



SF2120C

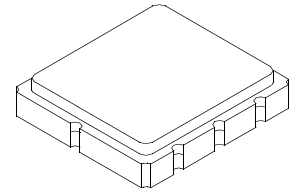
- *Designed for Broadband Receiver IF Applications*
- *Low Insertion Loss*
- *5.0 X 5.0 mm Surface-mount Case*
- *Differential Input and Single-ended Output*
- *Complies with Directive 2002/95/EC (RoHS)*



**149.00 MHz
SAW Filter**

Absolute Maximum Ratings

| Rating | Value | Units |
|--|-----------------|-------|
| Maximum Incident Power in Passband | +10 | dBm |
| Maximum DC Voltage on any Non-ground Terminal | 3 | VDC |
| Storage Temperature Range in Tape and Reel | -40 to +85 | °C |
| Suitable for Lead-free Soldering - Maximum Soldering Profile | 260 °C for 30 s | |



SM5050-8

Electrical Characteristics

| Characteristic | Sym | Min | Typ | Max | Units |
|--|-------|-------------------------------------|------------------|-----|-------------------|
| Nominal Center Frequency | f_c | | 149.00 | | MHz |
| Insertion Loss | | | 2.0 | 2.5 | dB |
| 2 dB Bandwidth | | 148 to 150 | 147.65 to 150.35 | | MHz |
| Amplitude Ripple, 148 to 150 MHz, -27.5 to 72.5 °C | | | 1.5 | 1.8 | dB _{P-P} |
| Amplitude Ripple, 148 to 150 MHz, -40 to -27.5 °C, 72.5 to 85 °C | | | 2.0 | 2.2 | dB _{P-P} |
| Rejection, f_c -2.5 MHz | | 15 | 54 | | dB |
| Rejection, f_c +2.5 MHz | | 15 | 30 | | dB |
| Center Frequency Temperature Coefficient | | | -30 | | ppm/K |
| Operating Temperature | | -40 | | 85 | °C |
| Case Style | | SM5050-8 5 x 5 mm Nominal Footprint | | | |
| Lid Symbolization (Y=year, WW=week, S=shift) | | RFM 635 YWWS | | | |

Electrical Connections

| Connection | | Terminals |
|------------------------|--------------------|------------------|
| Port 1 | Differential Input | 1, 2 |
| Port 2 | Output | 5 |
| | Ground | All others |
| Single-ended Operation | | Return is ground |
| Differential Operation | | Return is hot |
| Dot indicates Pin 1 | | |

