

ECN/PCN No.: R0043

For Manufacturer			
Product Description: Bluetooth modules	Abracon Part Number / Part Series: ABBTM Bluetooth module series	<input type="checkbox"/> Documentation only <input type="checkbox"/> ECN <input checked="" type="checkbox"/> EOL	<input checked="" type="checkbox"/> Series <input type="checkbox"/> Part Number
Affected Revision: N/A	New Revision: EOL	Application: <input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety	
Prior to Change: ABBTM-2.4GHZ, ABBTM-2.4GHZ-31, ABBTM-2.4GHZ-31-T, ABBTM-2.4GHZ-33, ABBTM-2.4GHZ-33-T, ABBTM-2.4GHZ-51, ABBTM-2.4GHZ-51-T, ABBTM-2.4GHZ-52, ABBTM-2.4GHZ-52-T, ABBTM-2.4GHZ-EVAL, ABBTM-2.4GHZ-T, ABBTM-2.4GHZ-T2, ABBTM-NVC-EVK-56, ABBTM-NVC-EVK-71, ABBTM-NVC-EVK-71-MESH, ABBTM-NVC-MB-EVK, ABBTM-NVC-MDCS42A-CON, ABBTM-NVC-MDCS71, ABBTM-NVC-MDCS71-CON, ABBTM-NVC-MDCS71-MESH, ABBTM-NVC-MDCS71-MESH-CON, ABBTM-NVC-MDCS71-101, ABBTM-NVC-MDCS86-101, ABBTM-101-2.4GHZ-T, ABBTM-2.4GHZ-51-101-, ABBTM-2.4GHZ-52-101, ABBTM-53-2.4GHZ-T, ABBTM-103-2.4GHZ-T, ABBTM-2.4GHZ-T; VER.10, ABBTM-NVC-MDCS42A-101, ABBTM-NVC-MDCS42A-F07, and ABBTM-NVC-MDCS56-102.			
After Change: All 32 EOL			
Cause/Reason for Change: Due to low demand, the Bluetooth Module ABBTM series is discontinued.			
Change Plan			
Effective Date: 06/08/2021	Additional Remarks: N/A		
Change Declaration: EOL			
Issued Date: 06/08/2021	Issued By: <i>Nicholas El-Takach</i>	Issued Department: Engineering	
Approval: <i>Syed Raza</i> Engineering VP	Approval: <i>Reuben Quintanilla</i> Quality Director	Approval: <i>Ying Huang</i> Purchasing Director	
For Abracon EOL only			
Last Time Buy (if applicable): No last time buy.	Alternate Part Number / Part Series: N/A		
Additional Approval:	Additional Approval:	Additional Approval:	
Customer Approval (If Applicable)			
Qualification Status: <input type="checkbox"/> Approved <input type="checkbox"/> Not accepted <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>			
Customer Part Number:		Customer Project:	
Company Name:	Company Representative:	Representative Signature:	
Customer Remarks:			

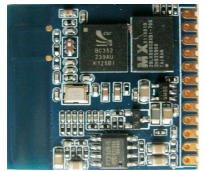
29.0 x 25.5 x 2.8 mm SMT Bluetooth Module

ABBTM-2.4GHz-33-T

Compliant to MSL level 3



RoHS
Compliant



29.0 x 25.5 x 2.8 mm SMT

FEATURES:

- Bluetooth Spec v1.2 Compliant
- Class 2, up to 10-meter range
- Complete 2.4GHz Bluetooth® System
- Power management: low power 1.8V operation for Bluetooth® core
- Compact size: 29.0mm (L) x 25.5 (W) mm x 2.8 (H) mm
- Bluetooth® Profile Supported: HSP, HFP, A2DP, AVRCP
- Built-in stereo codec
- Internal antenna
- Built-in audio amplifier
- Built-in power manager
- On-board flash memory (8Mbits)
- Echo cancellation software library
- Several firmware options
- Rewritable flash memory for easy upgrade route

APPLICATIONS:

- Automotive car kit applications
- PDAs and other portable terminals
- Car radio/Car DVD

GENERAL DESCRIPTION

Abrakon's ABBTM-2.4GHz-33-T module is a complete Bluetooth® solution built on CSR BC03 MultiMedia External Core, supported by 8Mbit on-board Flash Memory. ABBTM-2.4GHz-33-T is a short range, compact, cost effective solution designed to facilitate Bluetooth® connectivity for applications including Car & Home Audio and other Handsfree solutions.

