

For FM Band
Transmitter Module TSM□1-6 Series
Tuner Module TSM□1-0 Series

ALPS®

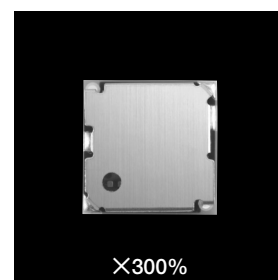
New
2006

A plan to expand FM.

**Compatibility ensured thanks to this compact,
low-profile module measuring 5.9×5.9mm.**



Transmitter



Tuner

Send music via FM

Receive FM

**Compact in size with a capacity of 0.049ml,
these modules enhance the flexibility of set design.**

Transmitter Module

- A compact, low-profile and weight saving for dimensions of 5.9×5.9×1.4 mm.
- Equipped with built-in Radio Data System function.
- Compatible with digital input.
- Ready for low current consumption design: 14mA.
- Four antenna output levels from which to select.
- Worldwide compatibility.

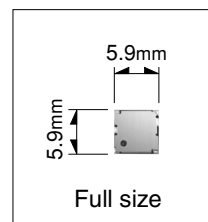
TSM□1-6 Series



Tuner Module

- Our unique RF design and high-density mounting technologies ensure a compact, low-profile and weight saving for dimensions of 5.9×5.9×1.4 mm.
- Ready for low current consumption design: 8mA.
- High-sensitivity and low-distortion characteristics have been realized.
- Worldwide compatibility.

TSM□1-0 Series



We offer a new function application for Personal Digital Assistants.

For FM Band

Transmitter Module TSM□1-6 Series

Tuner Module TSM□1-0 Series



FM Transmitter
Module
TSM□1-6 Series



FM Tuner
Module
TSM□1-0 Series

Flexibility of set design is enhanced thanks to the fact that both products are compact and low profile with a capacity of 0.049ml.

Applications

MP-3 players, mobile phones, Personal Digital Assistants, digital audio players, memory players, PCs, home AV equipments (TV, set-top box, etc.).

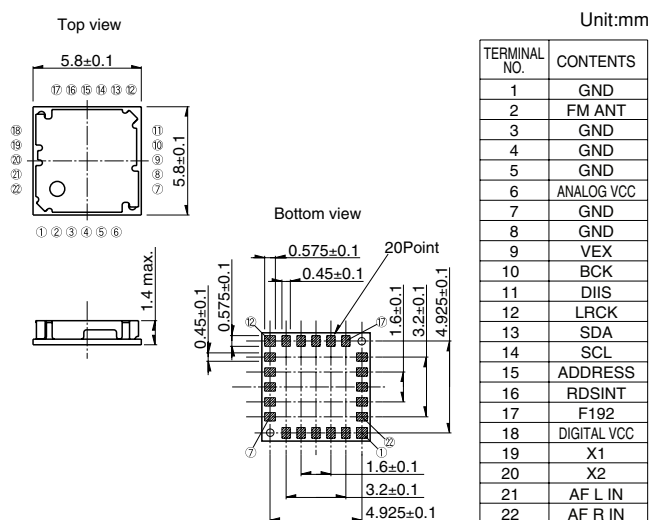
Typical Specifications of TSM□1-6

Items	Specifications
Output frequency range (FM frequency band)	76 to 108MHz
Dimensions	5.9×5.9×1.4mm max.
Vcc	3.0V
Current consumption	14mA
Control signal	I ² C
Ref.Frequency	32.768kHz (X'tal EXT)
Antenna output level	0.25/0.5/1.0/2.0mW

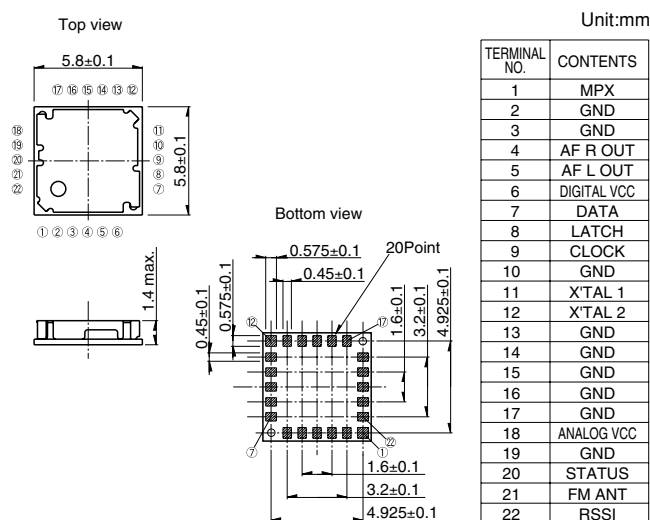
Typical Specifications of TSM□1-0

Items	Specifications
Input frequency range (FM frequency band)	76 to 108MHz
Dimensions	5.9×5.9×1.4mm max. (built in DET/MPX)
Vcc	2.85V
Current consumption	8mA (12mA max.)
Control signal	I ² C
Ref.Frequency	32.768kHz (X'tal EXT)

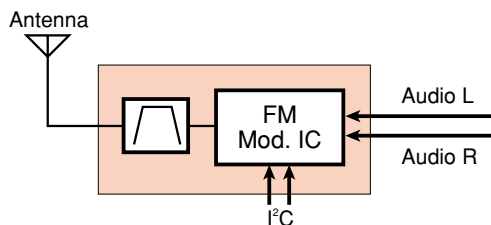
Dimensions of TSM□1-6



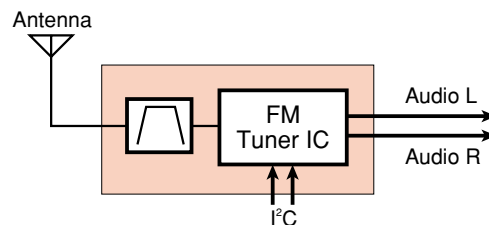
Dimensions of TSM□1-0



Circuit Block Diagram of TSM□1-6



Circuit Block Diagram of TSM□1-0



Cautions for Use

1. Specification indicated in this catalog is outline only. When employing the product, use of an officially authorized specification for supply contract is recommended.
2. Unless specifically indicated otherwise, products in this catalog have been designed and manufactured for use in ordinary electronic equipment and devices, such as AV equipment, electric home appliances, office machines, and communications equipment. Equipment manufacturers are consequently advised that when these products are planned for equipment that requires a high degree of safety and reliability, especially those apparatuses like medical equipment, aviation and aircraft equipment, space equipment, and burglar alarm equipment, the manufacturers should assure equipment safety by providing protection circuits and redundant circuitry and should fully study the suitability of such products for the intended equipment.
3. The external appearance, performances, and other properties of the product may be changed for improvement without prior notice. The product introduced in this catalog may discontinue being produced without prior notice.
4. All product names, company names and names of standards described in this catalog are trademarks or registered trademarks of their respective owners.
5. Please contact us for any enquiries and queries on our products and their uses.
6. This catalog is valid till the end of December 2006.

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