-55	-	+85	°C	
Capacitance (C1/C2)		30	-	pF	MT(6.00~13.00MHz)/MX (13.01~20.00MHz)
		15	-		MX: 20.01~25.99MHz
		-	5		-
Temperature Coefficient	-	±0.3	-	%	Oscillation Freq. drift @-25 °C ~+85 °C
Resonant Impedance	-	-	40	ohm	
Aging per year*	-	-	±0.3	%	From initial value
Withstanding Voltage		50		V	DC, 5s Max.
Insulation Resistance Ri	500			MΩ	10V, 1min
Rating Voltage UR		6		V	DC
		15		V	p-p AC
IC	MX: 1/6TC74HCU04. MT: 1/6TC4069UBP				

* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

DIMENSION (mm)



PART NUMBER GUIDE

Example: CRAS 16.0MX TLF

CR	A	S	16.0	MX	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CR: SMD Ceramic Resonator
- 2) A: Without Built-in Capacitance , 2 Pads
- 3) S: Outline Dimensions L4.7*W4.1*H1.7mm
- 4) 16.0: Frequency Range in MHz, 16.000MHz or Specify
- 5) MX: Design Mode for different Frequency range
- 6) T: Package in Tape/Reel, 1000pcs/Reel
- 7) LF: RoHS Compliant
- 8) XX: Intenal Control Code; Blank: N/A

MHZ SMD CERAMIC RESONATORS

MAIN FEATURE

- Extra SMD Package, 3 pads
- Built-in Capacitance

APPLICATION

- Communication and more



L4.7*W4.1*H1.8mm

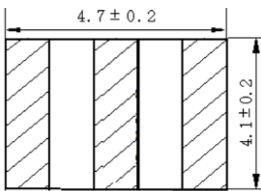
STANDARD SPECIFICATION

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	6.00		60.00	MHz	see p/n guide or Specify
Frequency Accuracy		±0.5		%	@25 °C
Operating Temperature Range	-25	-	+85	°C	
Storage Temperature Range	-55	-	+85	°C	
Built-in Capacitance		30	-	pF	MT(6.00~13.00MHz)/MX (13.01~20.00MHz)
		15	-		MX: 20.01~25.99MHz
		-	5		-
Temperature Coefficient	-	±0.3	-	%	Oscillation Freq. drift @-25 °C ~+85 °C
Resonant Impedance	-	-	40	ohm	
Aging per year*	-	-	±0.3	%	From initial value
Withstanding Voltage		50		V	DC, 5s Max.
Insulation Resistance Ri	500			MΩ	10V, 1min
Rating Voltage UR		6		V	DC
		15		V	p-p AC
IC	MX: 1/6TC74HCU04. MT: 1/6TC4069UBP				

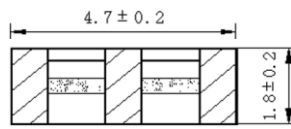
* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

DIMENSION (mm)

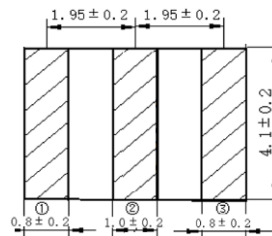
Top View



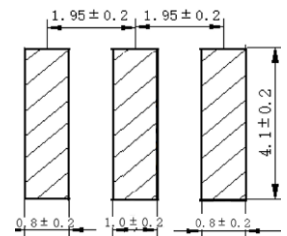
Side View



Bottom View



Solder Pattern



#1 In/Output #2 Ground #3 Output/Input

PART NUMBER GUIDE

Example: CRTS 16.0MX TLF

CR	T	S	16.0	MX	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CR: SMD Ceramic Resonator
- 2) T: Built-in Capacitance , 3 Pads, different value pF for frequency range
- 3) S: Outline Dimensions L4.7*W4.1*H1.7mm
- 4) 16.0: Frequency Range in MHz, 16.000MHz or Specify
- 5) MX: Design Mode for different Frequency range
- 6) T: Package in Tape/Reel, 1000pcs/Reel
- 7) LF: RoHS Compliant
- 8) XX: Intenal Control Code; Blank: N/A

MHZ SMD CERAMIC RESONATORS

MAIN FEATURE

- Extra SMD Package, 2 pads • Low Cost and short lead time

APPLICATION

- Communication and more



STANDARD SPECIFICATION

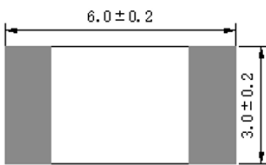
L6.0*W3.0*H1.4mm

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	2.00		12.00	MHz	see p/n guide or Specify
Frequency Accuracy		±0.5		%	@25 °C
Operating Temperature Range	-25	-	+85	°C	
Storage Temperature Range	-55	-	+85	°C	
Capacitance (C1/C2)		30	-	pF	MG: 2.00~12.00MHz
		-	-		-
		-	-		-
Temperature Coefficient	-	±0.3	-	%	Oscillation Freq. drift @-25 °C ~+85 °C
Resonant Impedance	-	-	30	ohm	
Aging per year*	-	-	±0.3	%	From initial value
Withstanding Voltage		50		V	DC, 5s Max.
Insulation Resistance Ri	500			MΩ	10V, 1min
Rating Voltage UR		6		V	DC
		15		V	p-p AC
IC	MG: 1/6TC4069UBP				

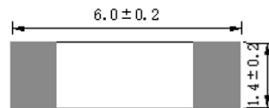
* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

DIMENSION (mm)