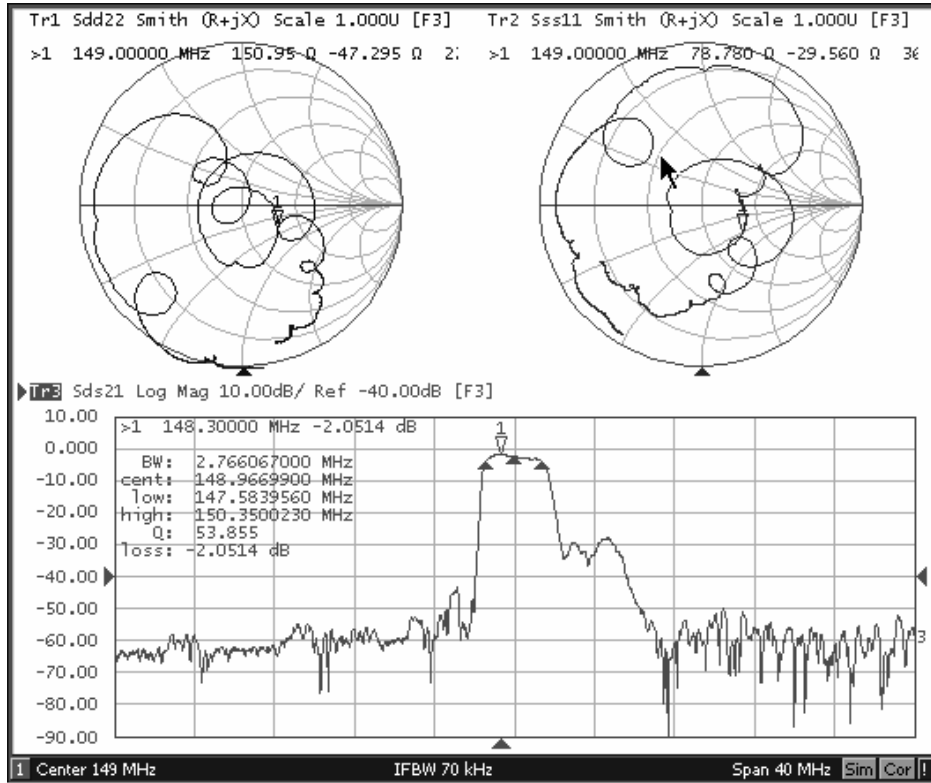


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

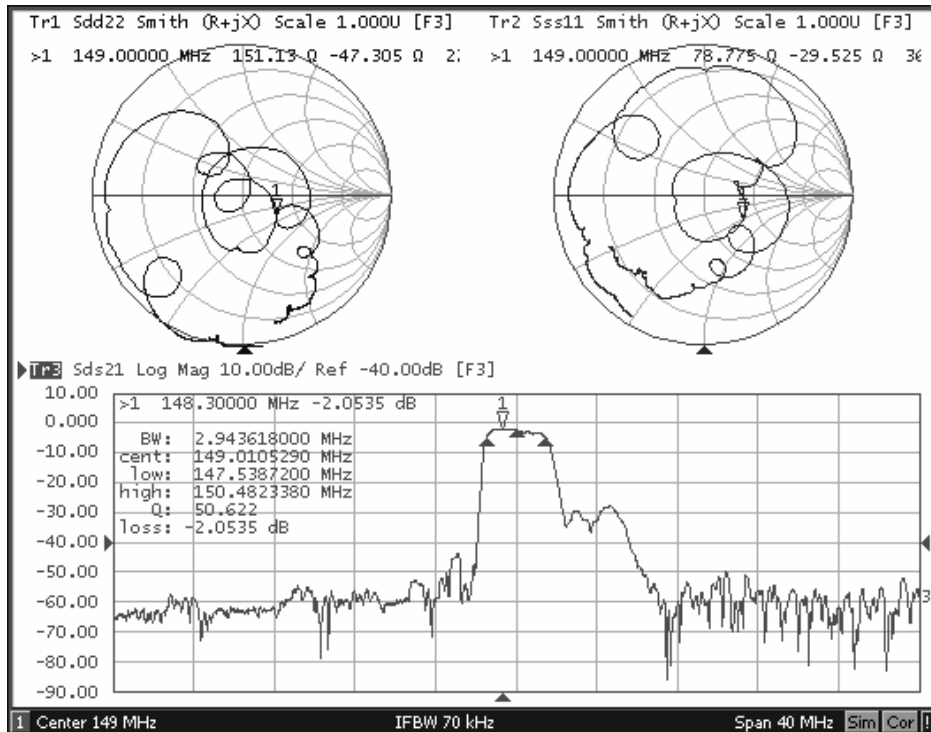
Notes:

