

# SPECIFICATION OF SAW FILTER

YOKETAN CORP.

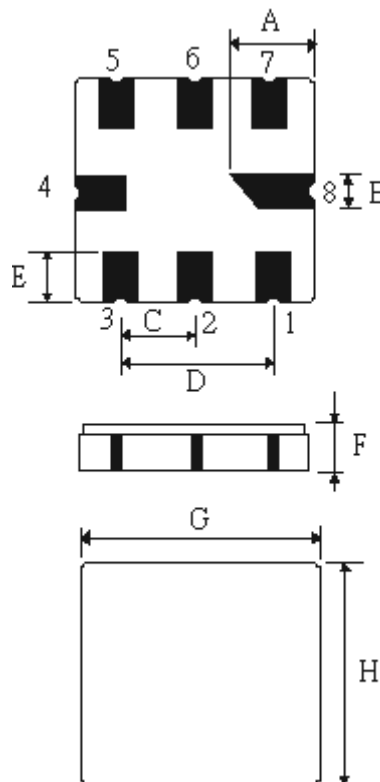
**Spec no: SM5050F-02800-020-NJ-A**

## 1. Features

For Wireless Lan applications

## 2. Type : SM5050 (Lead Free Parts)

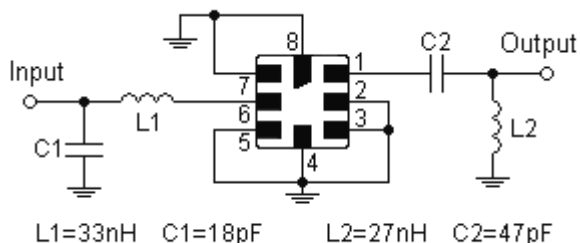
## 3. Product Dimension



Pin	Connection
6	Input
1	Output
2,3,5,7	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



## 5. Performance

### 5-1. Maximum Ratings

Rating	Value	Units
Source Power $P_S$	10	dBm
DC Voltage $V_{DC}$	0	V
Storage Temperature Range $T_{stg}$	-40 to +85	
Operating Temperature Range $T_A$	-10 to +60	

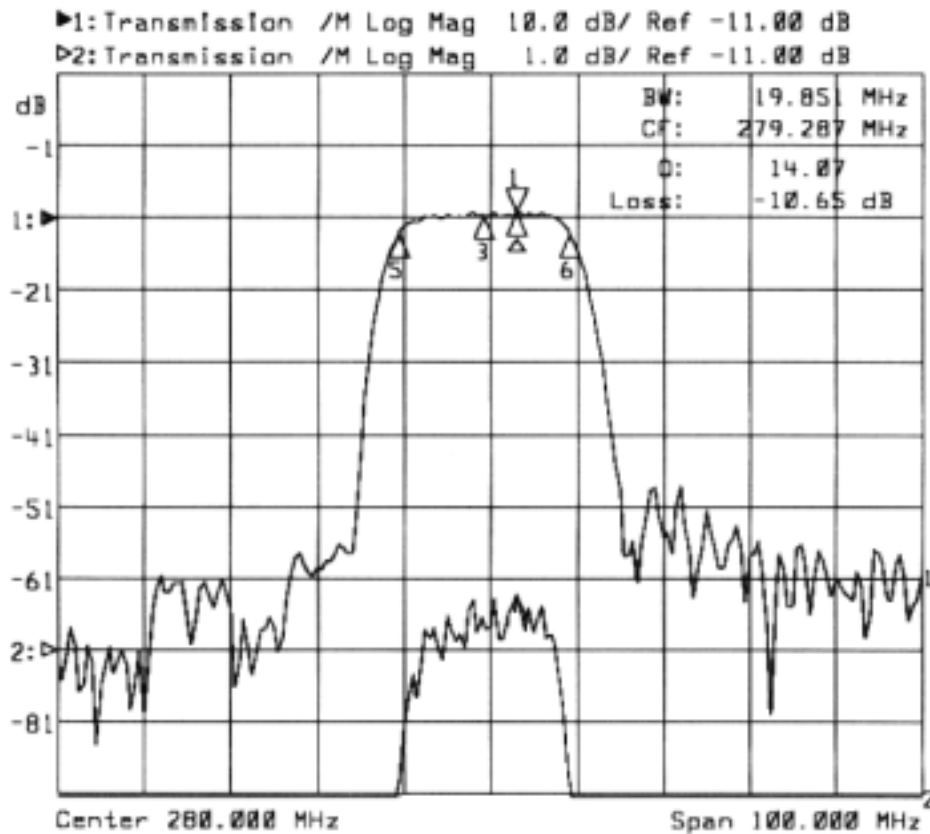
### 5-2. Electronic Characteristics

Terminating source impedance:  $Z_S = 50\Omega$  unbalanced and matching network

Terminating load impedance:  $Z_L = 50\Omega$  unbalanced and matching network

Item	Min	Typ	Max	Units
Center frequency $f_C$	--	280.000	--	MHz
Insertion loss $IL$ (including matching network)	--	11.0	13.5	dB
3dB Bandwidth $BW_3$	16	20	--	MHz
Amplitude ripple (p-p) $\Delta\alpha$ $f_C \pm 7\text{MHz}$	--	$\pm 0.5$	--	dB
Group delay ripple (p-p) $\Delta\tau$ $f_C \pm 7\text{MHz}$	--	40	100	ns
Relative attenuation (relative to $IL$ ) $a_{rel}$				
230 MHz ~ 260 MHz	35	46	--	dB
300 MHz ~ 330 MHz	28	37	--	dB
Temperature coefficient of frequency $TC_f$	--	-87	--	ppm/K

## 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.