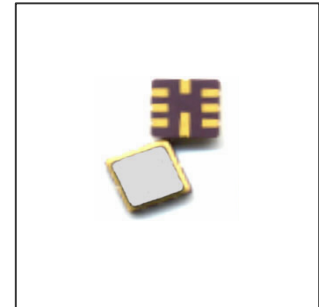


433.920MHz Low-loss Filter

■ Features

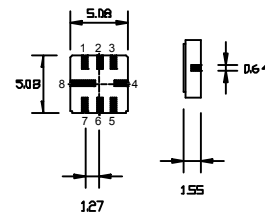
- RF Low-Loss Filter For Remote Control Receivers
- Excellent Rejection
- Simple External Impedance Matching



■ Maximum Ratings

Rating	Value	Units
CW RF Power Dissipation	10	dBm
DC voltage Between Terminals	15	VDC
Operating Temperature Range	-40 / +85	°C
Storage Temperature Range	-40 / +85	°C
Soldering Temperature	+250	°C

Electrostatic Sensitive Device (ESD)



Pin Configuration

- 1 : Input Ground
- 2 : Input
- 5 : Output
- 6 : Output Ground
- 4,8 : Case Ground
- 3,7 : to be grounded

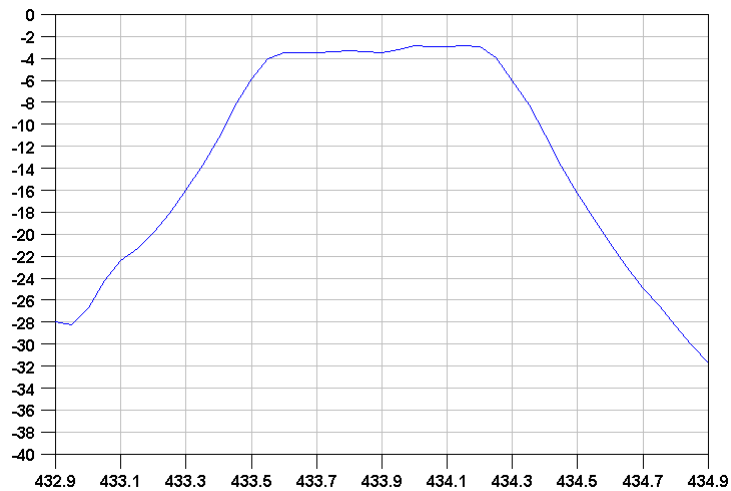
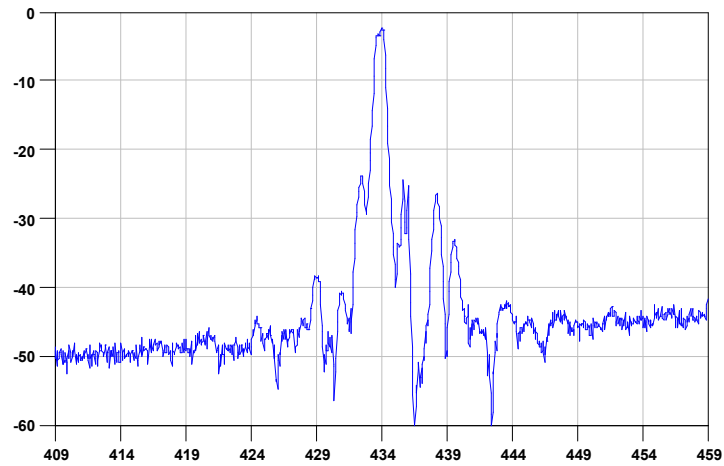
Ordering code	Marking
FC0433D92C110	FC0433C1, date code

■ Electrical Characteristics

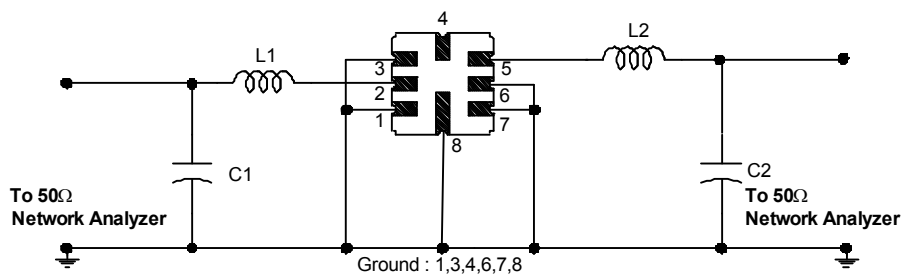
Ambient temperature	Ta = 25 °C					
Source impedance	Zs = 50 Ω and matching network.					
Load impedance	ZL = 50Ω and matching network.					
Characteristic		Sym	Min.	Typ.	Max.	Units
Center Frequency (Between -3dB points)		fc	433.82	433.92	434.02	MHz
Insertion Loss		IL	-----	3.0	5.0	dB
3 dB bandwidth		BW3	500	650	800	KHz
Rejection	At fc -10.7 MHz		20	30		dB
	At fc -21.4 MHz		38	45		dB
Impedance at 433.92 MHz	Input : Zin = Rin Cin			150 4.7		Ω pF
	Output : Zout = Rout Cin			150 4.7		Ω pF
Temperature Stability	Turnover Temperature	To	10	25	40	°C
	Turnover Frequency	fo		fc		MHz
	Temperature Coefficient	FTC	-----	0.033	-----	ppm/°C ²
Frequency aging		fa	-----	10	50	ppm/yr

1. Temperature dependance of fc : $fc (Ta) = fc (To) (1 - FTC (Ta - To)^2)$

Typical Filter Response:



Typical Test Circuit:



C1= 5 pF
 L1=32 nH
 L2=32 nH
 C2= 5 pF

Matching network to 50 Ω (element values depend on pcb layout and equivalent circuit)