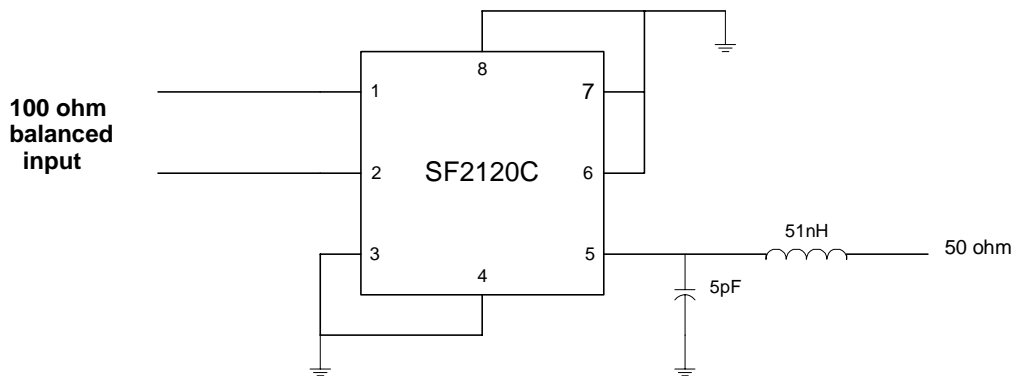
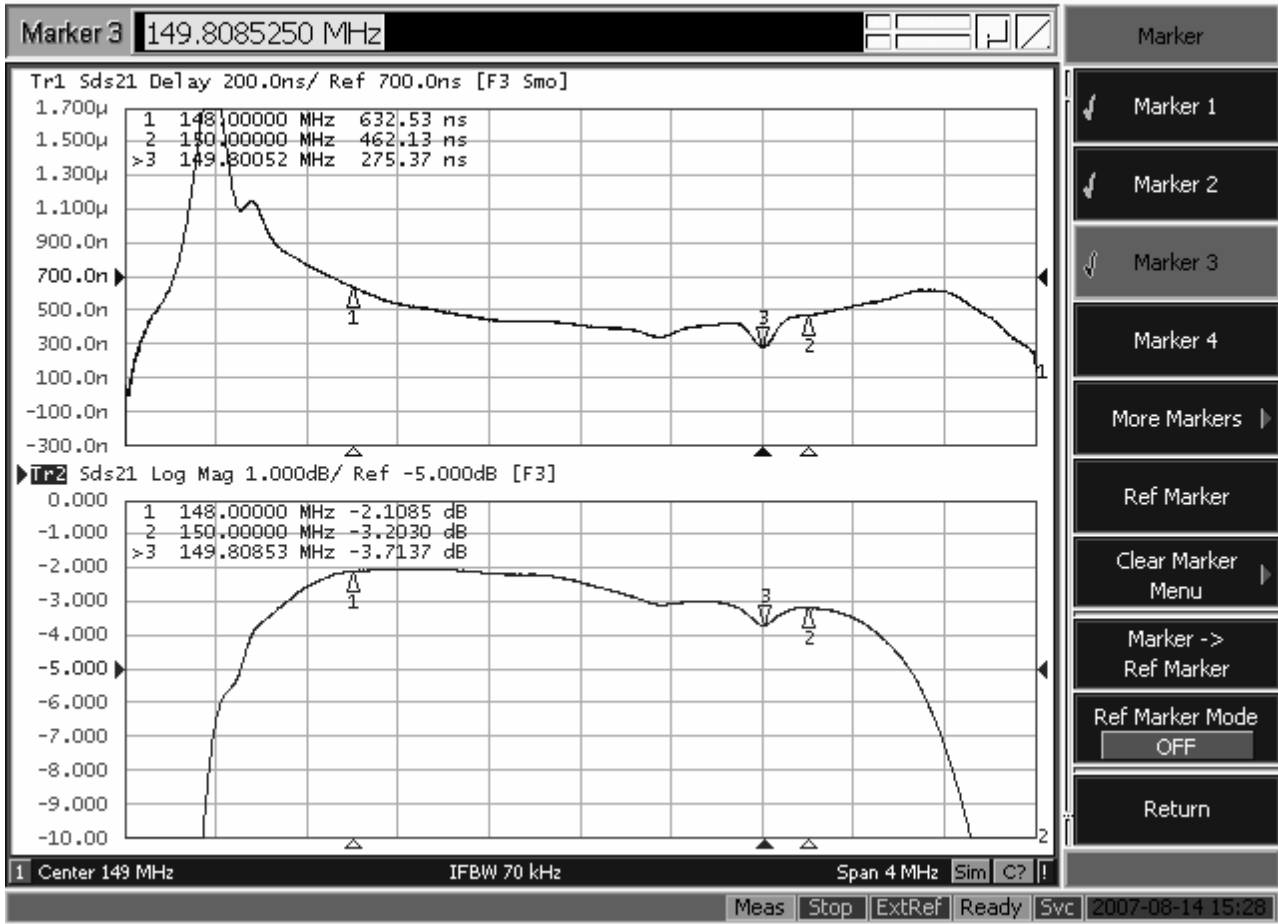
1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
2. Rejection is measured as attenuation below the minimum IL point in the passband. Rejection in final user application is dependent on PCB layout and external impedance matching design. See Application Note No. 42 for details.
3. The design, manufacturing process, and specifications of this filter are subject to change.
4. Tape and Reel Standard ANSI / EIA 481.
5. US and international patents may apply.
6. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.
7. The center frequency will move with ambient temperature changes.

