



- 383.1 to 396.9 MHz Filter
- Optimized for use with the TRC105 Transceiver
- Balanced 150 ohm IC Interface
- Complies with Directive 2002/95/EC (RoHS)



Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+15	dBm
DC Voltage	±5	V
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			390.0		MHz
1 dB Bandwidth	BW_1			16.0		MHz
Maximum Insertion Loss, 383.1 to 396.9 MHz	IL_{MAX}			1.4	2.4	dB
Amplitude Ripple, p-p, 383.1 to 396.9 MHz					1.0	
Rejection Referenced to Insertion Loss at 390.0 MHz:						
DC to 370 MHz			32	35		
400 to 490 MHz			32	35		
490 to 890 MHz			42	45		
890 to 1390 MHz			63	66		
1390 to 1790 MHz			55	58		
1790 to 2000 MHz			53	56		
Source Impedance	Z_S			50		Ω
Balanced Load Impedance	Z_L			150		Ω

Case Style	SM3838-8 3.8 x 3.8 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	889, YWWS
Standard Reel Quantity Reel Size 7 Inch	500 Pieces/Reel
Reel Size 13 Inch	3000 Pieces/Reel

Electrical Connections

Connection	Terminals
Single-ended Port	6
Balanced Port	1, 3
Case Ground	4, 5, 7, 8
No Connection	2



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

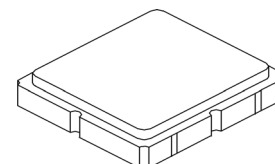
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

