

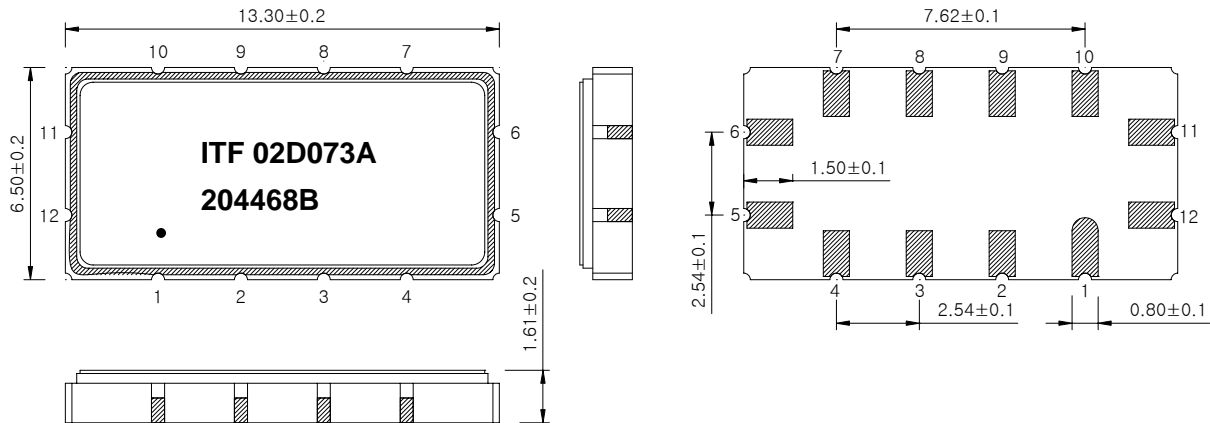
SAW Bandpass Filter 204468B



Features

- IF bandpass filter
- High attenuation
- 50 ohms single-ended operation
- SMD Package 13.3mm × 6.5mm × 1.6mm

Package Dimension



Package S1365

Dimensions shown are nominal in millimeters

Body : Al₂O₃ Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0 um,

Over a 1.27 ~ 8.89 um Ni Plating

Pin Configuration

11	Input
5	Output
6, 12	Ground
1, 2, 3, 4, 7, 8, 9, 10	Case ground

Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-10	25	60
Storage Temperature Range	°C	-40	-	85

Electrostatics Sensitive Device (ESD)

	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	204468B	
		Rev. Date	2003-09-02	
		Rev.	NR3011-AS03	1/7

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Electrical Specification

Fc = 160.0MHz


Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

		Minimum	Typical	Maximum
Center Frequency at room temp.	MHz	159.920	160.0	160.080
Insertion Loss	dB	-	4.0	5.5
3dB Bandwidth	MHz	0.085	0.095	-
40dB Bandwidth	MHz	-	0.350	0.400
Absolute Group Delay at Fc	usec	-	10.5	-
Group Delay Variation at 3dB	usec	-	5.0	-
Relative Attenuation ~ Fo - 0.5 MHz ... Fo + 0.5 MHz ~	dB	50	55	-
Temperature Coefficient of Frequency	ppm/°C ²	-	-0.03	-

Notes :

- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) All attenuation measurements are measured relative to insertion loss

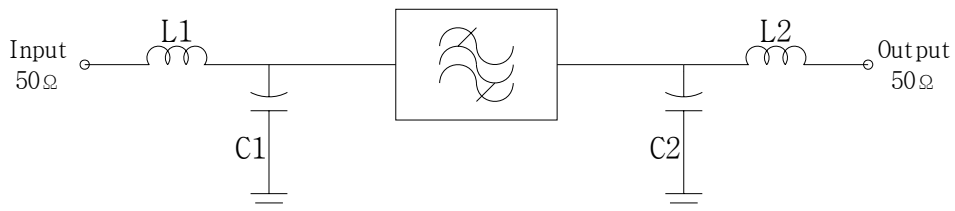
 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	204468B	
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Matching Schematic

(Actual matching values may vary due to PCB layout and parasitics)




L1, L2 = 220 nH

C1, C2 = 1.0 pF

Marking Configuration

ITF¹⁾ 02D073²⁾ A³⁾
204468B⁴⁾

- 1) Manufacturer name
- 2) Lot Number
- 3) Group Name (**refer to the next page)
- 4) Part Number