2 dB BW



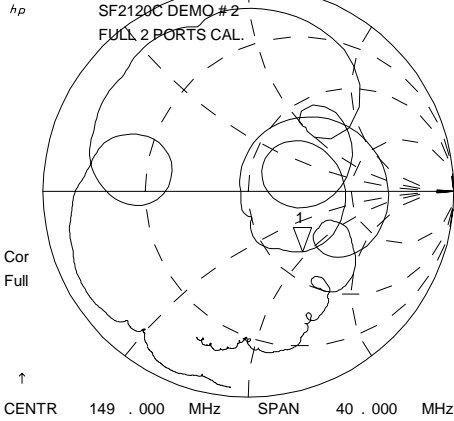
3 dB BW



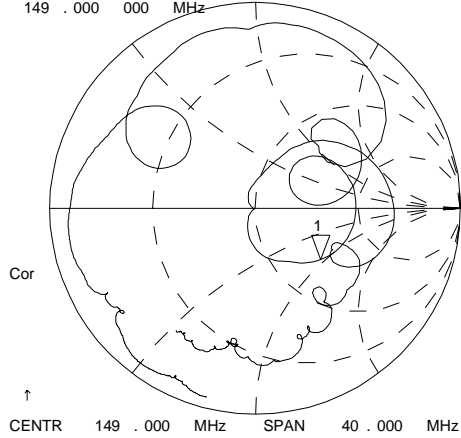


12 Jul 2007 09:02:21

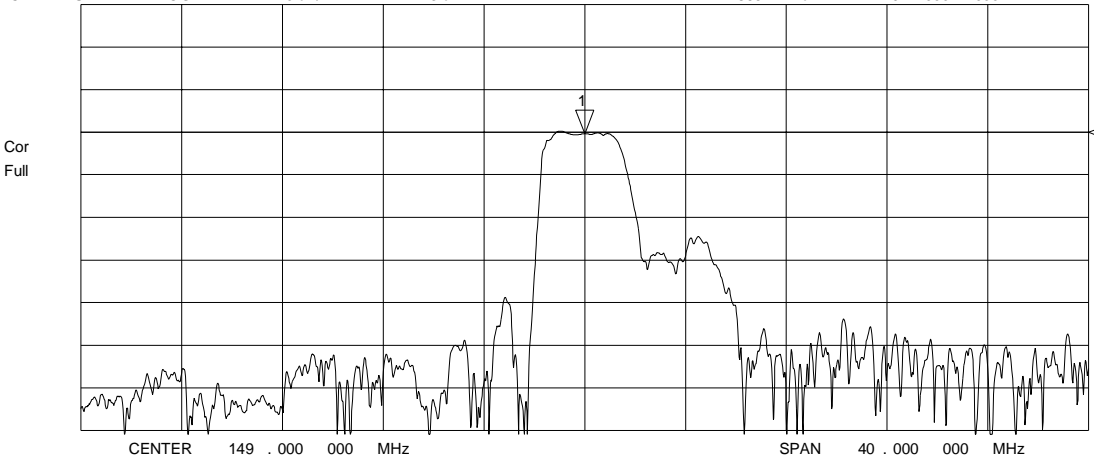
CH1 S11 1 UFS
1: 67.484 Ω -46.605 Ω 22.919 pF
149.000 000 MHz