AEC-Q200

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

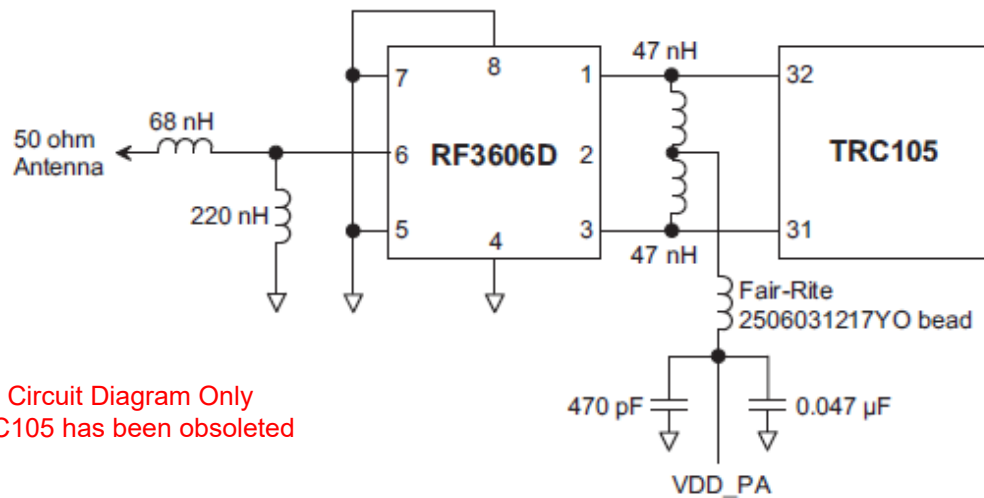
RF3606D

390 MHz SAW Filter



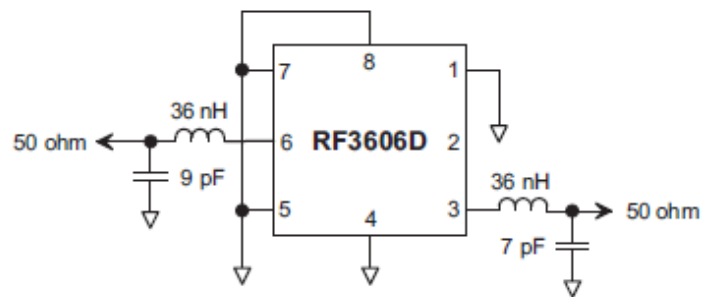
