RFID/NFC COIL ANT, SMT, 13.56MHZ

Part Number: L000641-01

L000641-01 is an SMT mount NFC (Near Field Communications) antenna designed for high-performance two-way read/write operations at 13.56MHz.

One of the smallest NFC antennas on the market, that takes only 20% of the PCB size compared with antennas routed on the PCB, but still performing about 35mm as reading distance. The unique size and SMT mounting makes this antenna the perfect choice for space-constrained applications.

FEATURES & BENEFITS

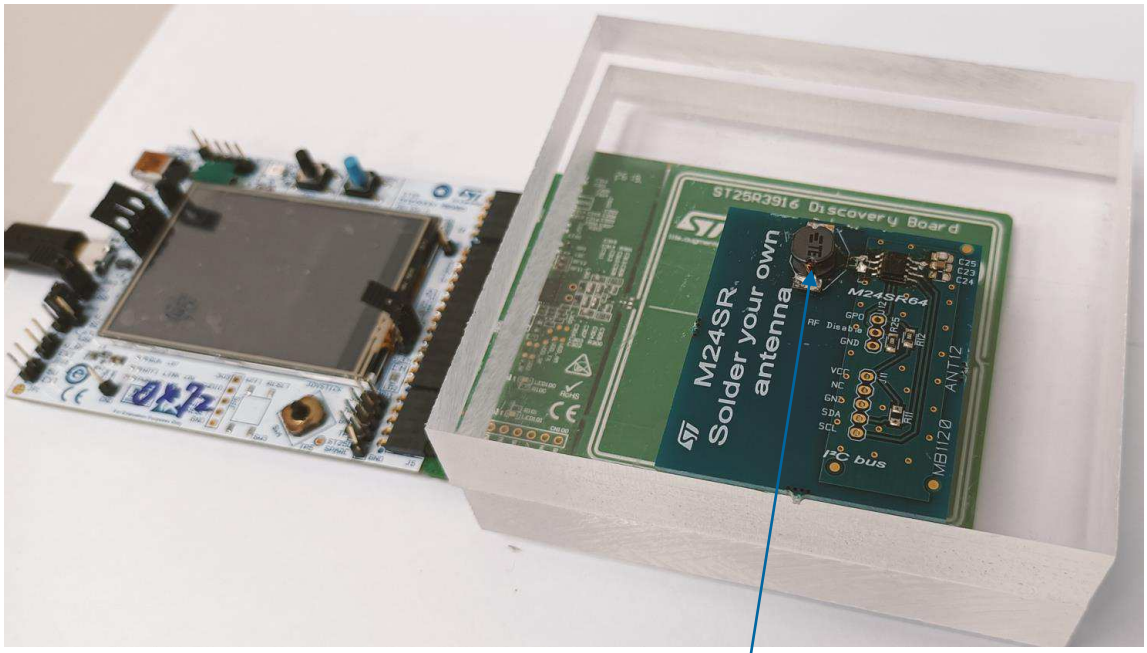
- Frequency **13.56MHz**
- Universal antenna module assembly
- Antenna type - Coil on ferrite core for increased performance
- Higher reading distance than competition
- Fully Pick & Place and SMT capable

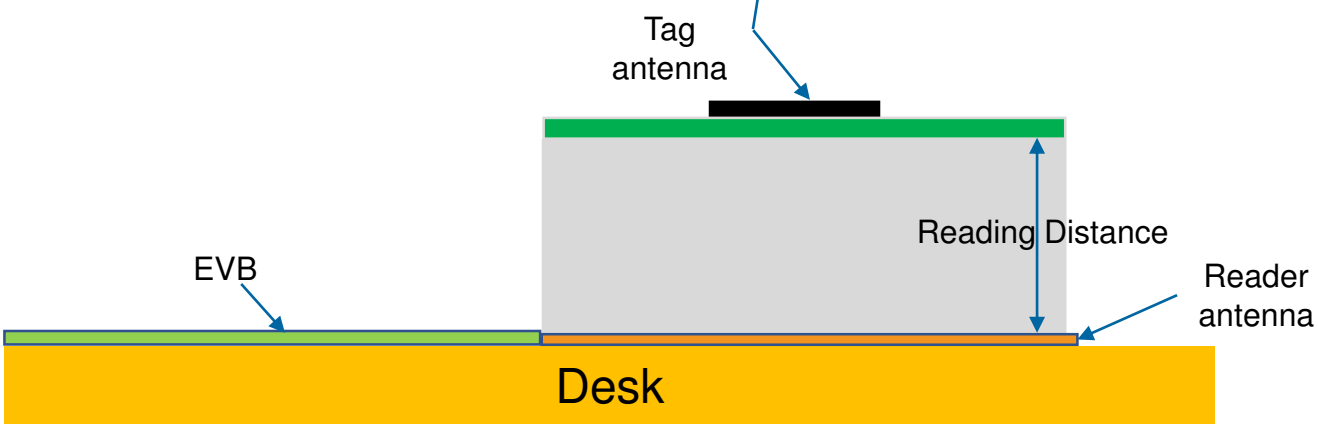
SPECIFICATIONS

Frequency Range	13.56 MHz
Self inductance (La)	4.7 uH
DCR	0.25 Ohm
Read Distance	35 mm
Size	7.8 mm x 7 mm x 5 mm
Weight	0.85g
Mounting	Surface mount
Operating Temperature	-40 to +85°C
Storage Temperature	-40 to +85°C
Hazardous Materials	A certificate of conformance is available from the product page on TE website.