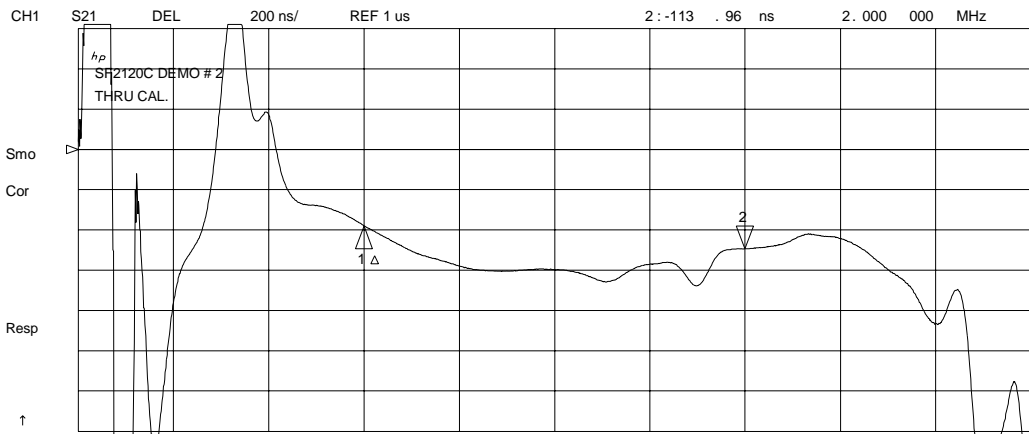
CH3 S22 1 UFS
1: 79.445 Ω -47.031 Ω 22.712 pF
149.000 000 MHz



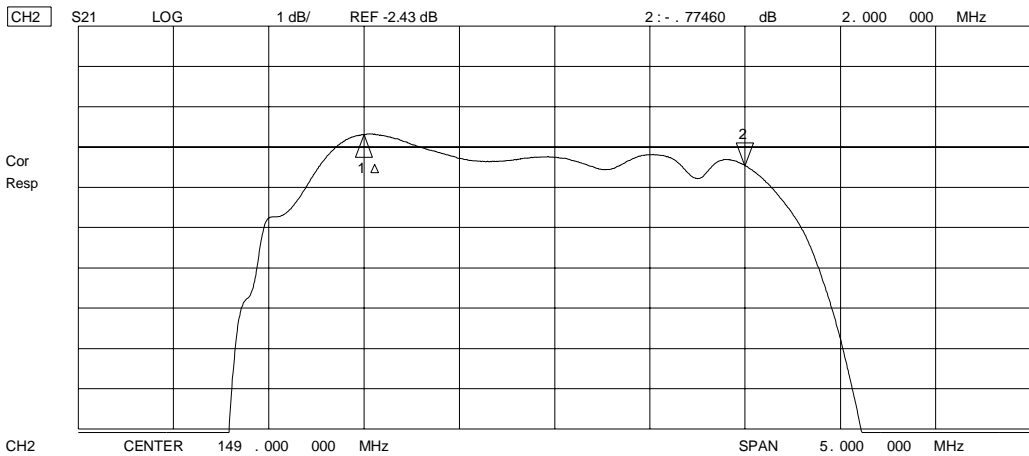
CH2 S21 LOG 10 dB/ REF -2.43 dB 1: -2.8632 dB 149.000 000 MHz