SM3838-8

RF3606D – TRC105 Application Circuit

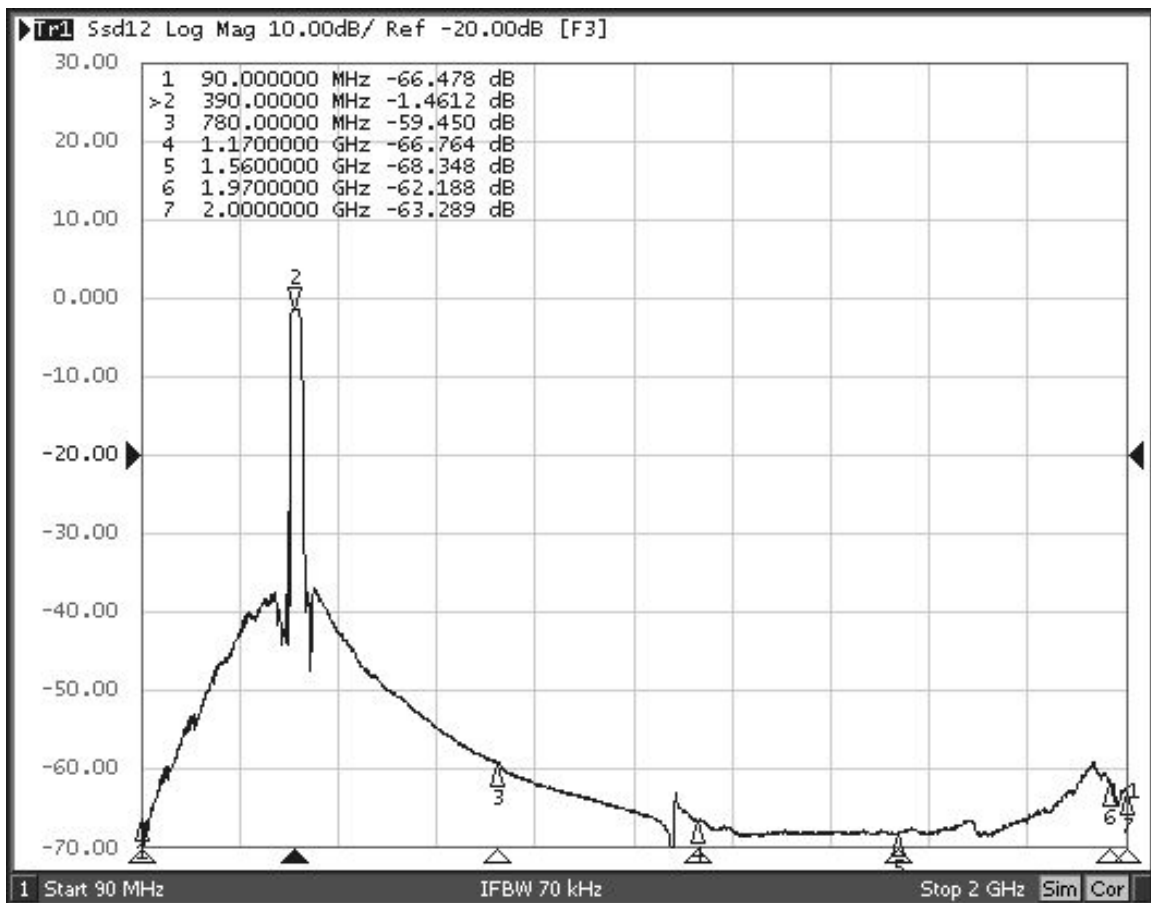


Reference Circuit Diagram Only
Note: TRC105 has been obsolete