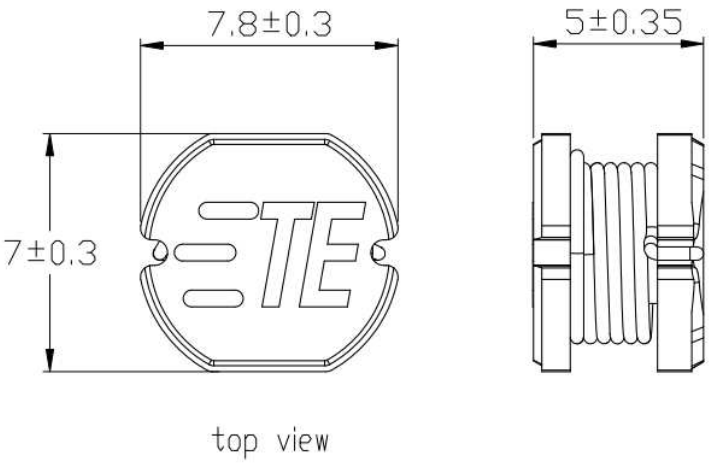
TEST SETUP

EVB MB1414 board

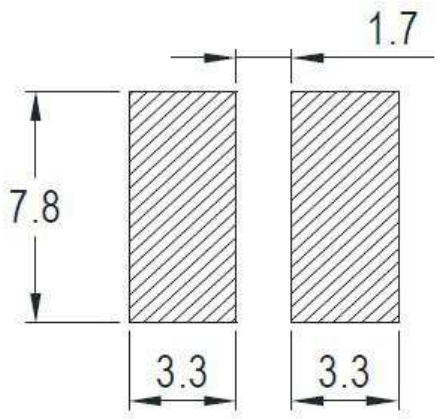




DIMENSIONS



FOOTPRINT



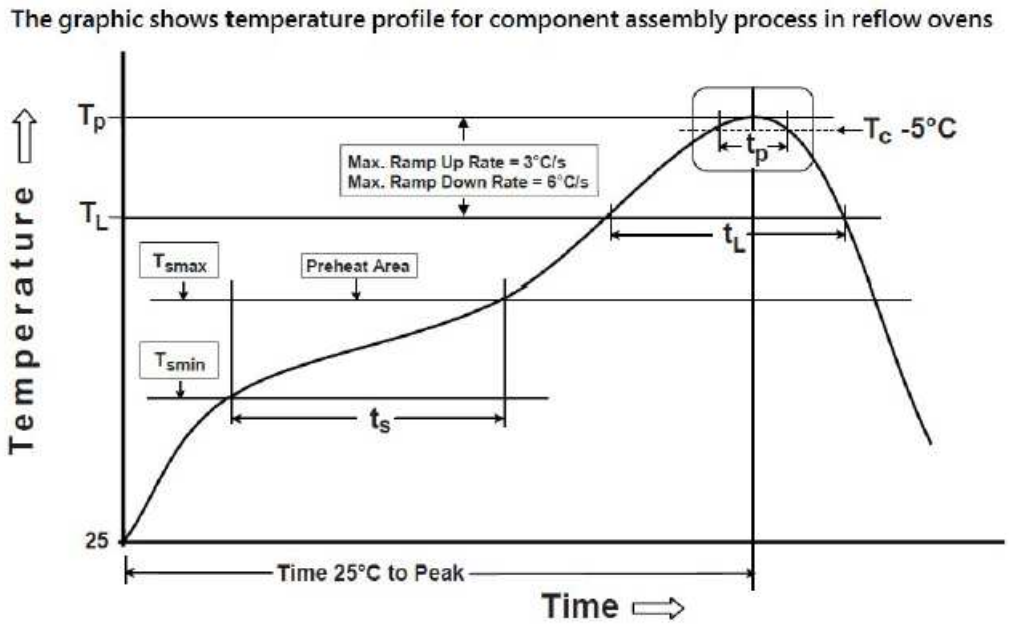
※Marking shall be start from electrode side.
Marking color : Black

