

NEW!

Z Axis RFID Coil PA6512-AE



This part is optimized for use for the Z axis in Near Field Communications systems.

Evaluation was done using the STMicroelectronics CR95HF NFC Transceiver Reference board with the PA6512 connected to the STMicroelectronics M24LRxxE Dynamic NFC/RFID Tag.

The PA6512-AE requires 85% less board space (123 mm² vs. 800 mm²) compared with antennas designed for a PCB, yet still has approximately 50% of the read distance.



Part number ¹	Inductance ² (μH)	Read distance ³ (inches/mm)	DCR max ⁶ (Ohms)	Inductance at 13.56 MHz (μH)
PA6512-AE_	4.7 ±20%	1.15/29,3	0.028	4.6

1. When ordering, please specify **packaging** code:

PA6512-AED

Packaging: **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (1000 parts per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

- Inductance measured at 100 kHz, using an Agilent/HP 4284A impedance analyzer or equivalent.
- Read distance measured using the ST Microelectronics CR95HF RF transceiver demo board.
- DCR measured using a Keithley 580 micro-ohmmeter or equivalent.
- Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Terminations Gold over nickel over phos bronze

Core material Ferrite

Environmental RoHS compliant, halogen free

Weight 1.1 g

Ambient temperature -40°C to +85°C

Storage temperature Component: -40°C to +125°C.

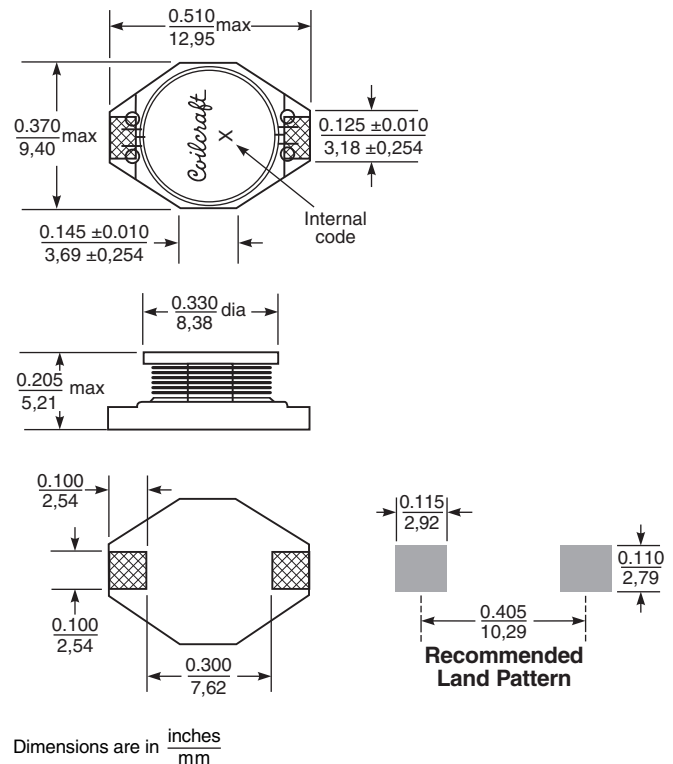
Tape and reel packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Packaging 1000 per 13" reel Plastic tape: 24 mm wide, 0.33 mm thick, 12 mm pocket spacing, 5.8 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

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