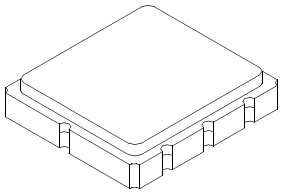
AEC-Q200
This component was always RoHS compliant from the first date of manufacture.

RF3319D

868.95 MHz SAW Filter



SM3838-8 Case
3.8 x 3.8

- ***Ideal Front-End Filter for European Wireless Receivers***
- ***Low-Loss, Coupled-Resonator Quartz Design***
- ***Simple External Impedance Matching***
- ***Complies with Directive 2002/95/EC (RoHS)***
- ***Tape and Reel Standard per ANSI/EIA-481***

The RF3319D is a low-loss, compact, and economical surface-acoustic-wave (SAW) filter designed to provide front-end selectivity in 868.95 MHz receivers. Receiver designs using this filter include superhet with 10.7 MHz or 500 kHz IF, direct conversion and superregen. Typical applications of these receivers are wireless remote-control and security devices operating in Europe under ETSI I-ETS 300 220, in Germany under FTZ 17 TR 2100, in the United Kingdom under DTI MPT 1340 (for automotive only), in France under PTT Specifications ST/PAA/TPA/AGH/1542, and in Scandinavia.

This coupled-resonator filter (CRF) uses selective null placement to provide suppression, typically greater than 40 dB, of the LO and image spurious responses of superhet receivers with 10.7 MHz IF. RFMi's advanced SAW design and fabrication technology is utilized to achieve high performance and very low loss with simple external impedance matching (not included).

Characteristic		Sym	Notes	Minimum	Typical	Maximum	Units
Center Frequency @ 25°C	Absolute Frequency	f_C			868.95		MHz
Insertion Loss		IL			2.2	4.0	dB
3 dB Bandwidth		BW_3		500	650	900	kHz
Attenuation: (relative to ILmin)	10 - 700 MHz			50	55		dB
	700 - 830 MHz			40	45		
	830 - 850 MHz			35	40		
	850 - 865 MHz			20	24		
	871 - 878 MHz			21	30		
	878 - 883 MHz			15	20		
	883 - 900 MHz			28	35		
	900 - 1000 MHz			40	45		
Temperature	Freq. Temp. Coefficient	FTC			0.032		ppm/ °C²
Frequency Aging	Absolute Value during the First Year	|fA|			<±10		ppm/yr
Impedance @ f_C	Input $Z_{IN} = R_{IN}/C_{IN}$	Z_{IN}		28.8 Ω // 1.93pF			
	Output $Z_{OUT} = R_{OUT}/C_{OUT}$	Z_{OUT}		26.9 Ω // 2.2pF			
Lid Symbolization (in addition to Lot and/or Date Codes)		668, YWWS					
Standard Reel Quantity	7 Inch Reel			500 Pieces/Reel			
Standard Reel Quantity	13 Inch Reel			3000 Pieces/Reel			

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

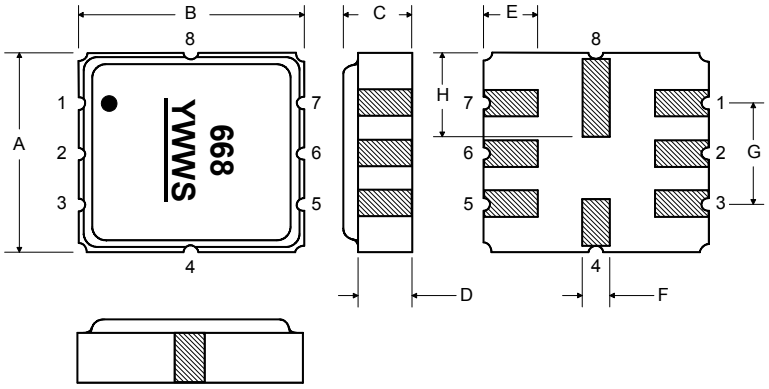
NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

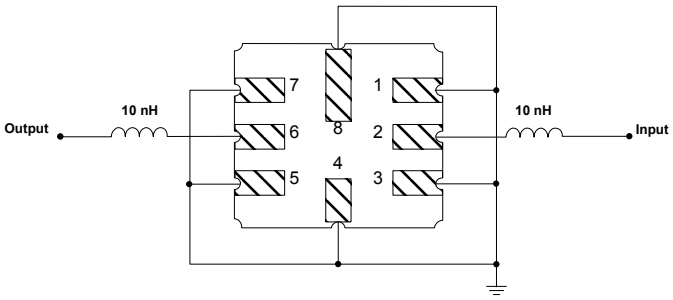
Rating		Value	Units
Input Power Level		10	dBm
DC Voltage		12	VDC
Storage Temperature		-40 to +125	°C
Operable Temperature Range		-40 to +125	°C
Soldering Temperature	(10 seconds / 5 cycles max.)	260	°C