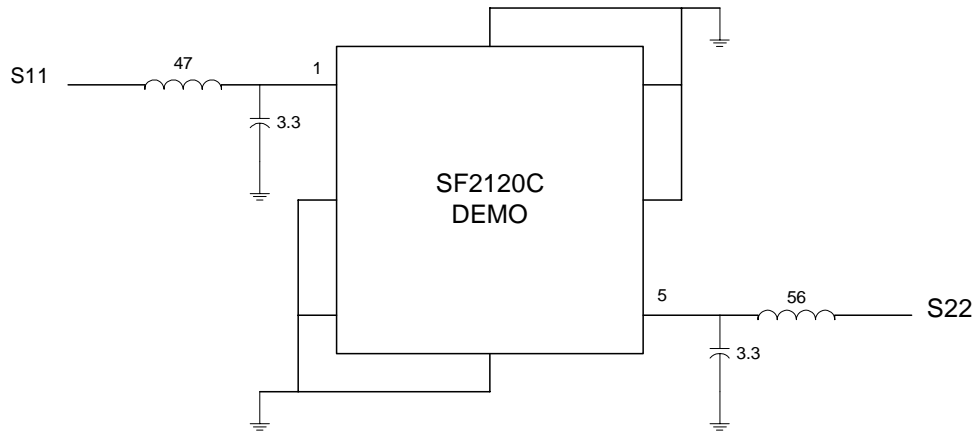
12 Jul 2007 08:52:09



CH1 Markers
 Δ REF=1
 mean : 431 . 85 ns
 s. dev : 63 . 986 ns
 p-p : 298 . 60 ns



CH2 Markers
 Δ REF=1
 mean : -2 . 6956 dB
 s. dev : . 24420 dB
 p-p : 1 . 1153 dB



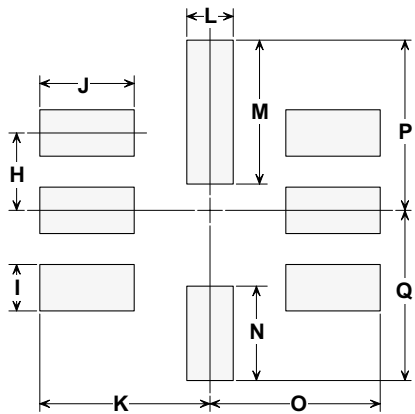
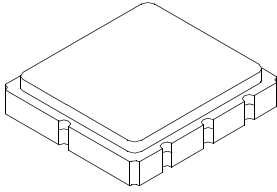
- | | | |
|--------------|-------------|--------|
| 401-1624-001 | | |
| 501-0782-470 | 0805, 47NH | L1 |
| 501-0782-560 | 0805, 56NH | L2 |
| 501-0621-033 | 0603, 3.3PF | C1, C2 |

SM5050-8 Surface-Mount 8-Terminal Ceramic Case

5.0 X 5.0 mm Nominal Footprint

Case Dimensions

| Dimension | mm | | | Inches | | |
|-----------|------|------|------|--------|-------|-------|
| | Min | Nom | Max | Min | Nom | Max |
| A | 4.80 | 5.00 | 5.20 | 0.189 | 0.197 | 0.205 |
| B | 4.80 | 5.00 | 5.20 | 0.189 | 0.197 | 0.205 |
| C | 1.30 | 1.50 | 1.70 | 0.050 | 0.060 | 0.067 |
| D | 1.98 | 2.08 | 2.18 | 0.078 | 0.082 | 0.086 |
| E | 1.07 | 1.17 | 1.27 | 0.042 | 0.046 | 0.050 |
| F | 0.50 | 0.64 | 0.70 | 0.020 | 0.025 | 0.028 |
| G | 2.39 | 2.54 | 2.69 | 0.094 | 0.100 | 0.106 |
| H | | 1.27 | | | 0.050 | |
| I | | 0.76 | | | 0.030 | |
| J | | 1.55 | | | 0.061 | |
| K | | 2.79 | | | 0.110 | |
| L | | 0.76 | | | 0.030 | |
| M | | 2.36 | | | 0.093 | |
| N | | 1.55 | | | 0.061 | |
| O | | 2.79 | | | 0.110 | |
| P | | 2.79 | | | 0.110 | |
| Q | | 2.79 | | | 0.110 | |