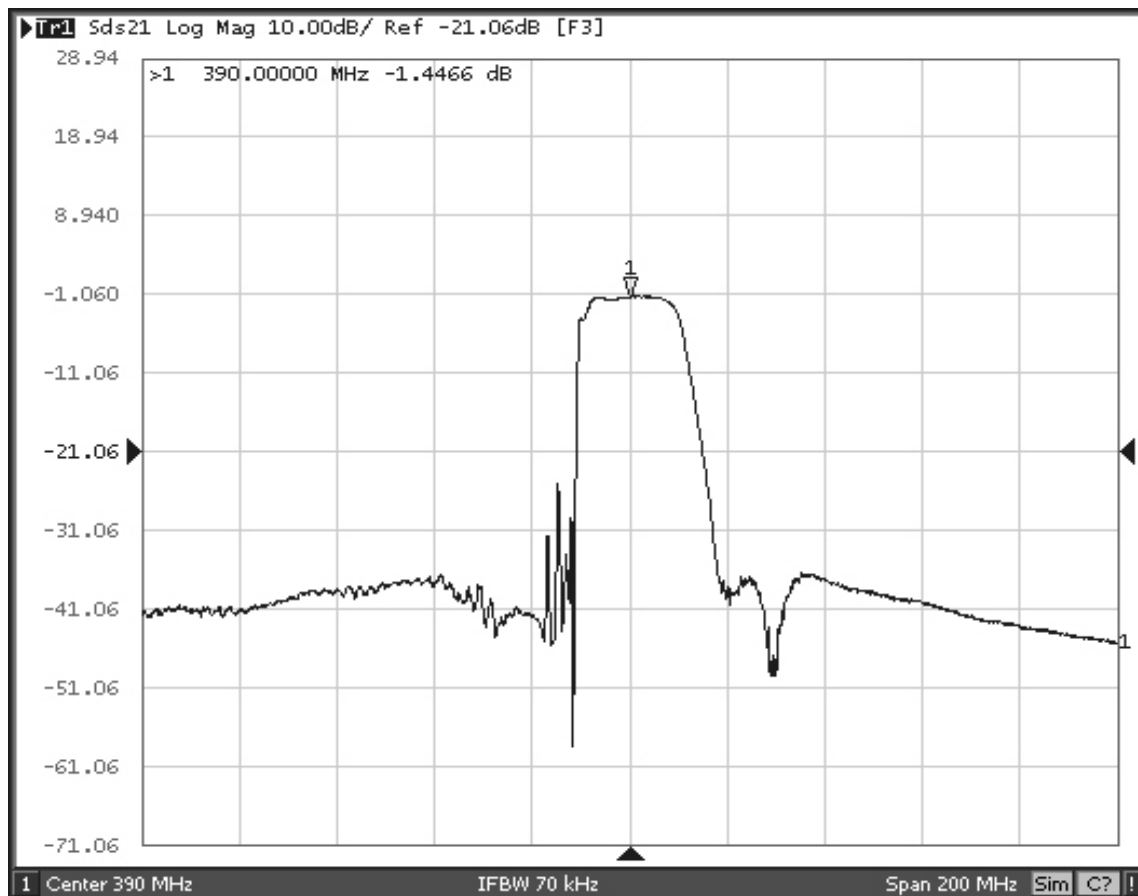
RF3606D 50 Ohm Tuning Network



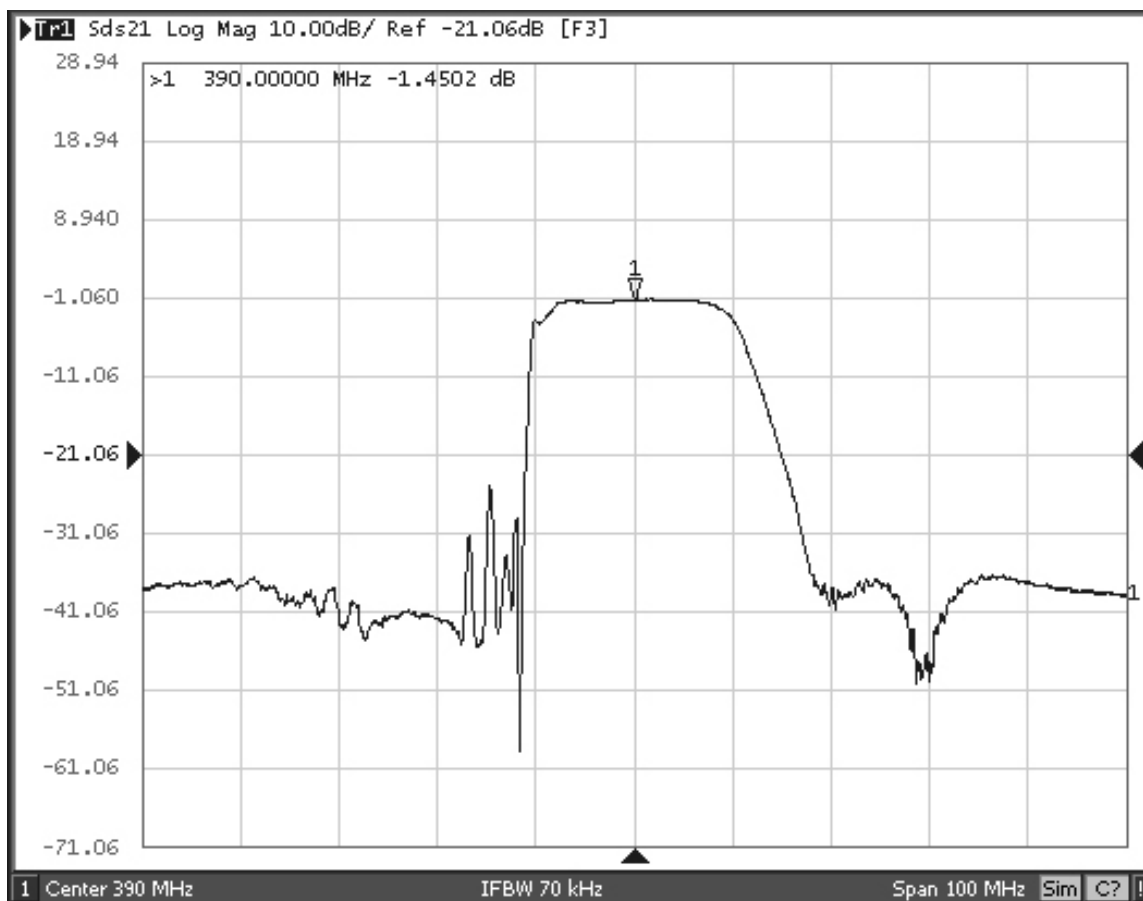
RF3606D Broadband Response, 200 to 2000 MHz



