


**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** Only pure water or alcohol recommended

Part number <sup>1</sup>	Inductance <sup>2</sup> at 2 MHz ±2% (µH)	Q min <sup>2</sup>	DCR max <sup>3</sup> (Ohms)	SRF typ <sup>4</sup> (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.

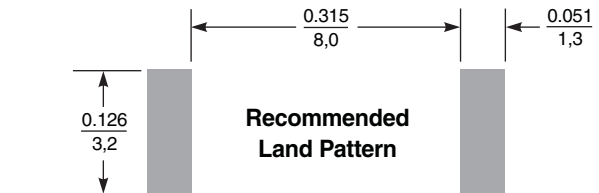
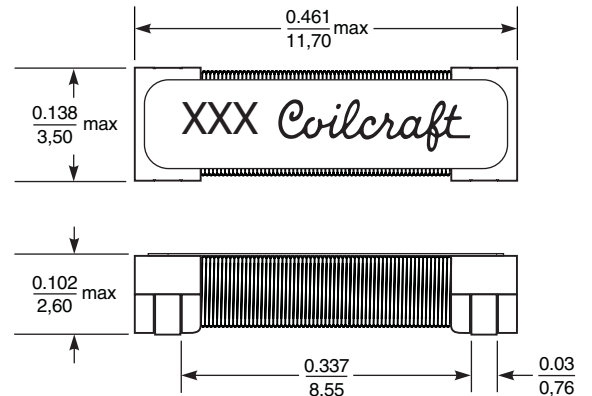
2. Inductance and Q measured using Agilent/HP 4287A iLCR meter or equivalent at 2 MHz. For recommended test procedures, contact Coilcraft.

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.



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



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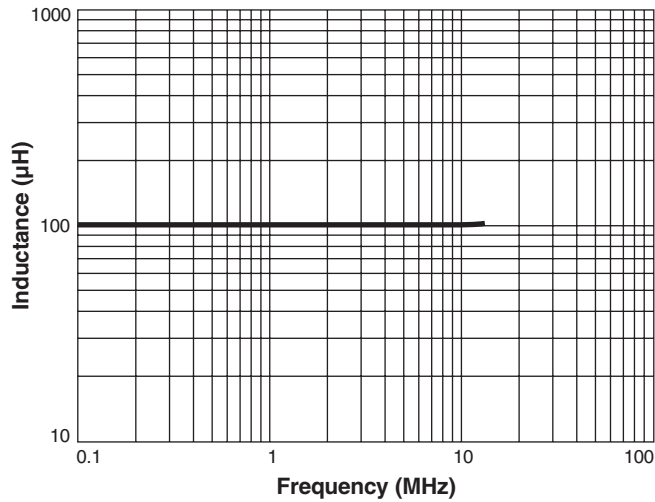
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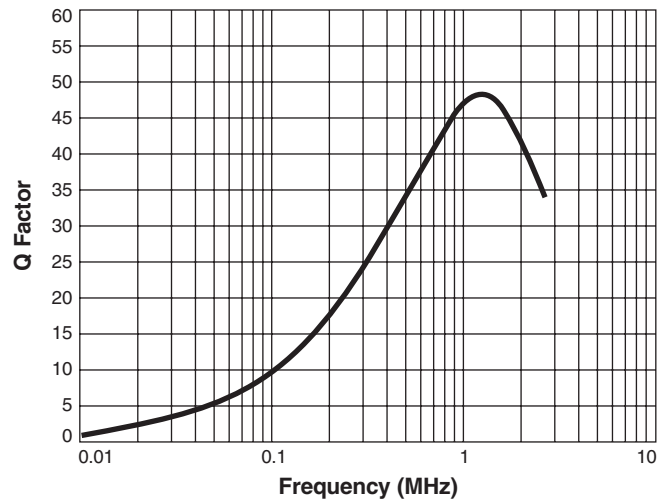
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## L vs Frequency



## Q vs Frequency


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