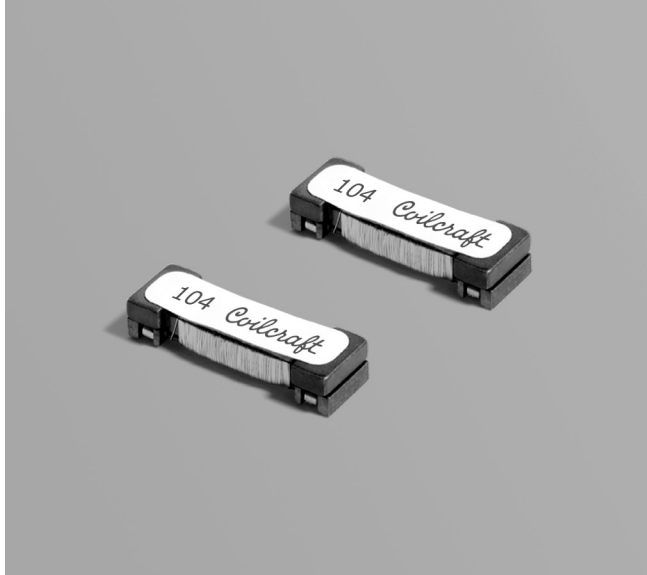



**NEW!**

# RFID Transponder Coil – MA5532-AE



- Developed for austriamicrosystems AS3935 Franklin Lightning Sensor IC
- Designed for antenna applications at 500 kHz to 2 MHz.
- Wound on plastic base for great durability and excellent mechanical shock resistance.
- 125°C operating temperature range

**Terminations** Gold over nickel over phos bronze.

**Environmental** RoHS compliant, halogen free

**Weight** 320 mg

**Ambient temperature** –40°C to +125°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)

**Temperature coefficient of inductance** +50 to +210 ppm/°C

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**

One per billion hours / one billion hours, calculated per Telcordia SR-332

**Packaging** 2500 per 13" reel Plastic tape: 24 mm wide,

0.35 mm thick, 8 mm pocket spacing, 2.75 mm pocket depth

**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf

| Part number <sup>1</sup> | Inductance <sup>2</sup><br>at 2 MHz<br>±2% (µH) | Q min <sup>2</sup> | DCR max <sup>3</sup><br>(Ohms) | SRF typ <sup>4</sup><br>(MHz) |
|--------------------------|-------------------------------------------------|--------------------|--------------------------------|-------------------------------|
| MA5532-AE_               | 100                                             | 30                 | 6.0                            | 34                            |

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

**MA5532-AED**

**Packaging: D** = 13" machine-ready reel. EIA-481 embossed plastic tape (2500 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.

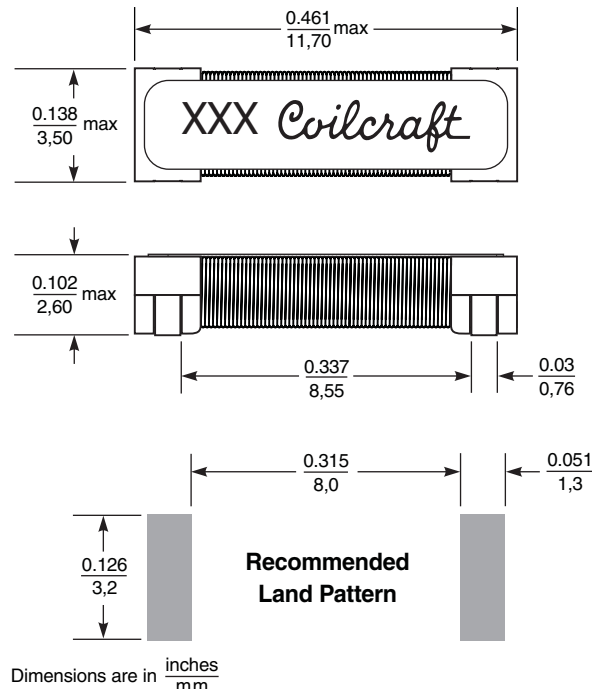
2. Inductance and Q measured using Agilent/HP 4287A iLCR meter or equivalent at 2 MHz. For recommended test procedures, contact Coilcraft.

3. DCR measured on micro-ohmmeter.

4. SRF measured using Agilent/HP 8753D network analyzer.

5. Electrical specifications at 25°C.

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



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