

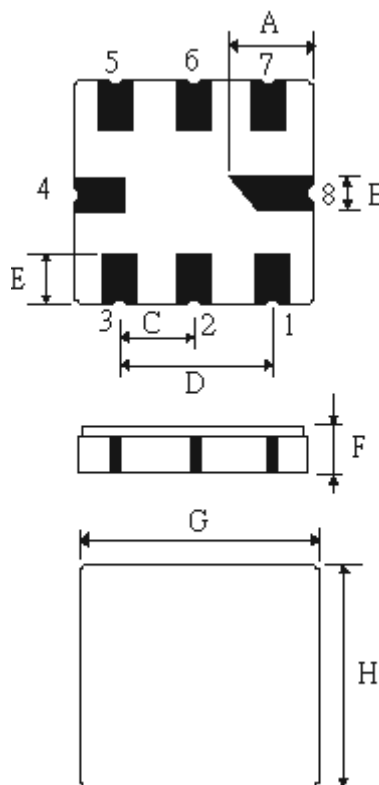
Spec no:SM5050-04339-R60-NJ-A

1. Features

Low-loss, compact, and economical SAW filter designed to provide front-end selectivity in 433.92MHz receiver. Receiver designs using this filter include superhet with 10.7MHz or 500KHz IF , direct conversion and superregen.

2. Type : SM5050 (Lead Free Parts)

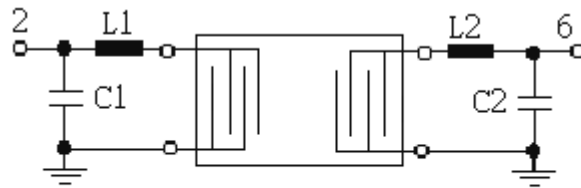
3. Product Dimension



Pin	Connection
2	Input
1	Input-ground
6	Output
5	Output-ground
3,7	To be Ground
4,8	Case Ground

Sign	Data (unit:mm)	Sign	Data(unit:mm)
A	2.08±0.15	E	1.2±0.15
B	0.60±0.1	F	1.35±0.15
C	1.27±0.1	G	5.0±0.2
D	2.54±0.1	H	5.0±0.2

4. Test Circuit



$$C1=13\text{pF}^*, L1=43\text{nH}^*, L2=43\text{nH}^*, C2=13\text{pF}^*$$

5. Performance

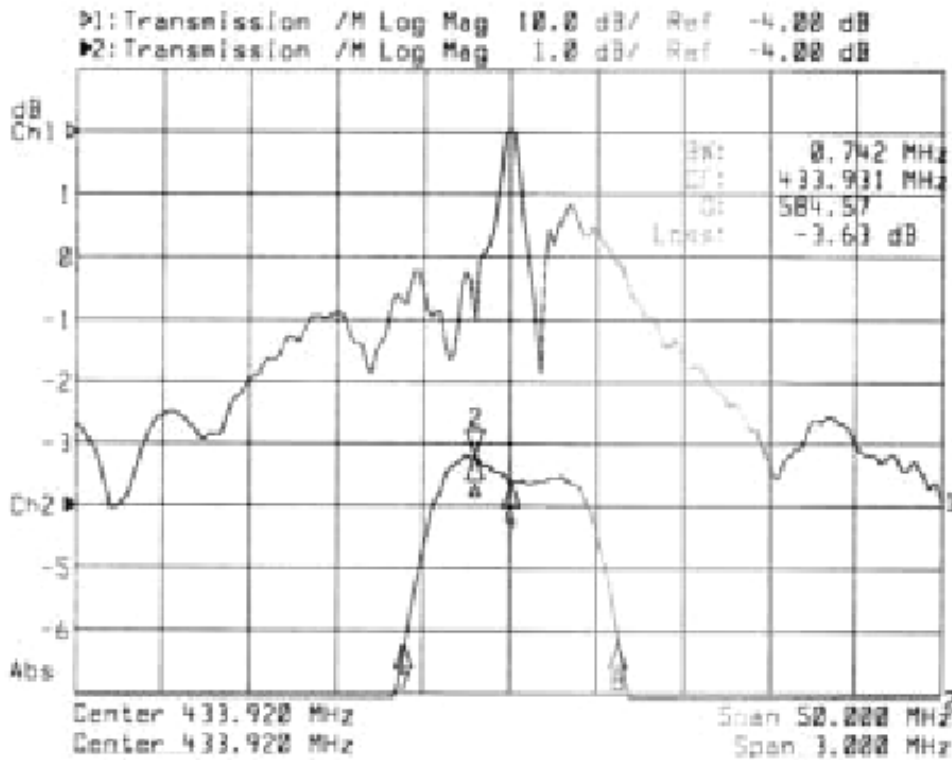
5-1. Maximum Ratings

Rating	Value	Units
Input Power Level	10	dBm
DC Voltage	12V	VDC
Storage Temperature	-40 to +85	
Soldering Temperature	+235	

5-2. Electronic Characteristics

Item		Min	Typ	Max	Units
Center frequency (center frequency between 3dB points)	f_c	--	433.92	--	MHz
Insertion loss	IL	--	3.0	5.5	dB
3dB Bandwidth	BW_3		± 300	± 500	KHz
Rejection	at $f_c - 21.4\text{MHz}$ (Image)	40	50	--	dB
	at $f_c - 10.7\text{MHz}$ (LO)	15	30	--	dB
	Ultimate	--	80	--	dB
Temperature	Operating Case Temperature	T_c	-35	+85	
	Turnover Temperature	T_o	24	39	54
	Turnover Frequency	f_o		f_c	MHz
	Frequency Temperature Coefficient	FTC		0.032	ppm/
Frequency Aging Absolute Value during the First Year		f_A		10	ppm/yr

6. Frequency Response



7 Notice

Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50Ω test system with $VSWR \leq 1.2:1$. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f_c . Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.