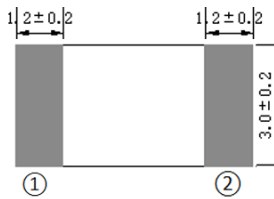
Top View



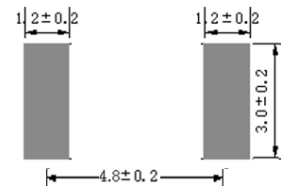
Side View



Bottom View



Solder Pattern



#1 In/Output #2 Output/Input

PART NUMBER GUIDE

Example: CRAP 8.0MG TLF

CR	A	P	8.0	MG	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CR: SMD Ceramic Resonator
- 2) A: Without Built-in Capacitance , 2 Pads
- 3) P: Outline Dimensions L6.0*W3.0*H1.4mm
- 4) 8.0: Frequency Range in MHz, 8.000MHz or Specify
- 5) MX: Design Mode for different Frequency range
- 6) T: Package in Tape/Reel, 4000pcs/Reel
- 7) LF: RoHS Compliant
- 8) XX: Intenal Control Code; Blank: N/A

MHZ SMD CERAMIC RESONATORS

MAIN FEATURE

- Extra SMD Package, 3 pads • Built-in Capacitance

APPLICATION

- Communication and more



L6.0*W3.0*H1.5mm

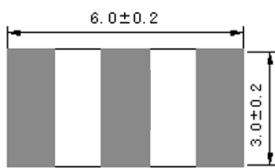
STANDARD SPECIFICATION

Parameter	Value			Unit	Condition
	Min.	Type	Max.		
Frequency Range	6.00		60.00	MHz	see p/n guide or Specify
Frequency Accuracy		±0.5		%	@25 °C
Operating Temperature Range	-25	-	+85	°C	
Storage Temperature Range	-55	-	+85	°C	
Built-in Capacitance		30	-	pF	MG: 2.00~12.00MHz
		-	-		-
		-	-		-
Temperature Coefficient	-	±0.3	-	%	Oscillation Freq. drift @-25 °C ~+85 °C
Resonant Impedance	-	-	40	ohm	
Aging per year*	-	-	±0.3	%	From initial value
Withstanding Voltage		50		V	DC, 5s Max.
Insulation Resistance Ri	500			MΩ	10V, 1min
Rating Voltage UR		6		V	DC
		15		V	p-p AC
IC	MG: 1/6TC4069UBP				

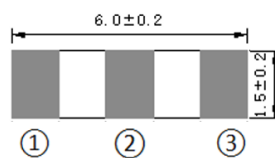
* Parts shall be left in a chamber of +85 °C ±2°C for 1000 hours, then measured after leaving in natural condition for 1 hours.

DIMENSION (mm)

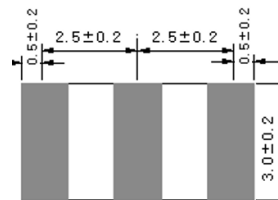
Top View



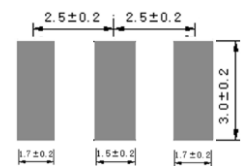
Side View



Bottom View



Solder Pattern



#1 In/Output #2 Ground #3 Output/Input

PART NUMBER GUIDE

Example: CRTP 8.0MG TLF

CR	T	P	8.0	MG	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CR: SMD Ceramic Resonator
- 2) T: Built-in Capacitance, 3 Pads, different value pF for frequency range
- 3) P: Outline Dimensions L6.0*W3.0*H1.4mm
- 4) 8.0: Frequency Range in MHz, 8.000MHz or Specify
- 5) MX: Design Mode for different Frequency range
- 6) T: Package in Tape/Reel, 4000pcs/Reel
- 7) LF: RoHS Compliant
- 8) XX: Intenal Control Code; Blank: N/A

MHZ SMD CERAMIC DISCRIMINATORS

MAIN FEATURE

- Extra SMD Package, 2 pads, 10.7000MHz • Compatible to Murata CDACC Series

APPLICATION

- Clock oscillators for microprocessors
- Small electronic equipment and more



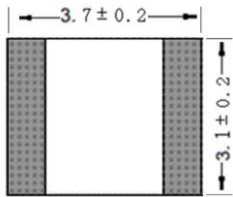
L3.7*W3.1*H1.4mm

STANDARD SPECIFICATION

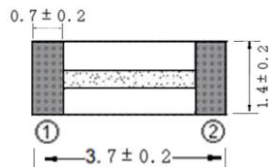
Part Number	Demodulation Output at F0 mv (Min.)	Distortion Factor at F0% (max.)	3dB Band Width kHz (max.)	Applicable IC Model No.
CDCV 10.7MG1 TLF	25	1.0	345	CX-2009, CX-20111
CDCV 10.7MG3 TLF	650	1.0	±150	TA7303P,TA7130, PC1028H,LA1150
CDCV 10.7MG16 TLF	60-90	0.9	300	TA8122AN
CDCV 10.7MG18 TLF	60-90	0.9	300	TA8132N
CDCV 10.7MG33 TLF	45	0.7	250	TA2007
CDCV 10.7MG80 TLF	65	1.0	300	TA2104AFN
CDCV 10.7MG82 TLF	90	0.8	320	TA2099N
CDCV 10.7MG92 TLF	60	1.0	300	TA2132P
CDCV 10.7MC1 TLF	35	1.0	242	CXA1019M,CX-20091

DIMENSION (mm)

