

UWB: 6.24 – 8.24 GHz SMD LTCC Filter



ABSGS4C6-CDGM3B8M

Request Samples



Check Inventory



1.60 x 0.80 x 0.60mm
RoHS Compliant
MSL Level = 1

Features

- Wide Band BPF
- Low loss of 2.35 dB
- Compact package size
- Max Input power of 1W
- Group delay < 2 ns

Applications

- UWB (Ultra-Wide Band)
- IoT
- M2M
- Secure car access
- Item Tracking
- Indoor Navigation
- Hands-Free Payment
- Smart Access
- Object Detection

Product Image



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Electrical Specifications

Item	Minimum	Typical	Maximum	Unit	Notes
Frequency Range	6240	-----	8240	MHz	-----
Insertion Loss	-----	-----	-2.35	dB	-----
V.S.W.R (in BW)	-----	-----	2.0	-	-----
Attenuation	-----	-----	-38 -17 -4 -2 -2 -30 -30	dB	2300 ~ 3800 MHz 5150 ~ 5470 MHz 5470 ~ 5725 MHz 5725 ~ 5850 MHz 5850 ~ 5925 MHz 12500 ~ 16500 MHz 18700 ~ 20000 MHz
Permissible Input Power	-----	-----	1	W	-----
In/Output Impedance	-----	-----	50	Ω	-----

Mechanical Specifications

Parameters	Specifications
Filter Dimension	1.6 x 0.8 x 0.6 mm
Mounting Type	SMD Mount
Material Type	Dielectric Filter
Technology	LTCC
In/Output Terminals	Ag + Ni + Sn
Ground Base	Ag+ Ni + Sn

Environmental Specifications

Parameters	Specifications
Operating Temperature Range	-40°C ~ +90°C
Storage Temperature Range	-40°C ~ +90°C
MSL level	1
ESD	N/A
Vibration	10 to 55Hz of 1.5mm for 2 hrs
Relative Humidity range	90~95%RH & <85%RH



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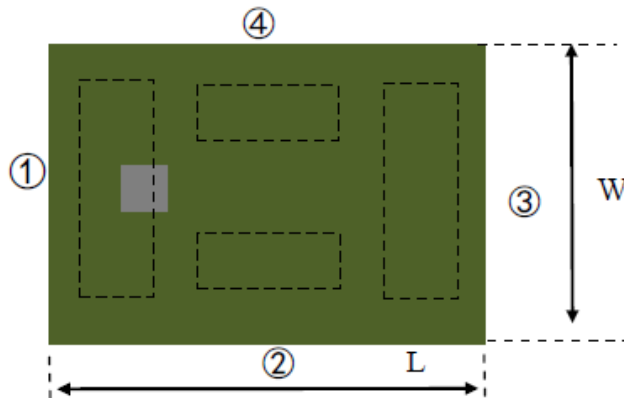


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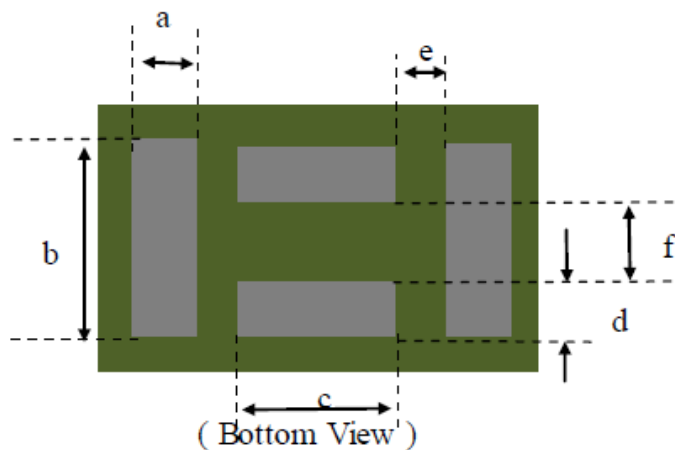


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Package Dimensions



Number	Terminal Name
①	INPUT
②	GND
③	OUTPUT
④	GND



Symbol	L	W	T	a	b	c	d	e	f
Dimension (mm)	1.6±0.1	0.8±0.1	0.6±0.1	0.225±0.1	0.65±0.1	0.40±0.1	0.22±0.1	0.30±0.1	0.21±0.1