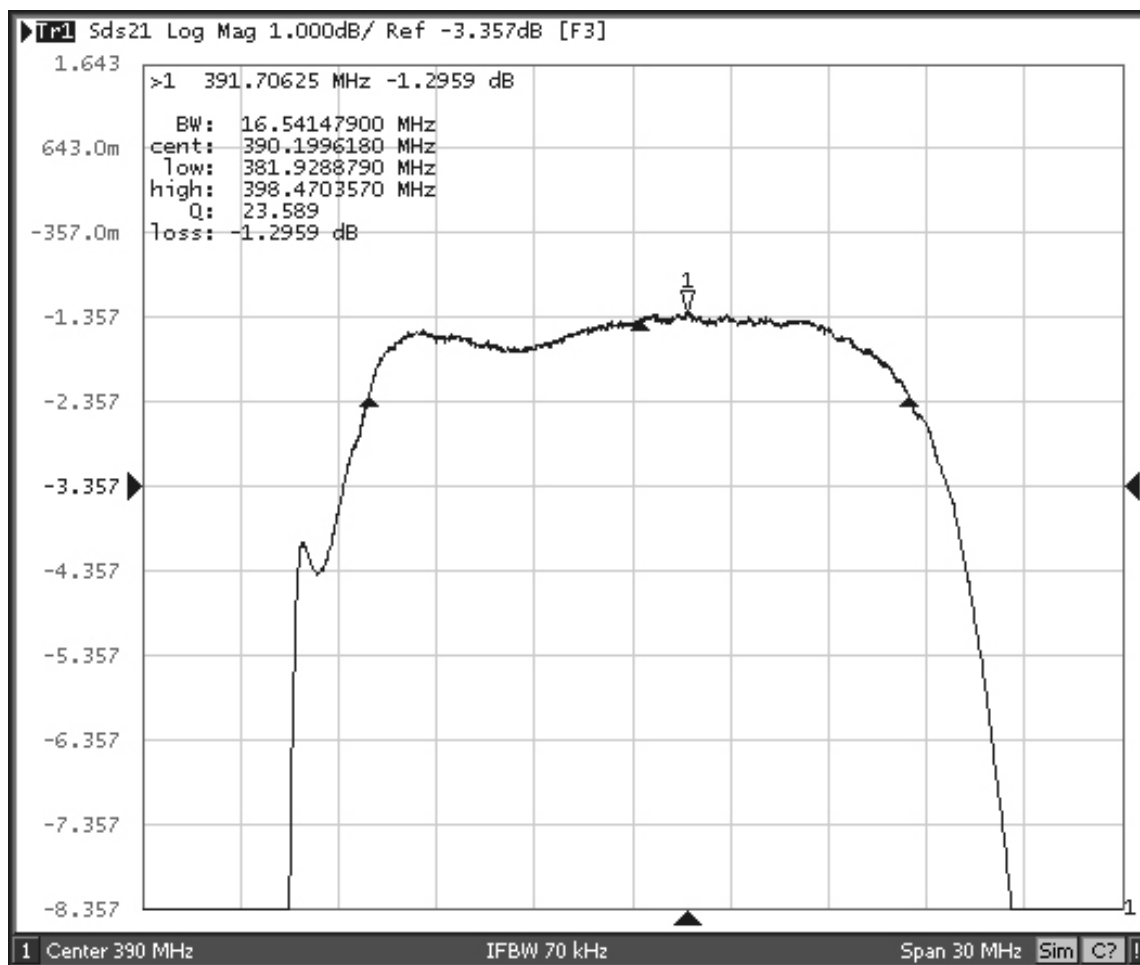
RF3606D Response, 290 to 490 MHz



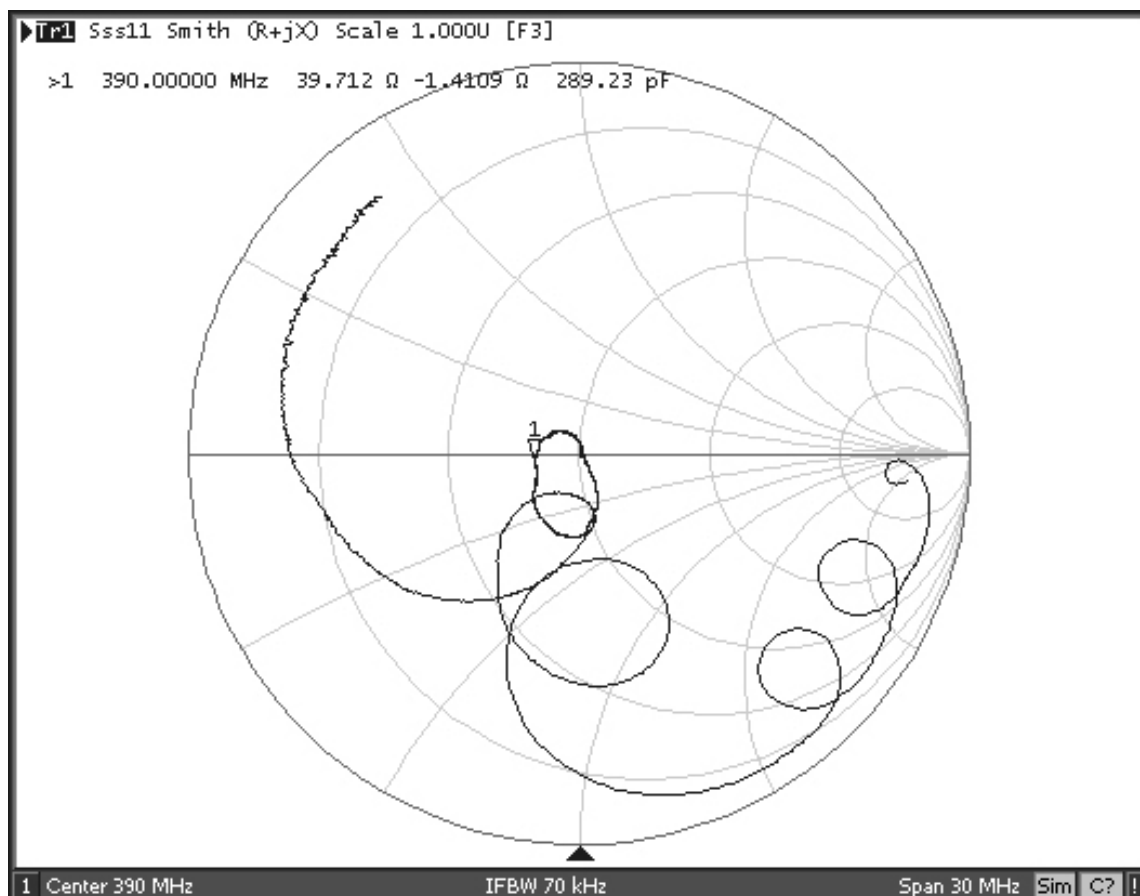
RF3606D Response, 340 to 440 MHz



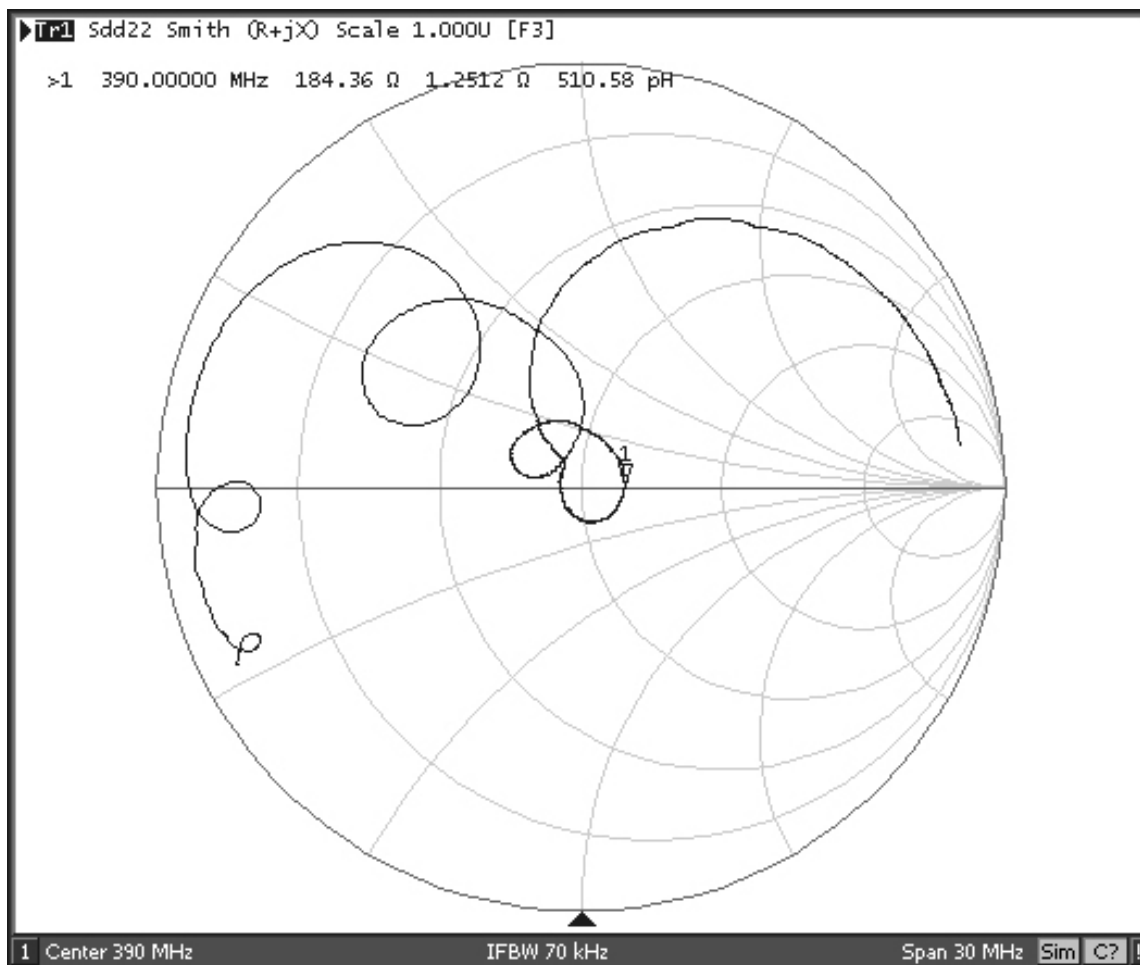
RF3606D Passband Response



RF3606D Input Impedance Plot



RF3606D Balanced Output Impedance Plot



Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.6	3.8	4.0	0.142	0.150	0.157
B	3.6	3.8	4.0	0.142	0.150	0.157
C	0.90	1.00	1.1	0.035	0.040	0.043