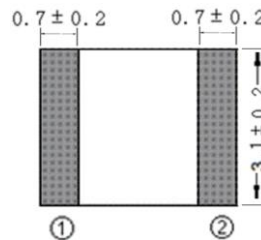
Top View



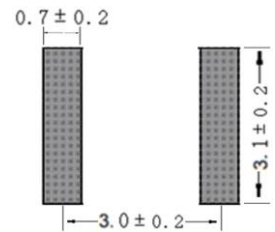
Side View



Bottom View



Solder Pattern



#1 In/Output #2 Output/Input

PART NUMBER GUIDE

Example: CDCV10.7MG1 TLF

CD	CV	10.7M	G1	T	LF	XX
1	2	3	4	5	6	7

- 1) CD: Ceramic Discriminators
- 2) CV: SMD type, Outline Dimensions L3.7*W3.1*H1.4mm
- 3) 10.7M: Frequency Range in MHz, 10.70MHz
- 4) G1: Design Mode for IC
- 5) T: Packed in Tape/Reel, 3000pcs/Reel
- 6) LF: RoHS Compliant
- 7) XX: Internal Control Code, 2 letter or digits; Blank: N/A

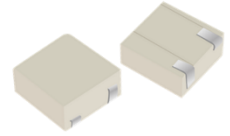
MHZ SMD CERAMIC DISCRIMINATORS

MAIN FEATURE

- SMD Package, 2 pads, 450KHz & 455KHz
- Low Cost and short lead time • Compatible to Murata CDBKB Series

APPLICATION

- Communication and more



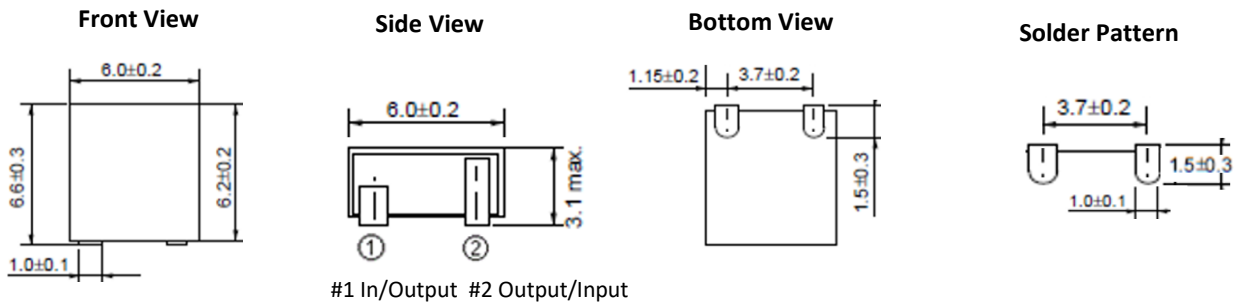
L6.2*W6.0*H3.1mm

STANDARD SPECIFICATION

Short Part Number	*Freq. (f0) ± 1.0 (KHz)	Bandwidth Min. (KHz)	Output Min. (mV)	Factor @f0 Max. (%)	IC Model No.
CDBC455C07 TLF	455.00	±4.0	350 ± 60	3.0	MC3357
CDBC455C09 TLF	455.00	±4.0	120 ± 40	1.5	NE604N
CDBC455C13 TLF	455.00	±4.0	330 ± 50	4.0	CXA1003BM
CDBC455C16 TLF	455.00	±4.0	175 ± 40	2.0	MC3372
CDBC455C24 TLF	455.00	±4.0	100 ± 40	2.0	TA31136
CDBC455C27 TLF	455.00	±4.0	90 ± 30	2.0	TK10487
CDBC455C28 TLF	455.00	±4.0	40 ± 20	3.0	TA31142F
CDBC455C29 TLF	455.00	±4.0	100 ± 30	2.5	NE605
CDBC455C35 TLF	455.00	±4.0	100 ± 40	2.5	TK10930
CDBC455C36 TLF	455.00	±13.0	90 ± 30	2.5	NE(SA)606
CDBC455C39 TLF	455.00	±11.0	130 ± 20	2.5	NE607/NE617
CDBC455C40 TLF	455.00	±4.0	40 ± 20	3.5	TA31145
CDBC455C49 TLF	455.00	±4.0	45 ± 10	3.0	MC3361
CDBC455C50 TLF	455.00	±4.0	64 ± 6.4	4.0	CXA3117N
CDBC455C66 TLF	455.00	±4.2	40 ± 10	4.0	NJM2590
CDBC455C70 TLF	455.00	±5.0	85 ± 10	4.5	NJM2591V(JRC)
CDBC455C71 TLF	455.00	±5.0	90 ± 30	5.0	NJM2590-2597
CDBC455C72 TLF	455.00	±5.0	100 ± 40	3.0	NJM2590-2597

*Center Frequency Range 450.000KHz is also available

DIMENSION (mm)



PART NUMBER GUIDE

Example: CDBC455C24TLF

CD	BC	455	C24	T	LF	XX
1	2	3	4	5	6	7

- 1) CD: Ceramic Discriminators
- 2) BC: SMD Type, Outline Dimensions, L6.2*W6.0*H3.1mm
- 3) 455: Frequency Range in KHz, 455KHz
- 4) C24: Design Mode
- 5) T: Package in Tape/Reel, 1000pcs/Reel
- 6) LF: RoHS Compliant
- 7) XX: Intenal Control Code , 2 letter or digits; Blank: N/A