Electrical Connections

Pin	Connection
1	Input Ground
2	Input
3	N/C
4	Case Ground
5	Output Ground
6	Output
7	Case Ground
8	Case Ground



Matching Circuit to 50Ω



Case Dimensions

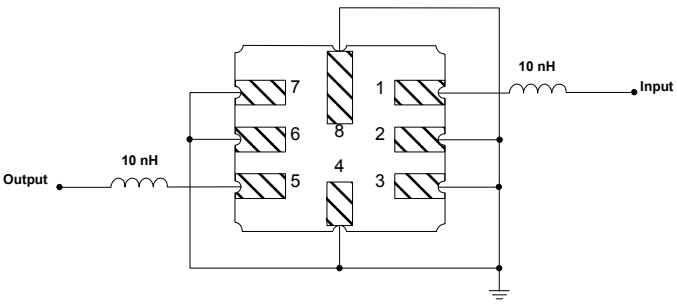
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.6	3.8	4.0	0.14	0.15	0.16
B	3.6	3.8	4.0	0.14	0.15	0.16
C	1.00	1.20	1.40	0.04	0.05	0.055
D	0.95	1.10	1.25	0.033	0.043	0.05
E	0.90	1.0	1.10	0.035	0.04	0.043
F	0.50	0.6	0.70	0.020	0.024	0.028
G	2.39	2.54	2.69	0.090	0.100	0.110
H	1.40	1.75	2.05	0.055	0.069	0.080

OPTIONAL

Electrical Connections

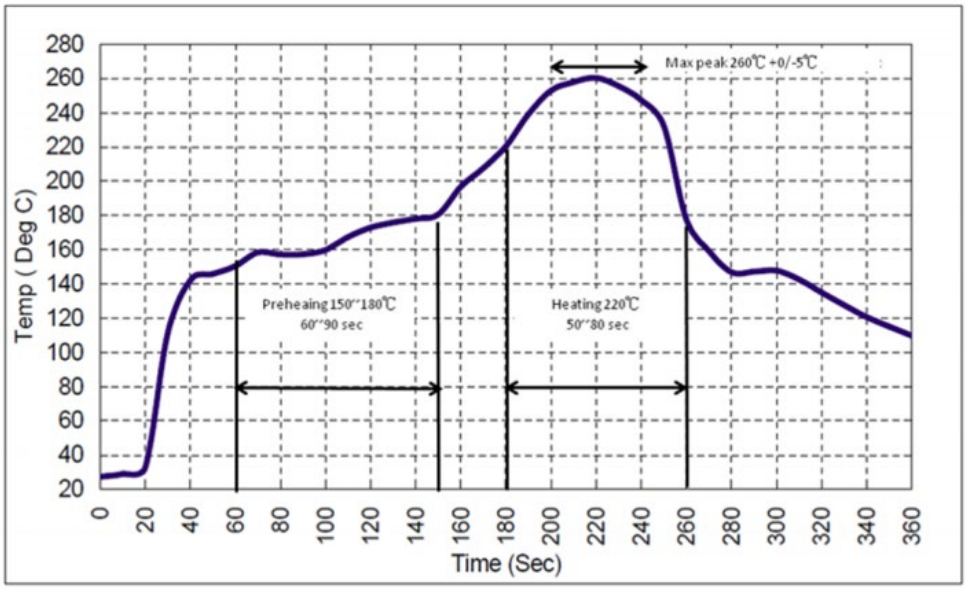
Pin	Connection
1	Input
2	Input Ground
3	N/C
4	Case Ground
5	Output
6	Output Ground
7	Case Ground
8	Case Ground

Matching Circuit to 50Ω



Recommended Reflow Profile

1. Preheating shall be fixed at 150~180ºC for 60~90 seconds.
2. Ascending time to preheating temperature 150ºC shall be 30 seconds min.
3. Heating shall be fixed at 220ºC for 50~80 seconds and at 260ºC +0/-5ºC peak (10 seconds).
4. Time: 5 times maximum.



Mouser Electronics

Authorized Distributor

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RFMi:
RF3319D