D	0.80	0.90	1.0	0.031	0.035	0.040
E	0.90	1.00	1.10	0.035	0.040	0.043
F	0.50	0.60	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

Solder Pad Plating	0.3 to 1.0 μm Gold over 1.27 to 8.89 μm Nickel
Lid Plating	2.0 to 3.0 μm Nickel
Body	Al_2O_3 Ceramic
Pb Free	

Technical drawing of the YMW5 689 component, showing three views: top, side, and bottom.

Top View: A rectangular component with rounded corners. Dimensions include overall width B, overall height A, and a central rectangular area with width 8 and height 4. The component is labeled "YMW5" and "689". Pin locations are numbered 1 through 7.

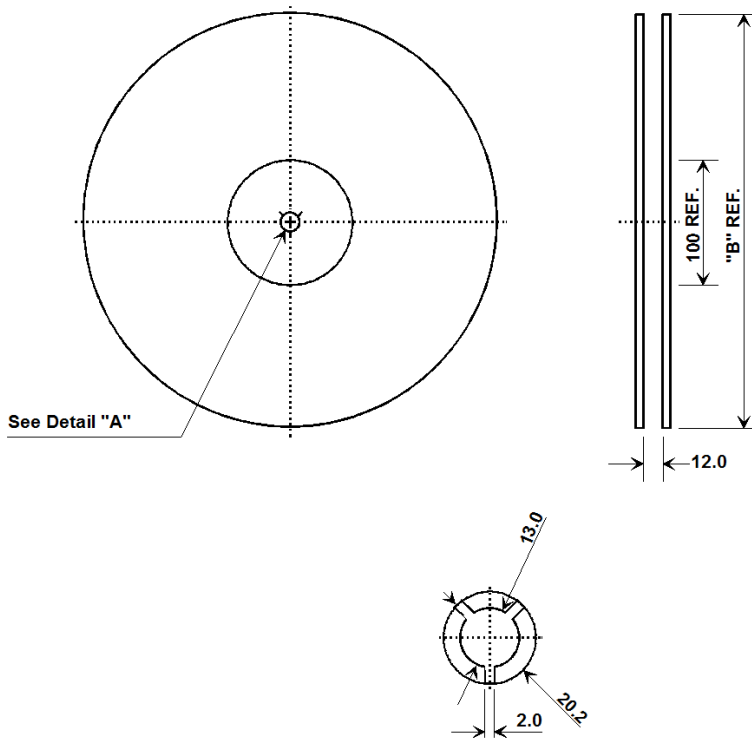
Side View: Shows the component's profile with a total height of C. It features four horizontal slots, each with a width of 4. The top surface is labeled 1, and the bottom surface is labeled 2.