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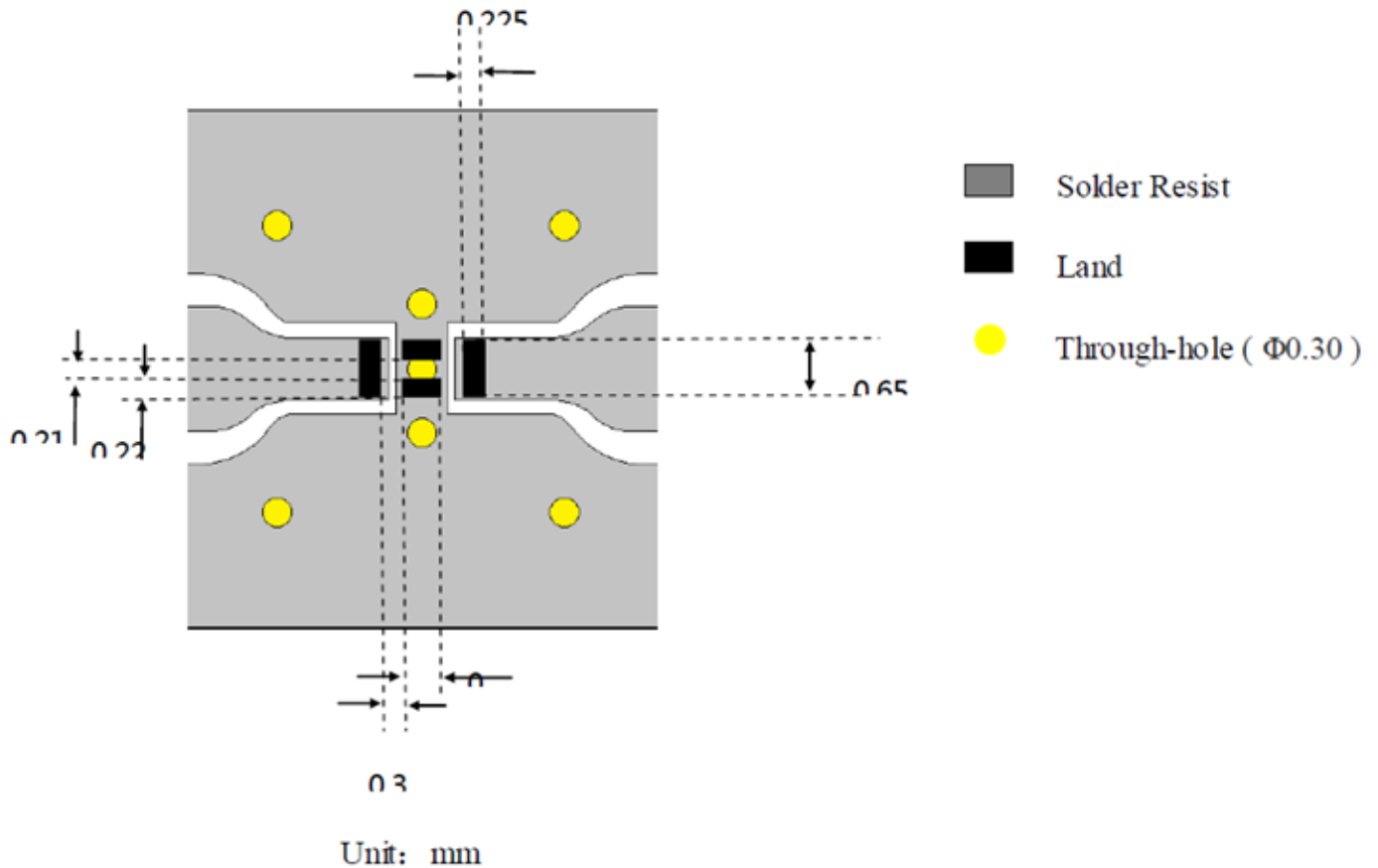


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Footprint



*Note: Line Width Should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness

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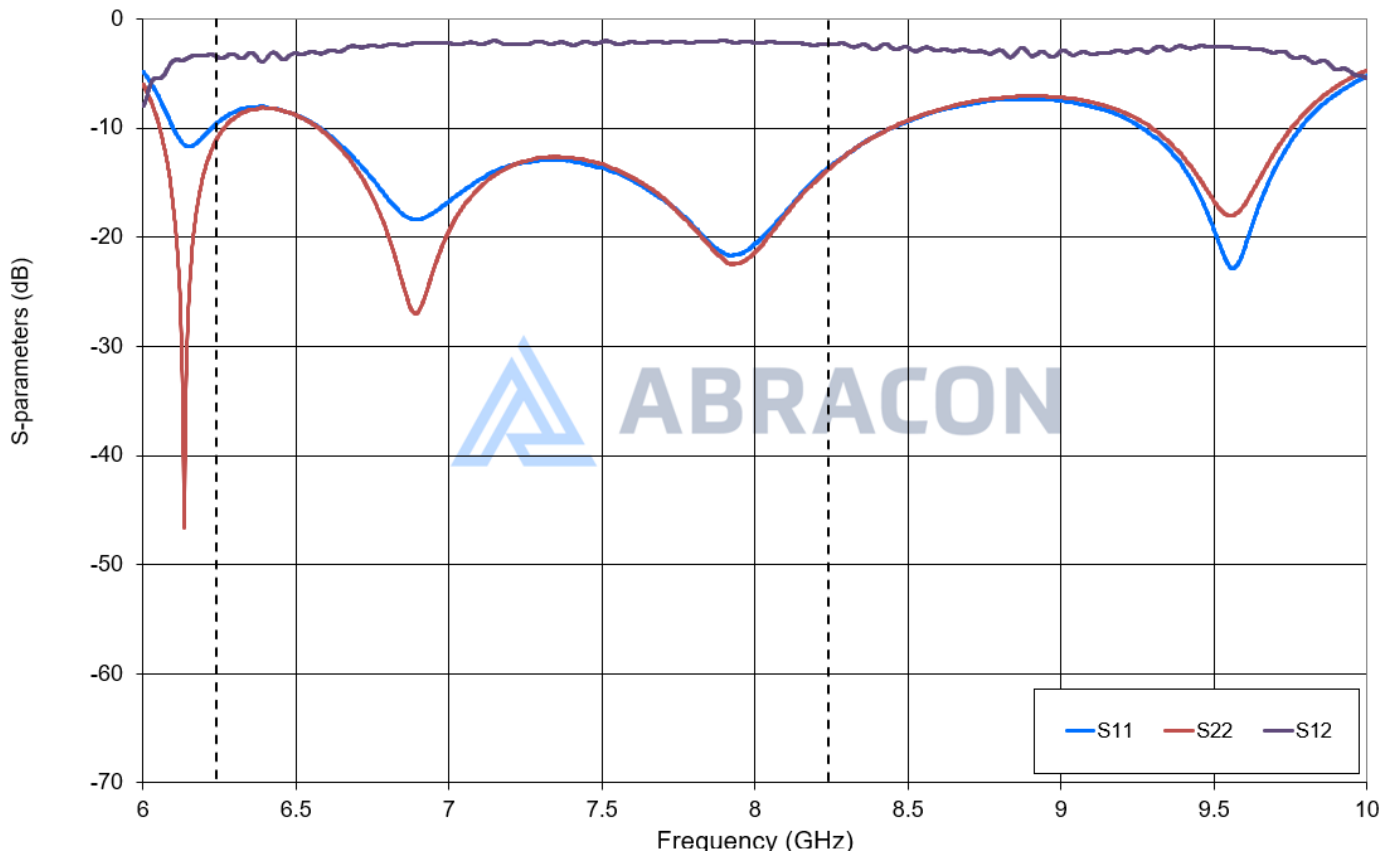
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Impedance Characteristics [Narrowband]