MHZ SMD CERAMIC FILTER

MAIN FEATURE

- SMD Package, 4 pads, 10.70MHz • Compatible to Murata SFECF/SFECV Series

APPLICATION

- Communication and more

STANDARD SPECIFICATION

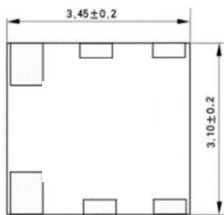


L3.45*W3.1*H1.4mm

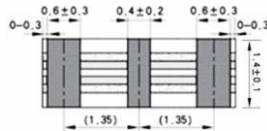
Short Part Number	Unit	CF33 10.7MS3	CF33 10.7MS2	CF33 10.7MSA5	CF33 10.7MSA20
3dB Band Width kHz (Min.)	KHz	180±40	230±50	280±50	330±50
20dB Band Width kHz (Max.)	KHz	470	510	590	700
Insertion Loss (Max.)	dB	4.5±2.0	3.5±2.0	3.0±2.0	3.0±2.0
Spurious Attenuation (9-12MHz)	dB	30	30	30	30
Operating Temp. Range	°C	-20~+85			
Storage Temp. Range	°C	-40~+85			
Ripple Max.	dB	1.0			
Temp. Coefficient of Freq. Max.	ppm/°C	±50 '@-20 ~ +80 °C			
Input/Output Impedance typ.	ohm	330			
Insulation Resistance Min.	Mohm	100 @DC 10V 1 minute+/-5 sec.			
Withstand DC Voltage Max.	V	50 @ 1 min			

DIMENSION (mm)

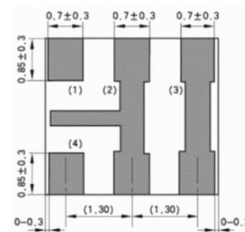
Top View



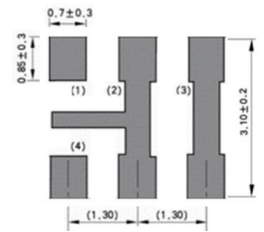
Side View



Bottom View



Solder Pattern



① Input ② Ground ③ N/A ④ Output

PART NUMBER GUIDE

Example: CF33 10.7M SA5TLF

CF	33	10.7M	SA5	T	LF	XX
1	2	3	4	5	6	7

- 1) CF: Ceramic Filter
- 2) 33: SMD Type, Outline Dimensions, L3.45*W3.1*H1.4mm
- 3) 10.7M: Frequency Range in MHz, 10.70MHz
- 4) SA5: Design Mode
- 5) T: Package in Tape/Reel, 4000pcs/Reel
- 6) LF: RoHS Compliant
- 7) XX: Intenal Control Code, 2 letter or digits; Blank: N/A

MHZ SMD CERAMIC FILTER

MAIN FEATURE

- SMD Package, 3 pads, 10.70MHz • Compatible to Murata SFECF/SFECV Series

APPLICATION

- Communication and more



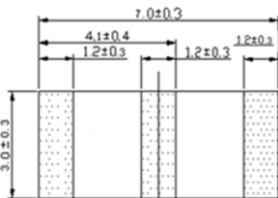
L7.0*W3.0*H1.5mm

STANDARD SPECIFICATION

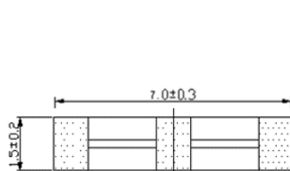
Short Part Number	3dB Band Width	20dB Band Width	Insertion Loss	Spurious Attenuation (9-12MHz)	Operating Temp. Range	Storage Temp.	Ripple	Temp. Coefficient of Freq.	Input/ Output Impedance	Insulation Resistance	Withstand DC Voltage
	KHz Min	KHz Min	dB Max.	dB	°C	°C	dB Max.	ppm/°C Max.	ohm	M ohm Min.	V Max.
CF7310.7MAJ	150±40	430	≤10.0	30	-20~+85	-40~+85	1.0	±50	330	100 @DC 10V 1 minute +/-5 sec.	50 @ 1 min
CF7310.7MVJ	150±40	380	5.5±2.0	35							
CF7310.7MAS3	180±40	520	≤6.0	30							
CF7310.7MVS3	180±40	470	4.0±2.0	35							
CF7310.7MAS2	230±40	570	≤6.0	30							
CF7310.7MVS2	230±40	510	3.5±2.0	35							
CF7310.7MAA5	280±40	650	≤6.0	30							
CF7310.7MVA5	280±40	590	3.0±2.0	35							
CF7310.7MVA20	330±40	700	3.0±2.0	30							
CF7310.7MVA19	Fn±175.	950	3.0±2.0	20 (5-15MHz)							
									470		

DIMENSION (mm)

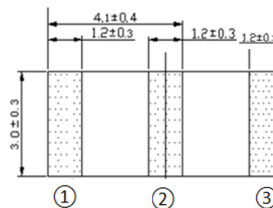
Top View



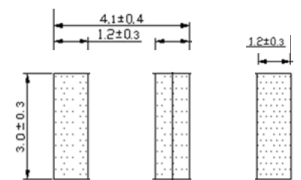
Side View



Bottom View



Solder Pattern



① Input ② Ground ③ Output

PART NUMBER GUIDE

Example: CF73 10.7MAA5 TLF XX

CF	73	10.7M	AA5	T	LF	XX
1	2	3	4	5	6	7

- 1) CF: Ceramic Filter
- 2) 73: SMD Type, Outline Dimensions, L7.0*W3.0*H1.5mm
- 3) 10.7M: Frequency Range in MHz, 10.70MHz
- 4) AA5: Design Mode
- 5) T: Package in Tape/Reel, 4000pcs/Reel
- 6) LF: RoHS Compliant
- 7) XX: Intenal Control Code, 2 letter or digits; Blank: N/A

