

Description

SAW3244S is a high-performance Surface Acoustic Wave (SAW) Bandpass filter designed for small cells applications in Band 3 (1805 ~1880 MHz DL).

SAW3244S uses advanced Chip Scale Package (CSP) technology and is housed in an industry- standard, 5-pin 1.1mm x 0.9mm package with a low profile of 0.6 mm max.

Features

- High Rejection in 1795 MHz (Typ. 20dB)
- Small Footprint: 0.25±0.03 mm x 0.20±0.03 mm.
- Package size 1.1±0.05 mm x 0.9±0.05 mm
- Approximate weight: 2mg
- Moisture Sensitivity Level 3 (MSL3)
- Electrostatic Sensitive Device (ESD)
- Package height 0.6 mm max.
- Single-Ended Operation
- RoHS Compliant

Electrical Specifications

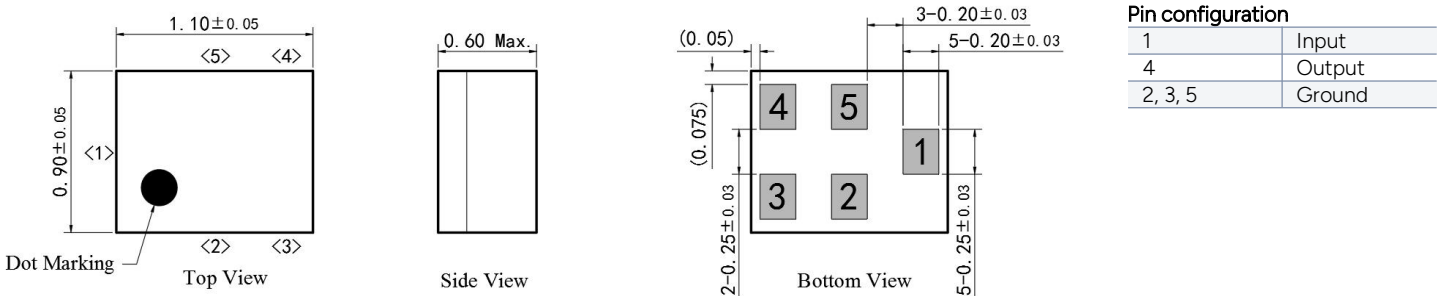
At Ta=25°C, unless otherwise specified, as measured on the evaluation board of SAW3244S with feed line loss de-embedded.

Parameter	Conditions	Min	Typ.	Max	Unit
Insertion Loss	1805 - 1880 MHz	-	2.2	3.0	dB
Passband Ripple	1805 - 1880 MHz	-	0.7	1.5	dB
Attenuation	100 - 1720 MHz	25	30	-	dB
	1720 - 1765 MHz	30	35	-	dB
	1765 - 1785 MHz	35	40	-	dB
	1795 MHz	18	20	-	dB
	1900 - 1920 MHz	22	25	-	dB
	1930 - 4000 MHz	23	30	-	dB
VSWR (input)	1805 - 1880 MHz	-	1.7	2.0	-
VSWR (output)	1805 - 1880 MHz	-	1.7	2.0	-

Absolute Maximum Ratings

Parameter	Rating	Unit
Operating Temperature	-40 to +85	°C
Storage Temperature	-40 to +85	°C
Maximum Input Power	+15	dBm
Maximum DC Voltage	5	V

Package & Dimensions



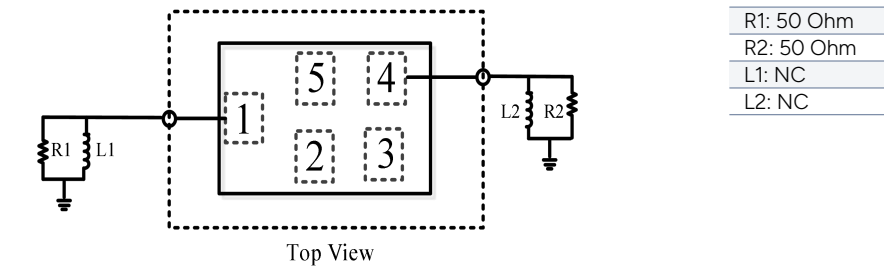
Product Marking:

Part Number	3244
Batch Number	MMYDD

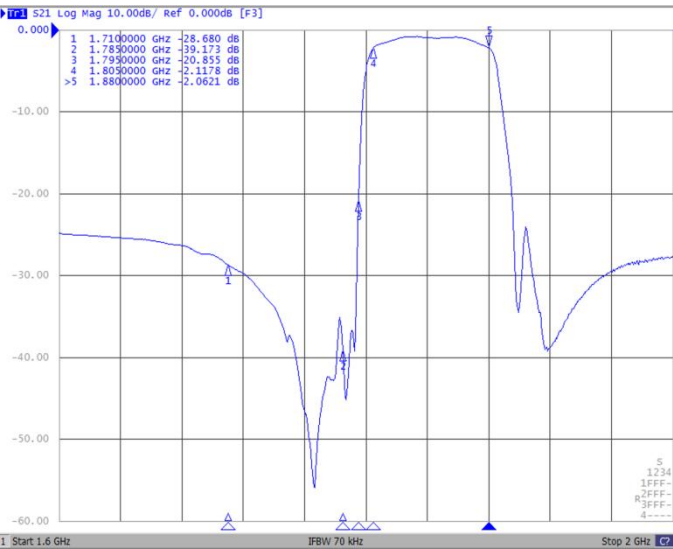
Batch Numbering Logic

Month	Year	Day
MM	Y	DD
01	A: 2023	01
02	B: 2024	02
03	C: 2025	03
...	...	...
12	Z: 2049	31