S-parameters



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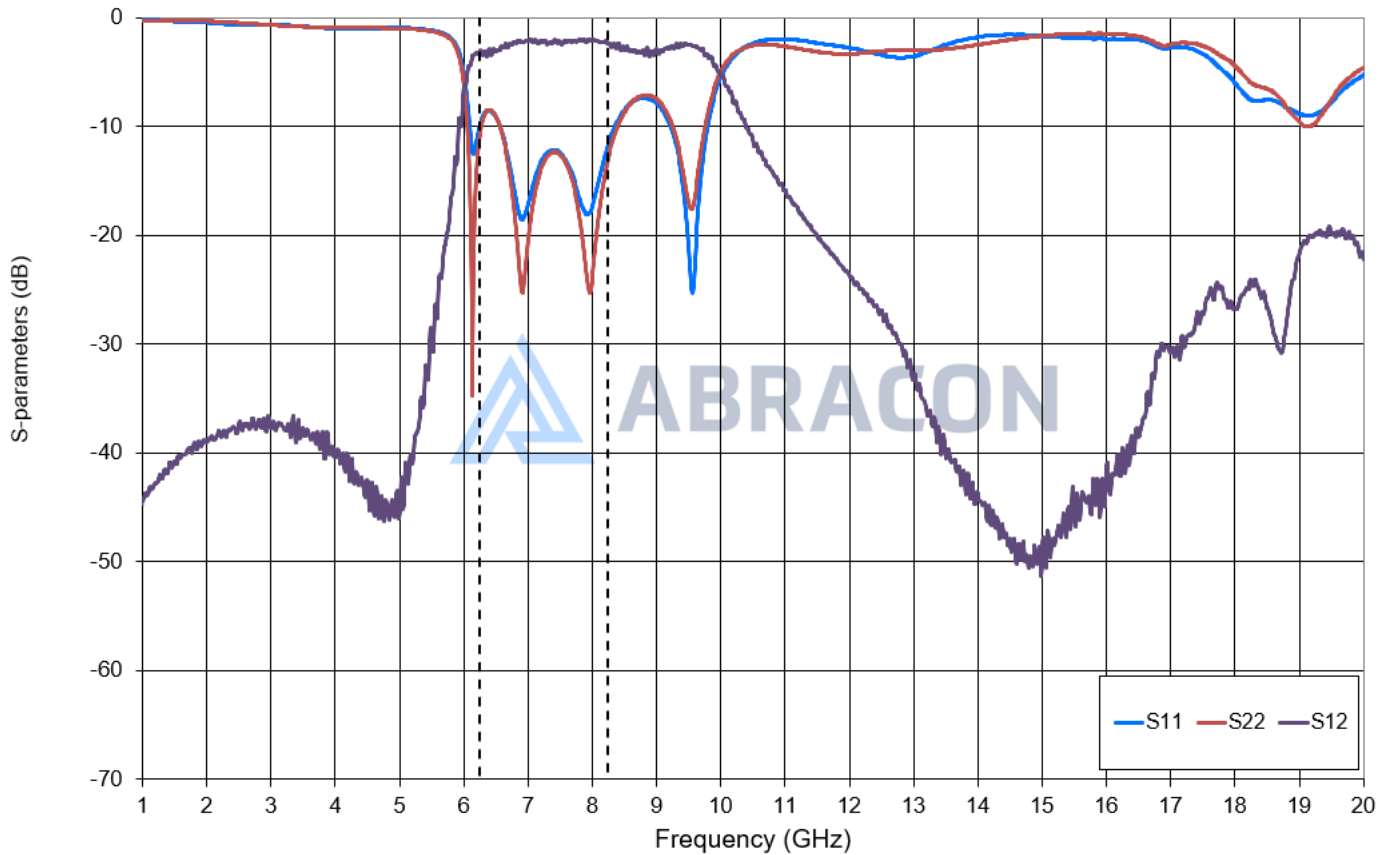
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Impedance Characteristics [Wideband]