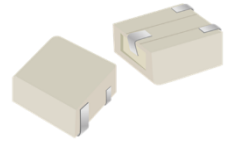
MHZ SMD CERAMIC FILTER

MAIN FEATURE

- SMD Package, 3 Pads • Compatible to Murata CFUK Series

APPLICATION

- Communication and more



L6.5*W6.0*H4.2mm

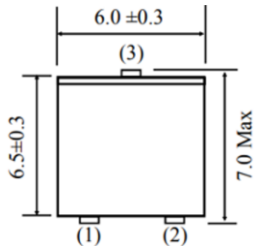
STANDARD SPECIFICATION- 455KHz

Table 1

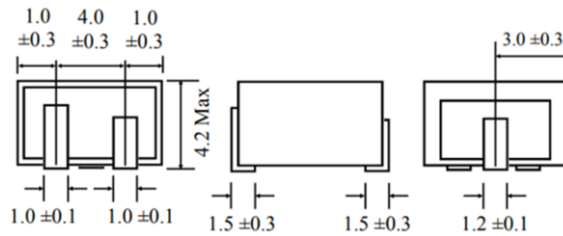
Short Part Number	Insertion Loss	6dB Band width	40dB Band width	GDT Deviation	Ripple	Spurious	Input/ Output	Temp. Stability	Insulation Resistance	Operating Temp. Range	Storage Temp.	
	dB Max.	KHz Max.	KHz Max.	μs Max.	dB Max.	dB	K ohm	%	M ohm Min.	°C	°C	
CFTC 455AU	2.0	20.0	40.0	N/A	1.0	20	1000	±0.5	100 @DC 10V 1 minute +/-5 sec.	-20~+85	-40~+85	
CFTC 455BU	2.0	15.0	30.0									
CFTC 455CU	2.0	12.5	24.0									
CFTC 455DU	2.0	10.0	20.0		2.0							
CFTC 455EU	6.0	7.5	15.0		50		1.0					1500
CFTC 455FU	2.0	6.0	12.5									
CFTC 455GU	2.0	4.5	10.0									
CFTC 455HU	2.0	3.0	9.0									
CFTC 455IU	4.0	2.0	7.5									
CFTC 455JUT	6.0	1.5	7.5									
CFTC 455KU	8.0	1.0	6.0									
CFTC 455LU	2.0	24.0	48.0									
CFTC455KAU	2.0	20.0	48.0	15		1.0		1000				
CFTC455KBU	2.0	15.0	40.0									
CFTC455KCU	2.0	12.5	30.0									
CFTC455KDU	2.0	10.0	24.0		20		1.0	1500				
CFTC455KEU	2.0	7.5	20.0									
CFTC455KFU	2.0	6.0	15.0									
CFTC455KGU	2.0	4.5	12.5									
CFTC455KHU	2.0	3.0	10.0									
CFTC455KIU	4.0	2.0	9.0									
CFTC455KJU	6.0	1.5	7.5									
CFTC455KKU	8.0	1.0	6.0									
CFTC455KLU	2.0	24.0	60.0	25		1.0			1000			
CFTC455KAU	2.0	20.0	48.0									
CFTC455KBU	2.0	15.0	40.0									
CFTC455KCU	2.0	12.5	30.0		15		1.0	1500				
CFTC455KDU	2.0	10.0	24.0									
CFTC455KEU	2.0	7.5	20.0									
CFTC455KFU	2.0	6.0	15.0									
CFTC455KGU	2.0	4.5	12.5									
CFTC455KHU	2.0	3.0	10.0									
CFTC455KIU	4.0	2.0	10.0									
CFTC455KJU	6.0	1.5	9.0									
CFTC455KKU	8.0	1.0	7.5									
CFTC455KLU	2.0	24.0	60.0	15		1.0			1000			

DIMENSION (mm)

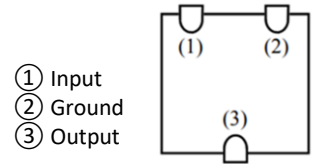
Top View



Side View



Bottom View



PART NUMBER GUIDE

Example: CFTC 455KDUTLF

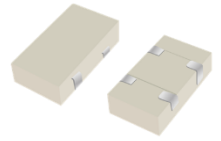
CFTC	455	K	D	U	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CFTC: KHz SMD Ceramic Filter
- 2) 455: Frequency range 455KHz; 450: 450.000KHz
- 3) K: GTD Deviation version; Blank: N/A
- 4) D: +/-10.0KHz Max. @6 dB; Please see Table 1 for A~L's different value
- 5) U: 3 pads, L6.5*W6.0*H4.2mm
- 6) T: Package in Tape/Reel, 1000pcs/Reel
- 7) LF: RoHS Compliant
- 8) XX: Intenal Control Code, 2 letter or digits; Blank: N/A