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Marking Example

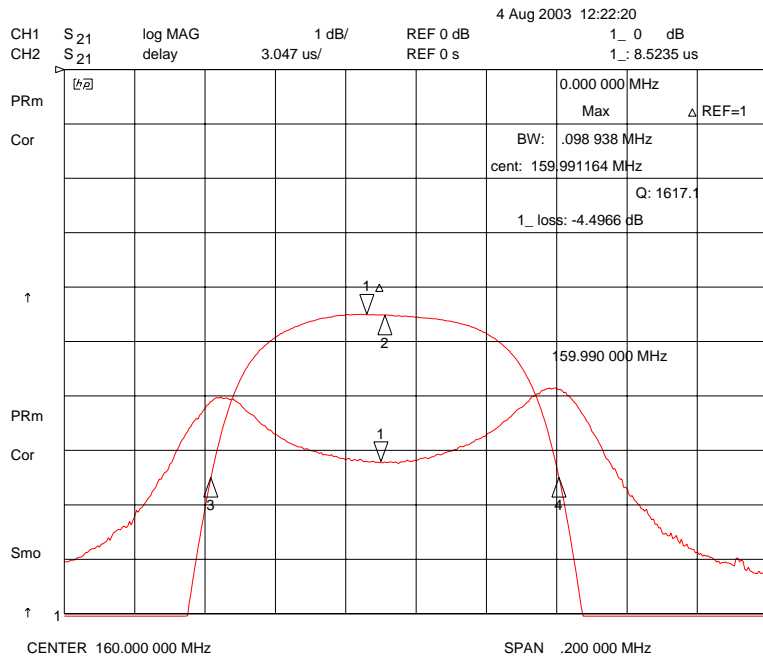
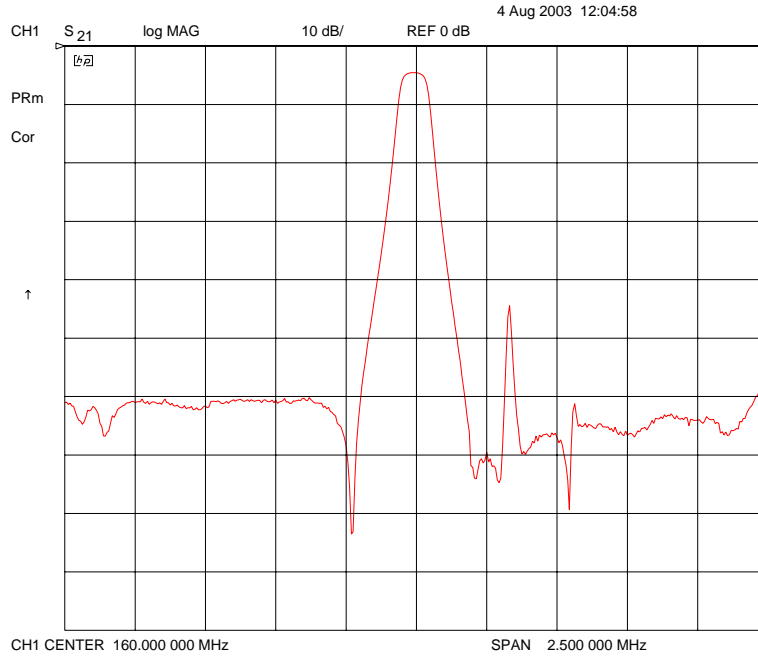
Center Frequency Range (MHz) at room temp.	Marking
159.920 ~ 159.929	ITF 02D073 F 204468B
159.930 ~ 159.939	ITF 02D073 G 204468B
159.940 ~ 159.949	ITF 02D073 H 204468B
159.950 ~ 159.959	ITF 02D073 I 204468B
159.960 ~ 159.969	ITF 02D073 J 204468B
159.970 ~ 159.979	ITF 02D073 K 204468B
159.980 ~ 159.989	ITF 02D073 L 204468B
159.990 ~ 159.999	ITF 02D073 M 204468B
160.000 ~ 160.009	ITF 02D073 N 204468B
160.010 ~ 160.019	ITF 02D073 O 204468B
160.020 ~ 160.029	ITF 02D073 P 204468B
160.030 ~ 160.039	ITF 02D073 Q 204468B
160.040 ~ 160.049	ITF 02D073 R 204468B
160.050 ~ 160.059	ITF 02D073 S 204468B
160.060 ~ 160.069	ITF 02D073 T 204468B
160.070 ~ 160.079	ITF 02D073 U 204468B

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Typical Performance (at +25°C)



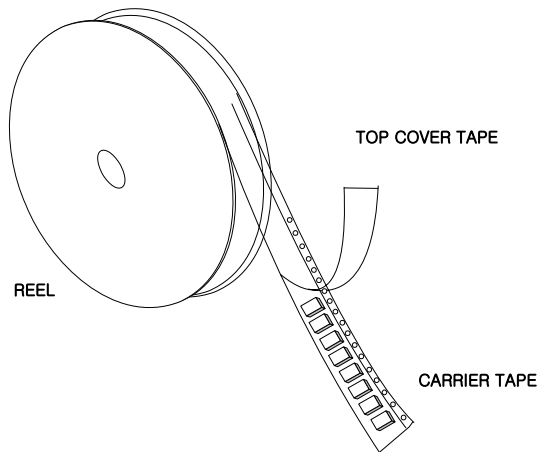
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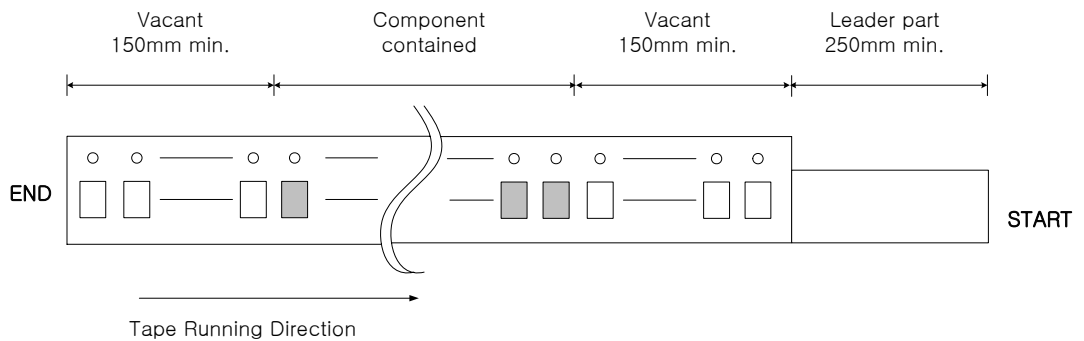
Packing Specification