S-parameters



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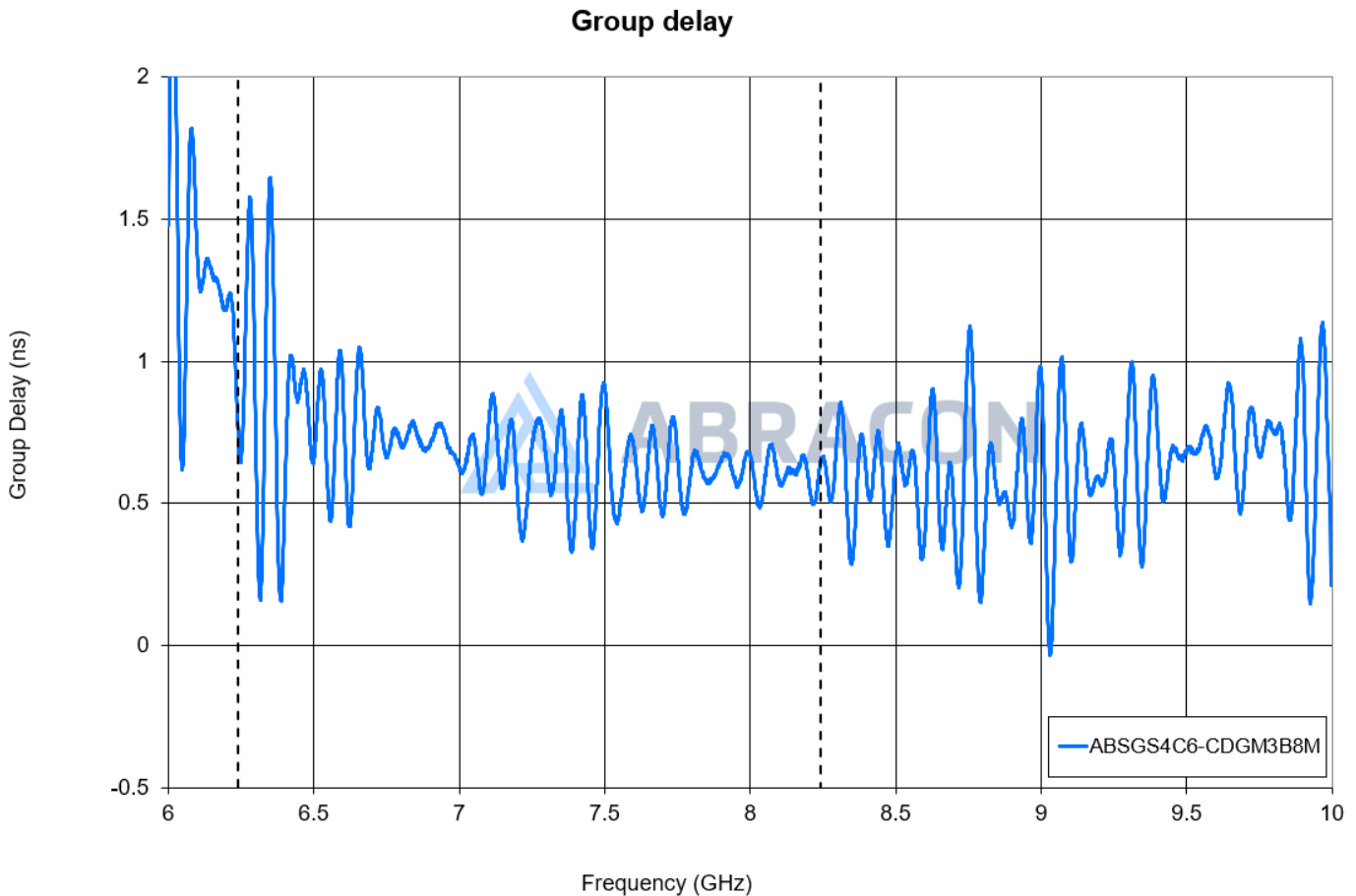


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Group Delay Characteristics [Narrowband]