Bottom View: Shows the underside of the component with dimensions E (width) and F (height). It features four horizontal slots, each with a width of 4. The top surface is labeled 1, and the bottom surface is labeled 2. The central rectangular area has a width of 8 and a height of 4. Pin locations are numbered 1 through 3.

Tape and Reel Specifications

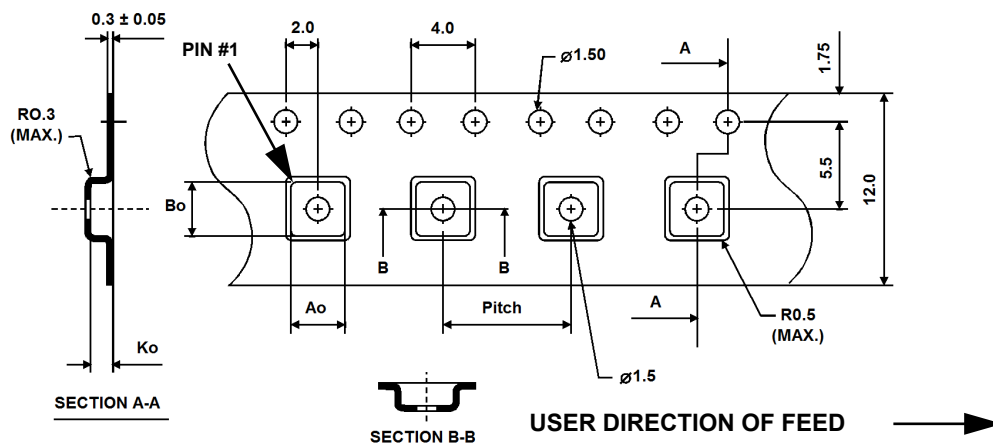
Tape and Reel Standard per ANSI/EIA-481

"B" "Nominal Size"		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



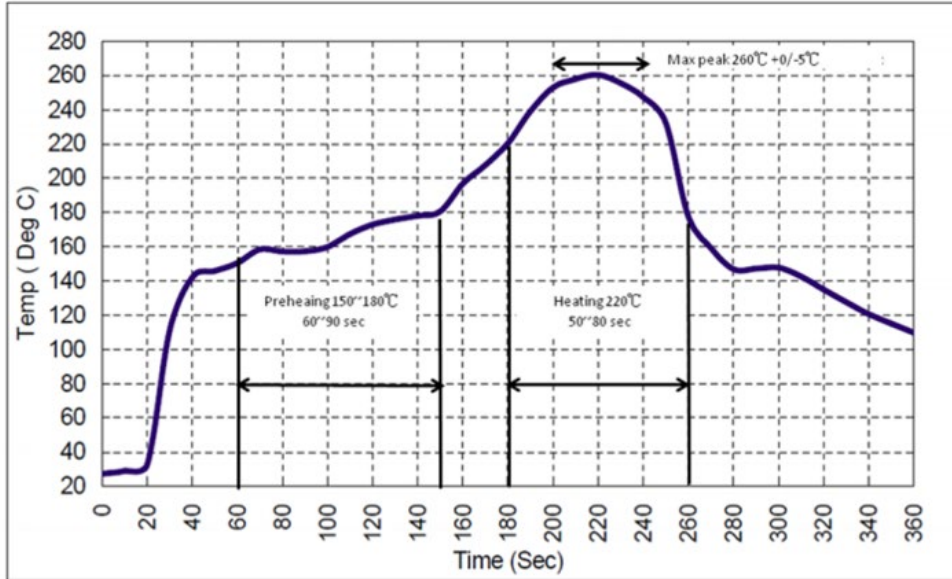
COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	4.25 mm
Bo	4.25 mm
Ko	1.30 mm
Pitch	8.0 mm
W	12.0 mm



Recommended Reflow Profile

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



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