1. Reeling Quantity : 2000 pcs / reel
2. Taping Structure : The tape shall be wound around the reel in the direction shown below.



Tape Specification

1. Leader part and vacant position specification

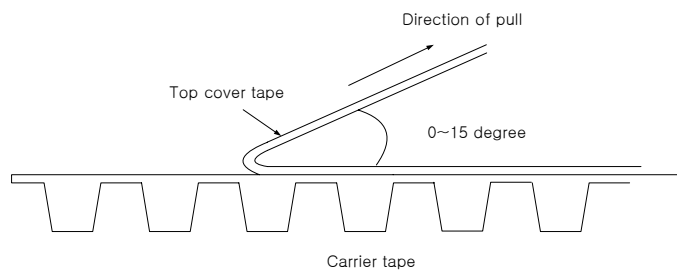



2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

- 1) pull off angle : 0~15°
- 2) speed : 300mm/min
- 3) force : 20~70g

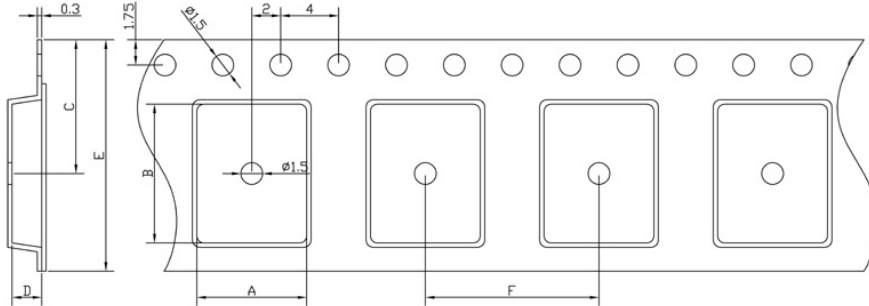


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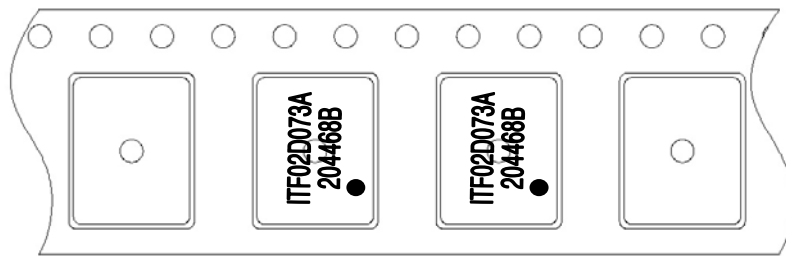


Carrier Tape Dimensions [unit : mm]



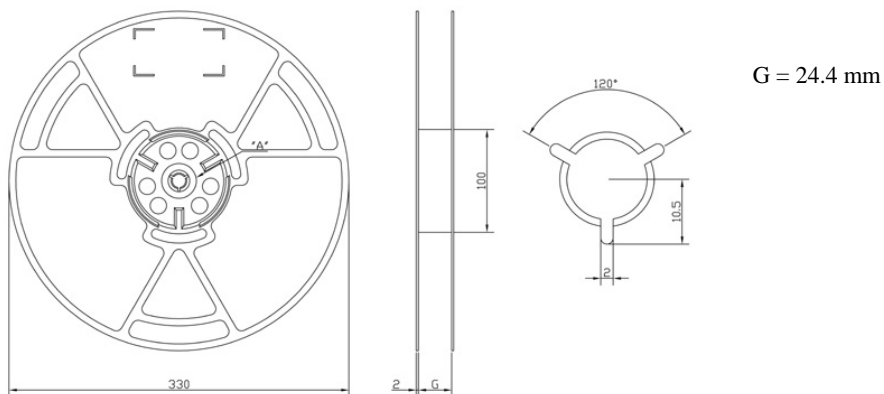
A	7.00 ± 0.1
B	13.80 ± 0.1
C	13.25 ± 0.1
D	1.95 ± 0.1
E	24.00 ± 0.1
F	12.00 ± 0.1

Part Direction



→
Tape Running Direction

Reel Dimensions [unit : mm]



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