MHZ SMD CERAMIC FILTER

MAIN FEATURE

- SMD Package, 4 Pads, 455KHz & 450KHz • Compatible to Murata CFWK Series



APPLICATION

- Communication and more



L12.0*W6.5*H3.0mm

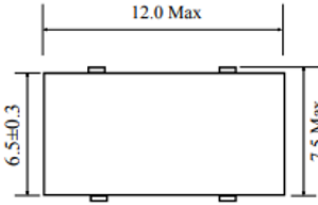
STANDARD SPECIFICATION- 455KHz

Table 1

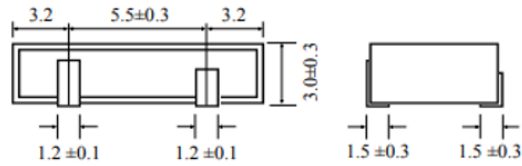
Short Part Number	Insertion Loss	6dB Band width	40dB Band width	GDT Deviation	Ripple	Spurious	Input/ Output	Temp. Stability	Insulation Resistance	Operating Temp. Range	Storage Temp.	
	dB Max.	KHz Max.	KHz Max.	μs Max.	dB Max.	dB	K ohm	%	M ohm Min.	°C	°C	
CFTC455AW	2.0	20.0	40.0	N/A	1.0	20	1000	±0.5	100 @DC 10V 1 minute +/-5 sec.	-20~+85	-40~+85	
CFTC455BW	2.0	15.0	30.0									
CFTC455CW	2.0	12.5	24.0									
CFTC455DW	2.0	10.0	20.0		2.0							
CFTC455EW	6.0	7.5	15.0		50		1.0					1500
CFTC 455FW	2.0	6.0	12.5									
CFTC455GW	2.0	4.5	10.0									
CFTC455HW	2.0	3.0	9.0									
CFTC455IW	4.0	2.0	7.5									
CFTC455JW	6.0	1.5	7.5									
CFTC455KW	8.0	1.0	6.0									
CFTC455LW	2.0	24.0	48.0									
CFTC455KAW	2.0	20.0	48.0	15		1.0		1000				
CFTC455KBW	2.0	15.0	40.0									
CFTC455KCW	2.0	12.5	30.0									
CFTC455KDW	2.0	10.0	24.0					20	1.0	1500		
CFTC455KEW	2.0	7.5	20.0									
CFTC455KFW	2.0	6.0	15.0									
CFTC455KGW	2.0	4.5	12.5									
CFTC455KHW	2.0	3.0	10.0									
CFTC455KIW	4.0	2.0	9.0									
CFTC455KJW	6.0	1.5	7.5									
CFTC455KKW	8.0	1.0	6.0									
CFTC455KLW	2.0	24.0	60.0		25		1.0			1000		
CFTC455KAW	2.0	20.0	48.0									
CFTC455KBW	2.0	15.0	40.0									
CFTC455KCW	2.0	12.5	30.0	15		1.0				1500		
CFTC455KDW	2.0	10.0	24.0									
CFTC455KEW	2.0	7.5	20.0									
CFTC455KFW	2.0	6.0	15.0									
CFTC455KGW	2.0	4.5	12.5									
CFTC455KHW	2.0	3.0	10.0									
CFTC455KIW	4.0	2.0	10.0									
CFTC455KJW	6.0	1.5	9.0									
CFTC455KKW	8.0	1.0	7.5									
CFTC455KLW	2.0	24.0	60.0									

DIMENSION (mm)

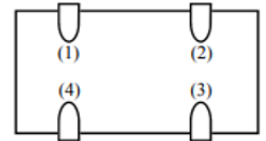
Top View



Side View



Bottom View



- ① Input
- ② Output
- ③ ④ Ground

PART NUMBER GUIDE

Example: CFTC 455KDW TLF

CFTC	455	K	D	W	T	LF	XX
1	2	3	4	5	6	7	8

- 1) CFTC: KHz SMD Ceramic Filter
- 2) 455: Frequency range 455KHz; 450: 450.000KHz
- 3) K: GTD Deviation version; Blank: N/A
- 4) D: D: +/-10.0KHz Max. @6 dB; Please see Table 1 for A~L's different value
- 5) W: 4 Pads, L12.0*W6.5*H3.0mm
- 6) T: Package in Tape/Reel, 1000pcs/Reel
- 7) LF: RoHS Compliant
- 8) XX: Intenal Control Code, 2 letter or digits; Blank: N/A

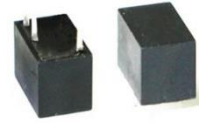
MHZ THRU - HOLE CERAMIC FILTER

MAIN FEATURE

- Thru Hole Package, 3 Pads, 455KHz & 450KHz • Compatible to Murata CFU Series

APPLICATION

- Communication and more



L8.0*W7.0*H8.0mm

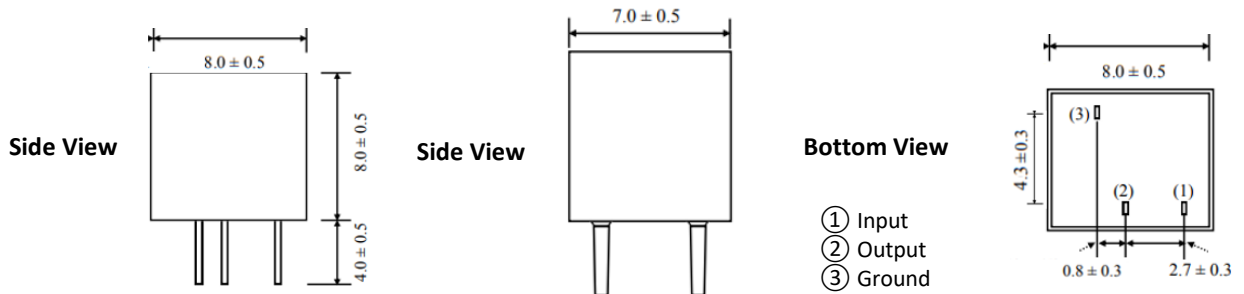
STANDARD SPECIFICATION- 455KHz

Table 1

Short Part Number	Center* Freq.	Insertion Loss	6 dB Band width	50 dB Band width	Ripple	Input/ Output	Temp. Stability	Insulation Resistance	Operating Temp. Range	Storage Temp.
	KHz	dB Max.	KHz Max.	KHz Max.	dB Max.	K ohm	%	M ohm Min.	°C	°C
CF455BU	455±2.0	4.0	±15.0	±30.0	2.0	1500	±0.5	100 @DC 10V 1 minute +/-5 sec.	-20~+85	-40~+85
CF455CU	455±2.0	4.0	±12.5	±24.0		1500				
CF455DU	455±1.5	4.0	±10.0	±20.0		1500				
CF455EU	455±1.5	6.0	±7.5	±15.0		1500				
CF455FU	455±1.5	4.0	±6.0	±12.5		2000				
CF455GU	455±1.5	6.0	±4.5	±10.0		2000				
CF455HU	455±1.0	6.0	±3.0	±9.0		2000				
CF455IU	455±1.0	6.0	±2.0	±7.5		2000				
CF455HTU	455±1.0	6.0	±3.0	±9.0		2000				
CF455ITU	455±1.0	6.0	±2.0	±7.5		2000				