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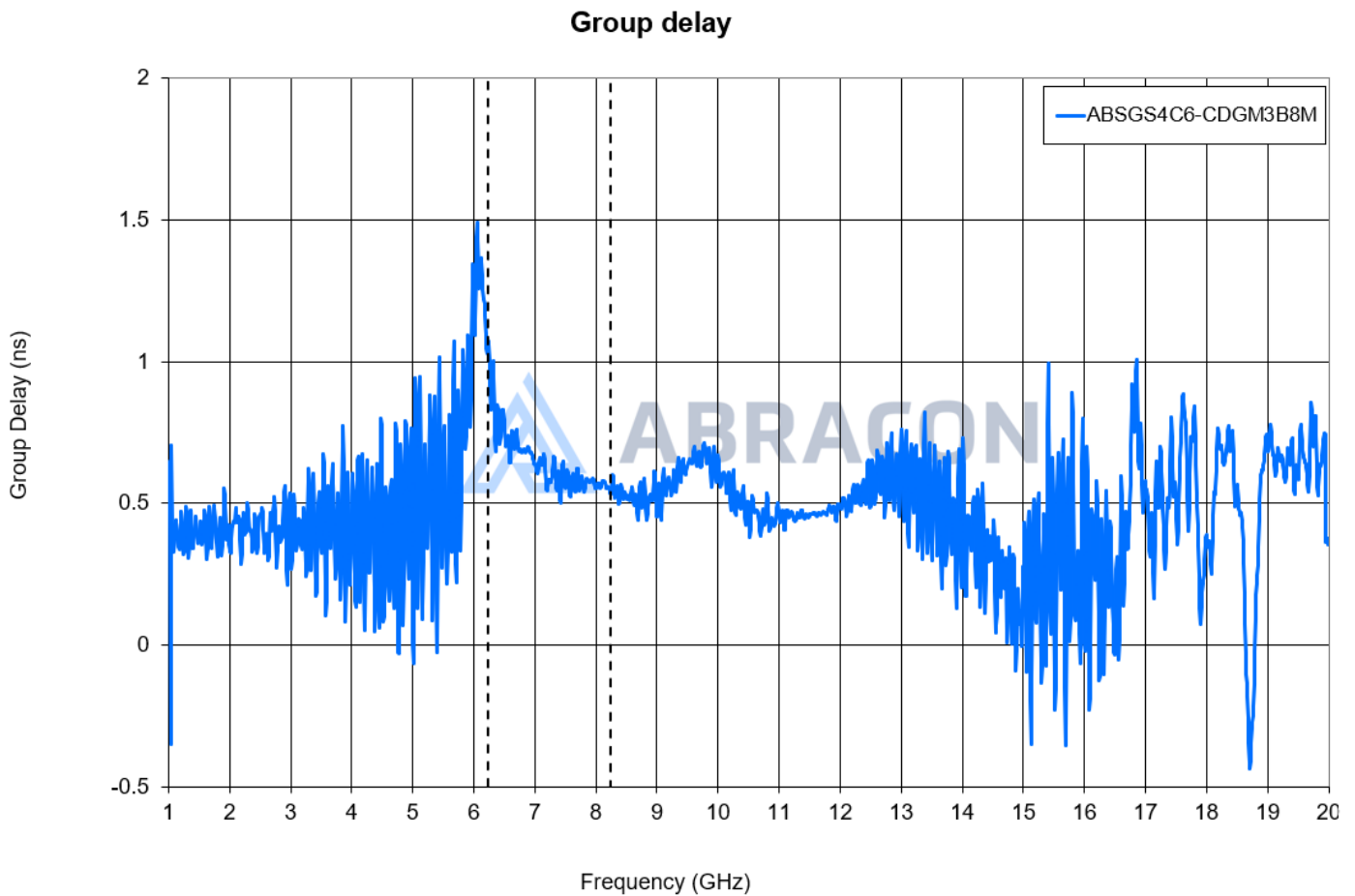


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Group Delay Characteristics [Wideband]



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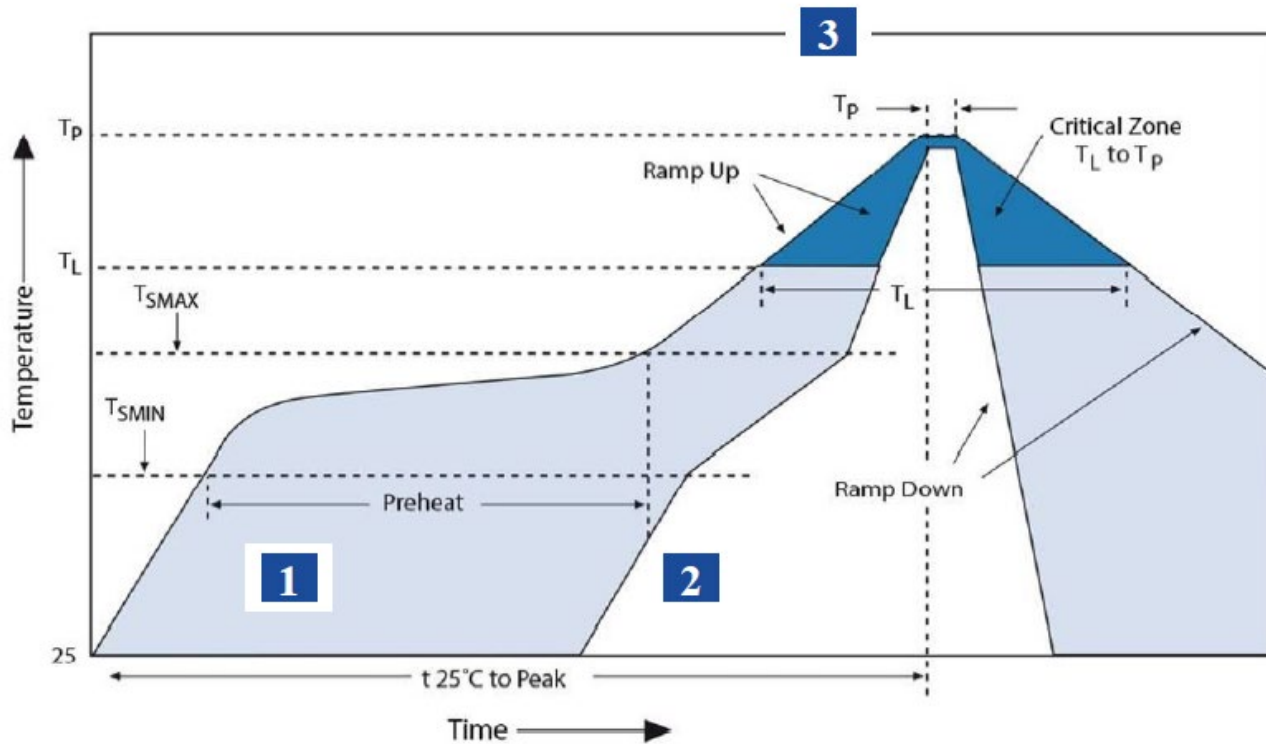