Dimensions: mm
Diagram is not to scale

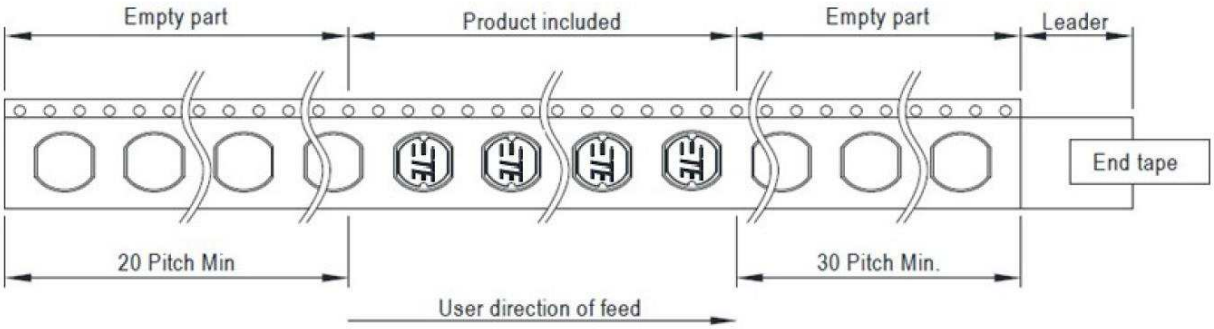
REFLOW SOLDERING TEMPERATURE

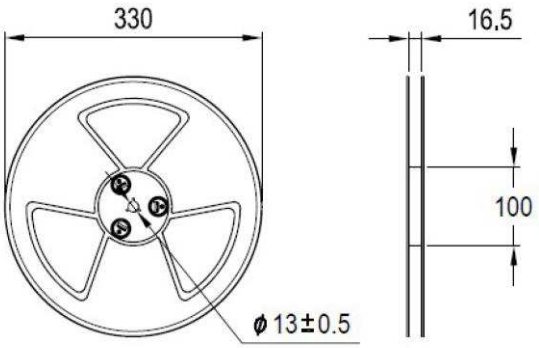
Phase	Profile Features	Pb-Free Assembly (SnAgCu)
PREHEAT	- Temperature Min (Tsmin) - Temperature Max (Tsmax) - Time (Ts) from (Tsmin to Tsmax)	150°C 200°C 60-120 seconds
RAMP-UP	Avg. Ramp-Up Rate (Tsmax to TP)	3°C / second (max)
REFLOW	- Temperature (TL) - Total Time above TL (t L)	217°C 60-150 seconds
PEAK	- Temperature (TP) - Time (tp)	260°C 20-30 seconds
RAMP-DOWN	Rate	6°C / second max
Time from 25°C to Peak Temperature		8 minutes max
Composition of solder paste		96.5Sn/3Ag/0.5Cu
Solder paste model		SHENMAO PF606-P26

Note: All temperature measure points are on the top surface of the component, if the temperature exceeds recommended levels, it can cause damage to the component or the surface to peel.

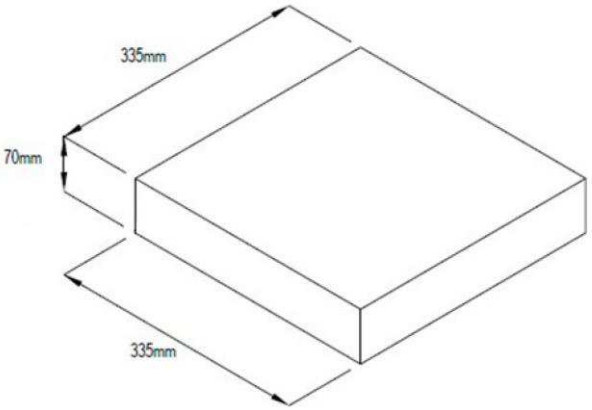


PACKAGING

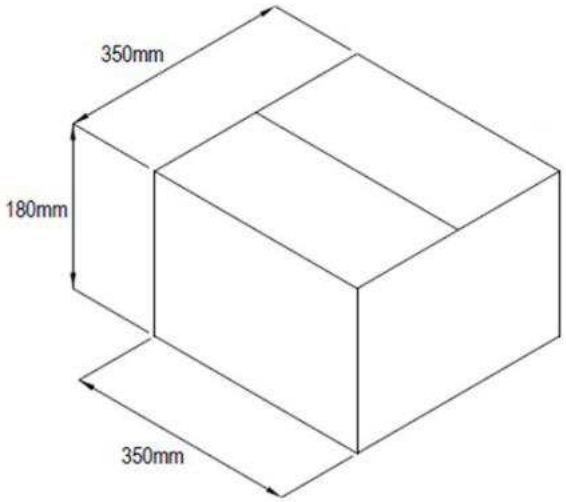




*Tape and reel packing with plastic bag.
*1000 pcs/ Reel



2 reels in one inner box = 2000 pcs



2 inner boxes in one outer box = 4000 pcs

TE TECHNICAL SUPPORT CENTER

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