ABBTM-2.4GHz-33-T module is a Power Class-2 Bluetooth® device, compliant with version 1.2 specification. The overall architecture comprises of built-in antenna and supporting circuitry for software protocols including L2CAP, SDP, GAP, HSP, HFP, A2DP and AVRCP, resident in the on-board Flash Memory.

ELECTRICAL SPECIFICATIONS:

Operating Frequency Band	2.4GHz ~ 2.48GHz Unlicensed ISM Band
Bluetooth Specification	V1.2
Output Power Class	Class 2
Operating Voltage	+3.3V and +5.0V
Host Interface	UART
Flash Memory Size	8 Mb

Absolute Maximum Ratings

	Minimum	Maximum
Storage temperature	-40°C	+150°C
Supply voltage: VBAT	-0.30V	3.6V

Recommended Operating Conditions

	Minimum	Maximum
Operating temperature range	-40°C	+85°C
Supply voltage: Vcc	+3.0V	+3.6V
Supply voltage: Vdd	+1.7V	+1.9V

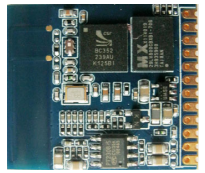


29.0 x 25.5 x 2.8 mm SMT Bluetooth Module

ABBTM-2.4GHz-33-T

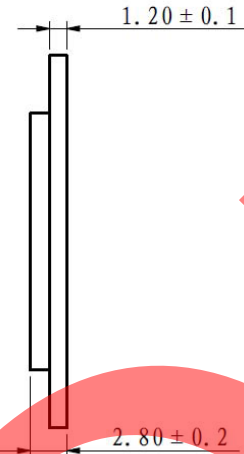
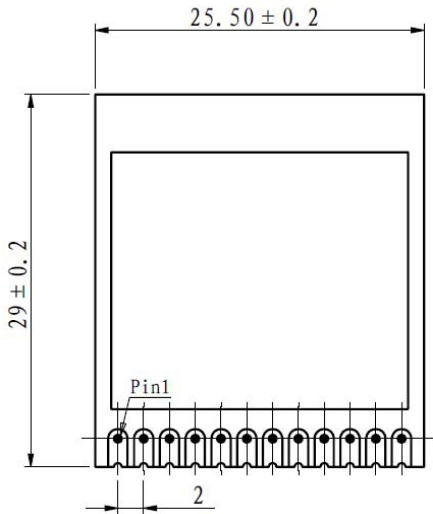


RoHS
Compliant

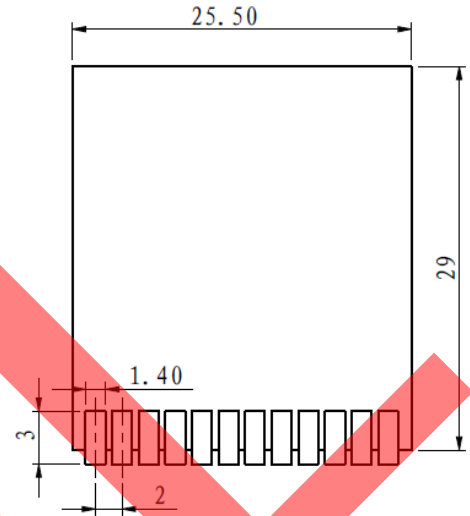


29.0 x 25.5 x 2.8 mm SMT

MECHANICAL DIMENSIONS



Recommended Land Pattern



Note: Specified dimensions without tolerance are listed for reference purposes only.

Dimensions: mm.

PIN DESCRIPTION

Pin No.	Name	Type	Function
1	NC	Input / Output	Not used currently
2	SPK_OUT_L	Output	Left channel audio out
3	SPK_OUT_R	Output	Right channel audio out
4	AGND	Ground	Analog ground
5	MIC_P	Input	Microphone positive pole input, internal power supply
6	MIC_GND	Ground	Microphone ground
7	VDD	Input	Power supply, +3.3V ~ +5V
8	GND	Ground	Power ground
9	UART_TX	Output	UART data output
10	UART_RX	Input	UART data input
11	NC	Input / Output	Not used currently
12	NC	Input / Output	Not used currently

