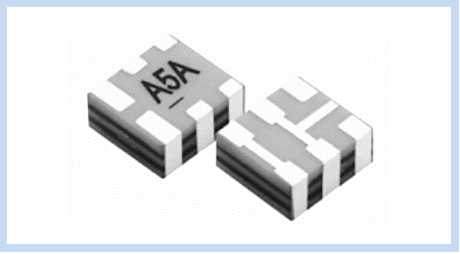
SMD Ceramic Filter
10.7MHz 3.45x3.1x1.4mm

RFC10M7-S series

MERITEK

FEATURE

- Compact Construction Design Enabling Flexible PCB Footprint
- Low Profile at 1.4mm Max in Thickness
- Various Bandwidth Options Available for Application
- Application: FM Receiver



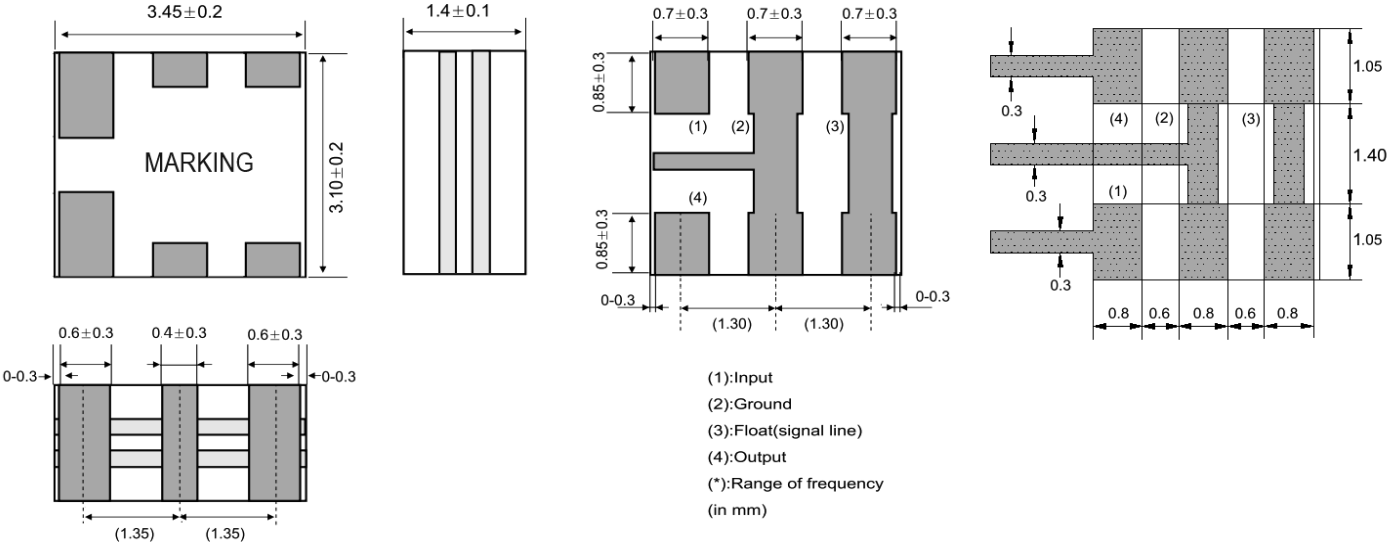
RoHS

ELECTRICAL CHARACTERISTICS

Part Number	3dB Band Width (KHz)	20dB Band Width (KHz) Max	Insertion Loss (dB) Max	Ripple Within 3dB BW (dB) Max	Spurious Attenuation (9~12MHz) (dB) Min
RFC10M745S3S	180 ± 40	470	4.5 ± 2.0	1.0	30
RFC10M735S2S	230 ± 50	510	3.5 ± 2.0	1.0	30
RFC10M730A5S	280 ± 50	590	3.0 ± 2.0	1.0	30
RFC10M730A20S	330 ± 50	700	3.0 ± 2.0	1.0	30

Parameter	Specification
Center Frequency	10.700MHz ± 30KHz
Temperature Characteristic	±0.5% (–20°C to 80°C)
Input/Output Impedance	330Ω
Withstanding Voltage	50VDC at 60sec
Insulation Resistance	100MΩ Min at 10V, 60sec
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 85°C

DIMENSIONS



(1):Input
(2):Ground
(3):Float(signal line)
(4):Output
(*):Range of frequency
(in mm)

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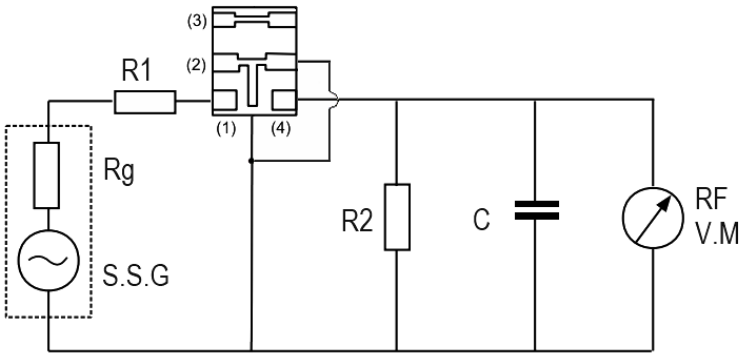
TEST CIRCUIT



R1=280Ω ±5%
R2=330Ω ±5%
Rg=50Ω
C2=10pF*
S.S.G：Output Voltmeter

Note:
1. Condition: 20±15℃, RH 65±20%
2. C2 Including stray and of RF V.M capacitance
3. Pin: (1): Input, (2): Ground, (3): Float, (4): Output

PART NUMBERING SYSTEM

RFC	10M7	30A5	S
(1)	(2)	(3)	(4)

No.	Item	Code	Description
(1)	**Product Code**	RFC	RF Filter Series, Ceramic Type
(2)	**Center Frequency**	10M7	10M7: 10.7MHz
(3)	**Internal Code**	30A5	30: 3.0dB insertion loss, A5: 280KHz 3dB Bandwidth
(4)	**Series Code**	S	S: 3.45x3.1x1.4mm

RECOMMENDED SOLDERING PROFILES

Reflow Condition		
Pre Heat	**Temp. Min $T_{s(min)}$**	150°C
	Temp. Max $T_{s(max)}$	180°C
	Time (min. to max.) (t_s)	60~120 seconds
Average ramp up rate (T_L) to peak		3°C/second max.
$T_{s(max)}$ to T_L (Ramp-up rate)		3°C/second max.
Reflow	**Temp. (T_L)**	200°C
	Time (min. to max.) (t_L)	20~40 seconds
Peak Temperature (T_P)		245°C
Time within 5°C of actual peak Temperature (t_p)		10 second max.
Ramp-down Rate		6°C/second max.