*Center Frequency Range 450.000KHz is also available

DIMENSION (mm)



PART NUMBER GUIDE

Example: CF455EU BLF

CF	455	E	U	B	LF	XX
1	2	3	4	5	6	7

- 1) CF: KHz Thru-Hole Ceramic Filter
- 2) 455: Frequency range 455KHz; 450: 450.000KHz
- 3) E: Design Mode Code
- 4) U: 3 Pins, L8.0*W7.0*H8.0mm
- 5) B: Package In bulk
- 6) LF: RoHS Compliant
- 7) XX: Intenal Control Code, 2 letter or digits; Blank: N/A

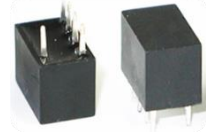
MHZ THRU - HOLE CERAMIC FILTER

MAIN FEATURE

- Thru Hole Package, 5 Pads, 455KHz & 450KHz • Compatible to Murata CFW Series

APPLICATION

- Communication and more



L11.0*W7.0*H8.0mm

STANDARD SPECIFICATION- 455KHz

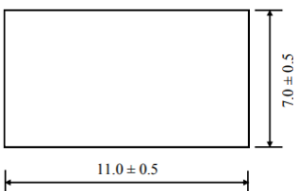
Table 1

Short Part Number	Center* Freq.	Insertion Loss	6 dB Band width	50 dB Band width	Ripple	Input/ Output	Temp. Stability	Insulation Resistance	Operating Temp. Range	Storage Temp.
	KHz	dB Max.	KHz Max.	KHz Max.	dB Max.	K ohm	%	M ohm Min.	°C	°C
CF455BW	455±2.0	4.0	±15.0	±30.0	2.0	1500	±0.5	100 @DC 10V 1 minute +/-5 sec.	-20~+85	-40~+85
CF455CW	455±2.0	4.0	±12.5	±24.0		1500				
CF455DW	455±1.5	4.0	±10.0	±20.0		1500				
CF455EW	455±1.5	6.0	±7.5	±15.0		1500				
CF455FW	455±1.5	4.0	±6.0	±12.5		2000				
CF455GW	455±1.5	6.0	±4.5	±10.0		2000				
CF455HW	455±1.0	6.0	±3.0	±9.0		2000				
CF455IW	455±1.0	6.0	±2.0	±7.5		2000				
CF455HTW	455±1.0	6.0	±3.0	±9.0		2000				
CF455ITW	455±1.0	6.0	±2.0	±7.5		2000				

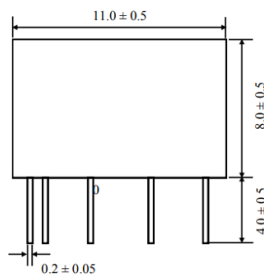
*Center Frequency Range 450.000KHz is also available

DIMENSION (mm)

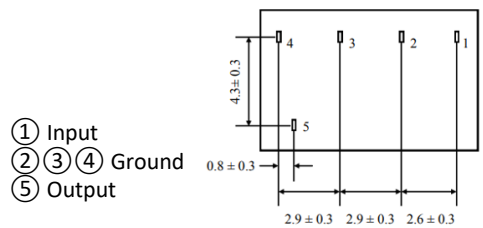
Top View



Side View



Bottom View



- ① Input
- ② ③ ④ Ground
- ⑤ Output

PART NUMBER GUIDE

Example: CF455EW BLF

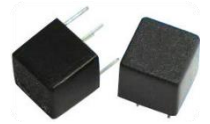
CF	455	E	W	B	LF	XX
1	2	3	4	5	6	7

- 1) CF: KHz Thru-Hole Ceramic Filter
- 2) 455: Frequency range 455KHz; 450: 450.000KHz
- 3) E: Design Mode Code
- 4) W: 5 Pins, L11.0*W7.0*H8.0mm
- 5) B: Package In bulk
- 6) LF: RoHS Compliant
- 7) XX: Intenal Control Code, 2 letter or digits; Blank: N/A