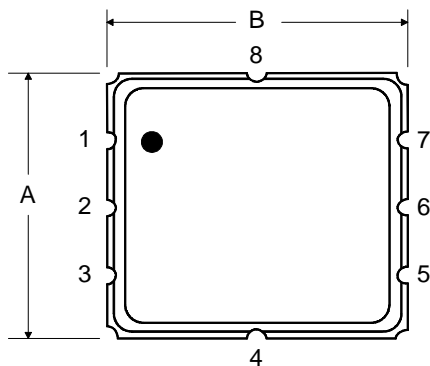


PCB Footprint

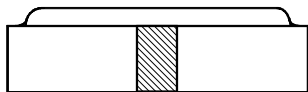
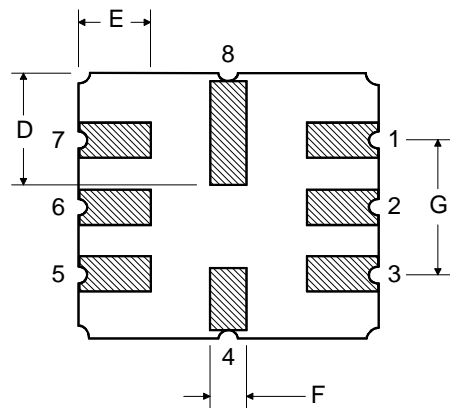
Case Materials

| Materials | |
|--------------------|--|
| 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 |

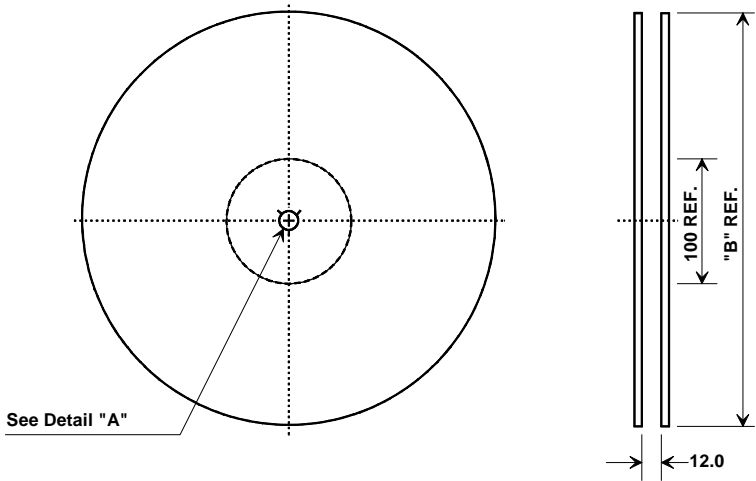
TOP VIEW



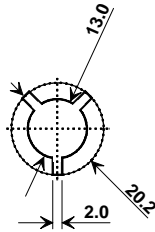
BOTTOM VIEW



Tape and Reel Specifications

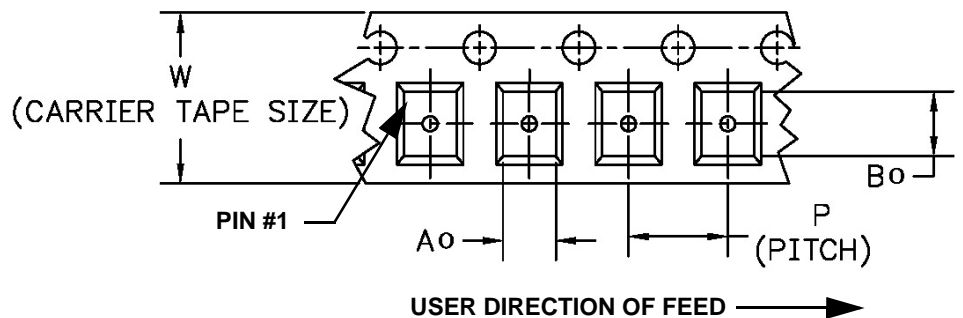
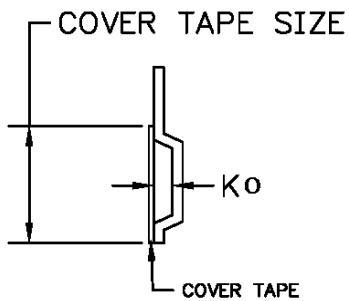


| "B" Nominal Size | | Quantity Per Reel |
|------------------|-------------|-------------------|
| Inches | millimeters | |
| 7 | 178 | 500 |
| 13 | 330 | 3000 |



COMPONENT ORIENTATION and DIMENSIONS

| Carrier Tape Dimensions | |
|-------------------------|---------|
| Ao | 5.3 mm |
| Bo | 5.3 mm |
| Ko | 2.0 mm |
| Pitch | 8.0 mm |
| W | 12.0 mm |



Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9