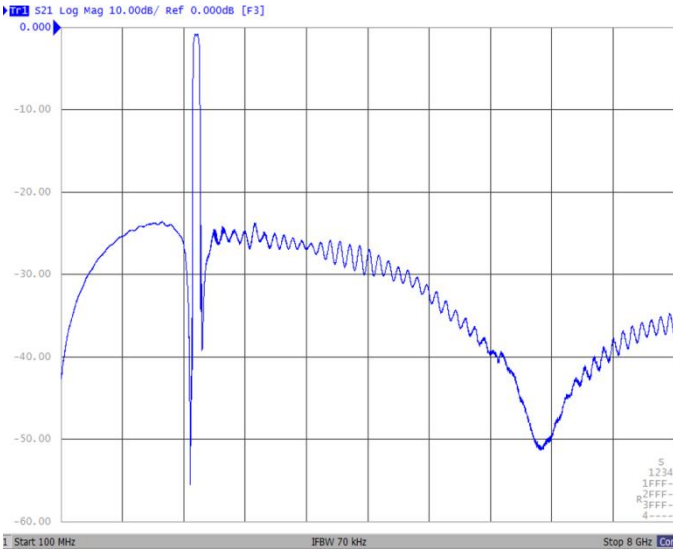
Matching Circuit



Frequency Characteristics



S21

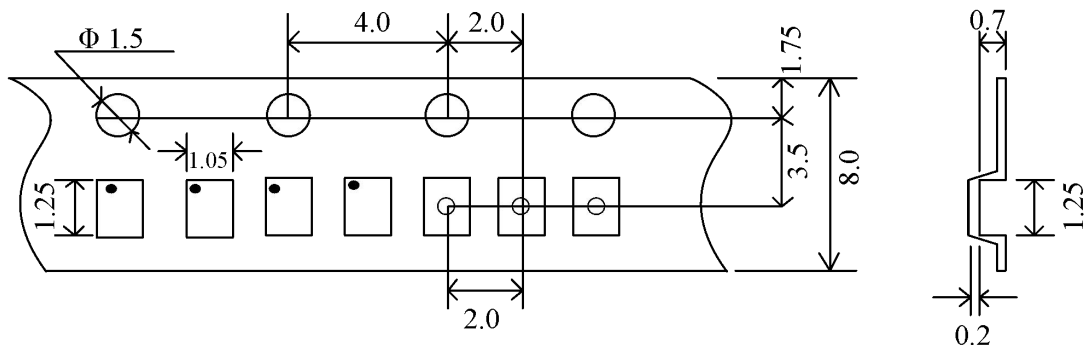


Wide Band S21

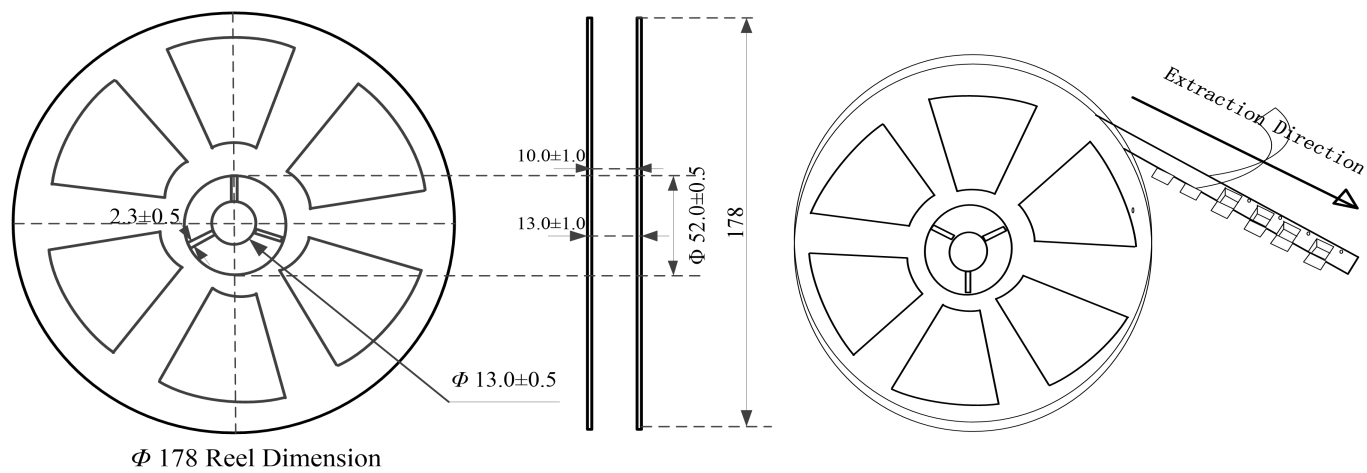
Packing material

Tape

Tensile Strength of Carrier Tape: Carrier tape 10N or more; Cover tape 5N or more. Packaging quantities: 5000 PCS / Reel.



Reel

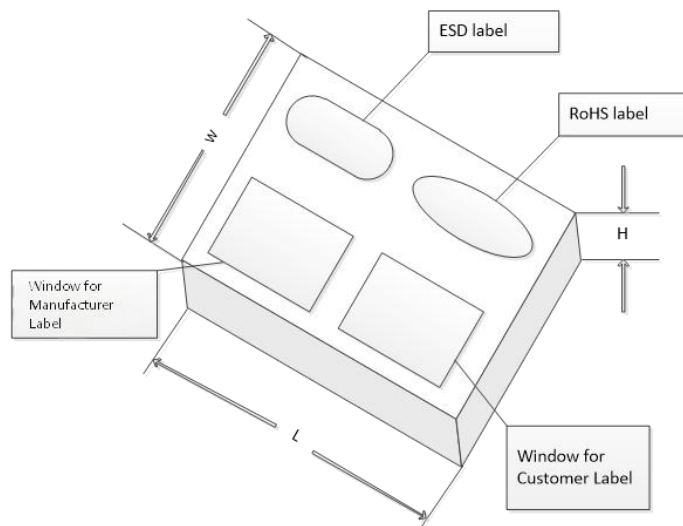


Barrier bag



Dimensions	X	Y	Sealing Area
mm	200+15	235+8	10±3

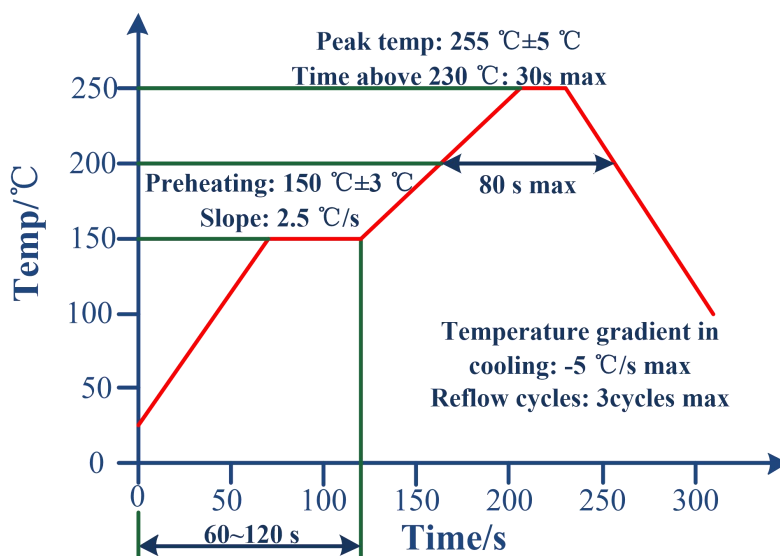
Folding Box



Dimensions	W	L	H	Tolerance
mm	205	255	70	±5

Recommended Soldering Profile

Recommended Reflow profile for convection and infrared soldering-lead-free solder.



Important Notice

- SAW devices should not be used in any type of fluid such as water, oil, organic solvent, etc...
- Do not operate outside the recommended operating temperature range.
- Sudden change of temperature shall be avoided, deterioration of the characteristics may occur.
- Be careful of temperature and duration when soldering.
- Do not place soldering iron on the body.
- Be careful not to subject for excessive force.
- SAW devices are electrostatic sensitive. Please avoid static voltage during operation and storage.
- Ultrasonic cleaning shall be avoided. Ultrasonic vibration may cause destruction.
- RoHS compliance.
- ESD (Electrostatic Discharge) sensitive device.