MHZ THRU - HOLE CERAMIC FILTER

MAIN FEATURE

- Thru Hole Package, 4 Pads, 455KHz & 450KHz • Compatible to Murata CFMU Series



L6.5*W6.5*H6.3mm

APPLICATION

- Communication and more



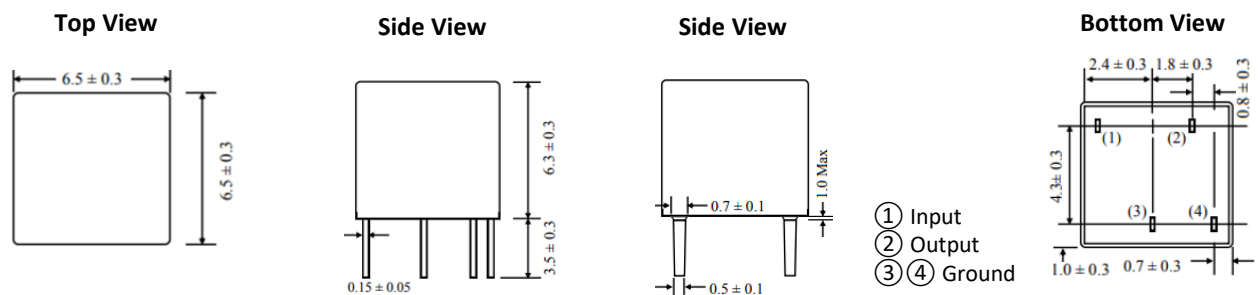
STANDARD SPECIFICATION- 455KHz

Table 1

Short Part Number	Center* Freq.	Insertion Loss	6 dB Band width	50 dB Band width	Ripple	Input/ Output	Temp. Stability	Insulation Resistance	Operating Temp. Range	Storage Temp.
	KHz	dB Max.	KHz Max.	KHz Max.	dB Max.	K ohm	%	M ohm Min.	°C	°C
CFM455BU	455±2.0	4.0	±15.0	±30.0	2.0	1500	±0.5	100 @DC 10V 1 minute +/-5 sec.	-20~+85	-40~+85
CFM455CU	455±2.0	4.0	±12.5	±24.0		1500				
CFM455DU	455±1.5	4.0	±10.0	±20.0		1500				
CFM455EU	455±1.5	6.0	±7.5	±15.0		1500				
CFM455FU	455±1.5	4.0	±6.0	±12.5		2000				
CFM455GU	455±1.5	6.0	±4.5	±10.0		2000				
CFM455HU	455±1.0	6.0	±3.0	±9.0		2000				
CFM455IU	455±1.0	6.0	±2.0	±7.5		2000				
CFM455HTU	455±1.0	6.0	±3.0	±9.0		2000				
CFM455ITU	455±1.0	6.0	±2.0	±7.5		2000				

*Center Frequency Range 450.000KHz is also available

DIMENSION (mm)



PART NUMBER GUIDE

Example: CFM455EU BLF

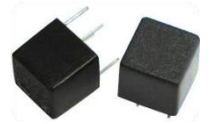
CFM	455	E	U	B	LF	XX
1	2	3	4	5	6	7

- 1) CFM: KHz Thru-Hole Ceramic Filter, M type, L6.5*W6.5*H6.3mm
- 2) 455: Frequency range 455KHz; 450: 450.000KHz
- 3) E: Design Mode Code
- 4) U: 3 Pins, L11.0*W7.0*H8.0mm
- 5) B: Package In bulk
- 6) LF: RoHS Compliant
- 7) XX: Intenal Control Code, 2 letter or digits; Blank: N/A

MHZ THRU - HOLE CERAMIC FILTER

MAIN FEATURE

- Thru Hole Package, 5 Pins, 455KHz & 450KHz • Compatible to Murata CFMU Series



L9.5*W6.5*H6.3mm

APPLICATION

- Communication and more



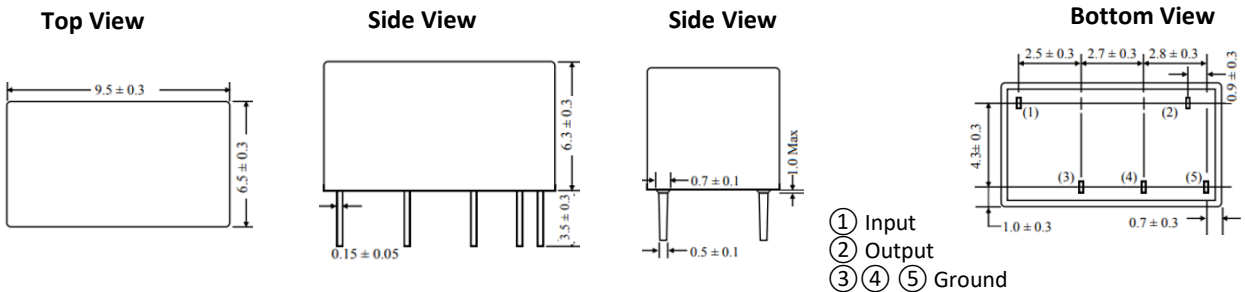
STANDARD SPECIFICATION- 455KHz

Table 1

Short Part Number	Center* Freq.	Insertion Loss	6 dB Band width	50 dB Band width	Ripple	Input/ Output	Temp. Stability	Insulation Resistance	Operating Temp. Range	Storage Temp.
	KHz	dB Max.	KHz Max.	KHz Max.	dB Max.	K ohm	%	M ohm Min.	°C	°C
CFM455BW	455±2.0	4.0	±15.0	±30.0	2.0	1500	±0.5	100 @DC 10V 1 minute +/-5 sec.	-20~+85	-40~+85
CFM455CW	455±2.0	4.0	±12.5	±24.0		1500				
CFM455DW	455±1.5	4.0	±10.0	±20.0		1500				
CFM455EW	455±1.5	6.0	±7.5	±15.0		1500				
CFM455FW	455±1.5	4.0	±6.0	±12.5		2000				
CFM455GW	455±1.5	6.0	±4.5	±10.0		2000				
CFM455HW	455±1.0	6.0	±3.0	±9.0		2000				
CFM455IW	455±1.0	6.0	±2.0	±7.5		2000				
CFM455HTW	455±1.0	6.0	±3.0	±9.0		2000				
CFM455ITW	455±1.0	6.0	±2.0	±7.5		2000				

*Center Frequency Range 450.000KHz is also available

DIMENSION (mm)



PART NUMBER GUIDE

Example: CFM455EW BLF

CFM	455	E	W	B	LF	XX
1	2	3	4	5	6	7

- 1) CFM: KHz Thru-Hole Ceramic Filter, M type, L9.5*W6.5*H6.3mm
- 2) 455: Frequency range 455KHz; 450: 450.000KHz
- 3) E: Design Mode Code
- 4) W: 5 Pins
- 5) B: Package In bulk
- 6) LF: RoHS Compliant
- 7) XX: Intenal Control Code, 2 letter or digits; Blank: N/A