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Soldering Profile: Reflow



Zone	Description	Temperature	Time
1	Preheat / Soak	$T_{SMIN} \sim T_{SMAX}$ 160 – 180 °C	60 ~ 120 sec
2	Reflow	T_L 220 °C	30~40 sec
3	Peak heat	T_P 265 °C	5 sec (Max)

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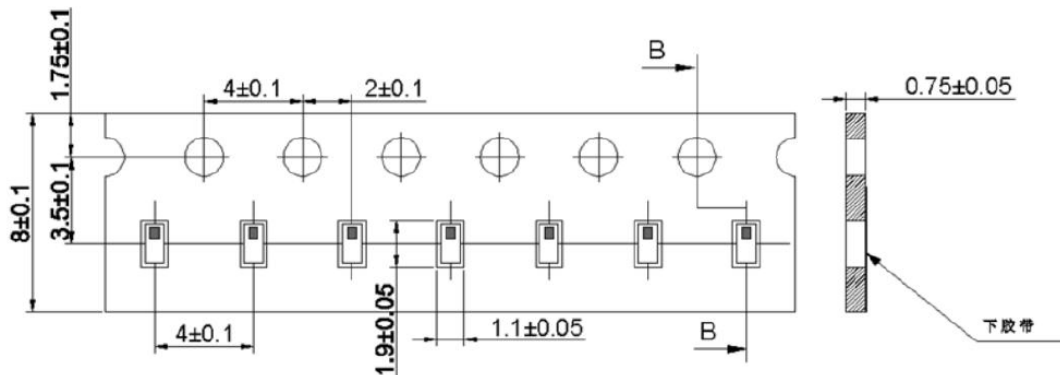
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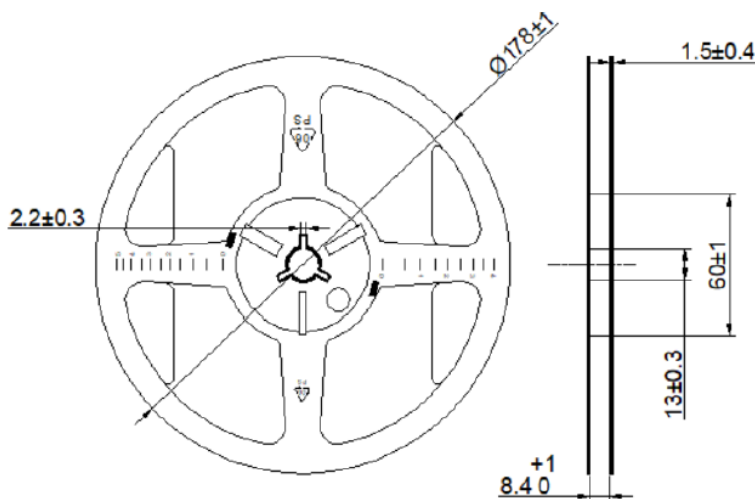
Packaging and Dimensions

1. Paper Tape (Unit: mm)



Reserve a length of 200mm at least for the trailer of the carrier and 200mm at least for the leader of the carrier and further 200mm at least of cover tape at the leading part of the carrier.

2. Reel (6000 pcs/Reel)



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