

NEW!

SMT Isolation Transformers HTX8045



- 5K VDC Hi-Pot ideal for isolated SPI communication and gate drive applications
- Applications include Battery Management Systems and Industrial Networking
- 5.9 mm creepage and clearance Material Group 1 (CTI > 600)⁸
- Reduced board space compared to traditional core and bobbin types
- Cost-effective and fully-automated for the highest quality
- AEC-Q200 qualified

Core material Ferrite

Terminations RoHS compliant tin over nickel over silver glass frit.

Weight 0.53 – 0.54 g

Max part temperature +140°C

Ambient temperature -40°C to +125°C

Storage temperature Component: -40°C to +140°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)

PCB washing Tested with pure water or alcohol only. For other solvents, see [Doc787_PCB_Washing.pdf](#)

| Part number ¹ | Turns ratio pri : sec | Primary inductance ² ±30% (µH) | Leakage inductance ³ max (µH) | DCR max ⁴ (Ohms) | | Isolation ⁵ (VDC / Vrms) | Volt-time product ⁶ (V-µsec) | Capacitance ⁷ max (pF) |
|--------------------------|-----------------------|---|--|-----------------------------|------|-------------------------------------|---|-----------------------------------|
| | | | | Pri | Sec | | | |
| HTX8045-903CR_ | 1 : 2 | 90 | 0.40 | 0.47 | 0.83 | 5000 / 3535 | 25.9 | 18 |
| HTX8045-164AR_ | 1 : 1 | 160 | 0.70 | 0.55 | 0.55 | 5000 / 3535 | 34.6 | 16 |

1. When ordering, please specify **turns ratio** and **packaging** codes:

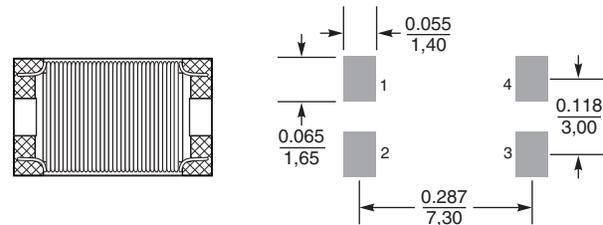
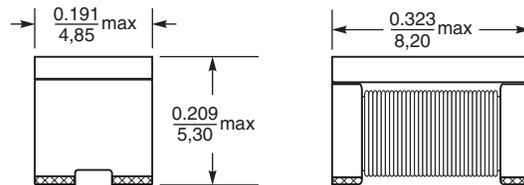
HTX8045-164ARC

Turns ratio: A = 1:1 C = 1:2

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (400 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1200 parts per full reel).

- Inductance measured at 100 KHz, 0.1 Vrms, 0 Adc on an HP4263B (or equivalent).
 - Leakage inductance is measured at 100 kHz, 0.1 Vrms on an HP4263B (or equivalent) with the other winding shorted.
 - DCR is measured on an HP4263B (or equivalent).
 - 5000 VDC / 3535 Vrms; one minute isolation (hipot) measured between primary and secondary.
 - Volt-time is for reference and calculated with 2400 Gauss.
 - Interwinding capacitance is measured at 250 kHz, 0.1 Vrms on AT3600/AT5600 across pins 1-4 with 2,3 open.
 - Insulation level may be Functional, Basic, or Reinforced depending on application variables such as working voltage, pollution degree, OVC, and altitude. Please contact [Coilcraft](#) for full details.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



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

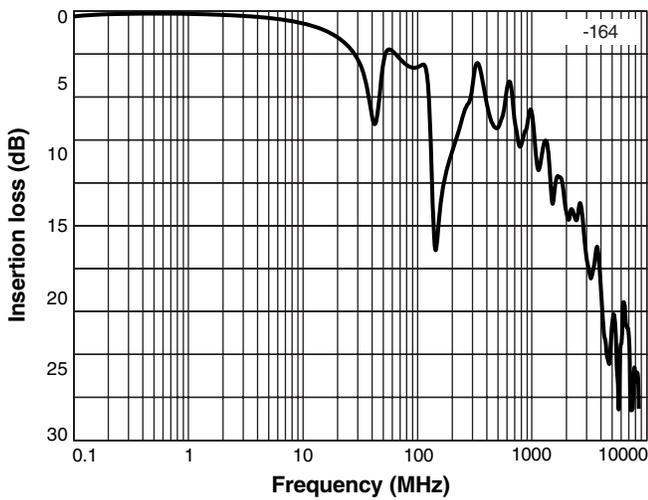
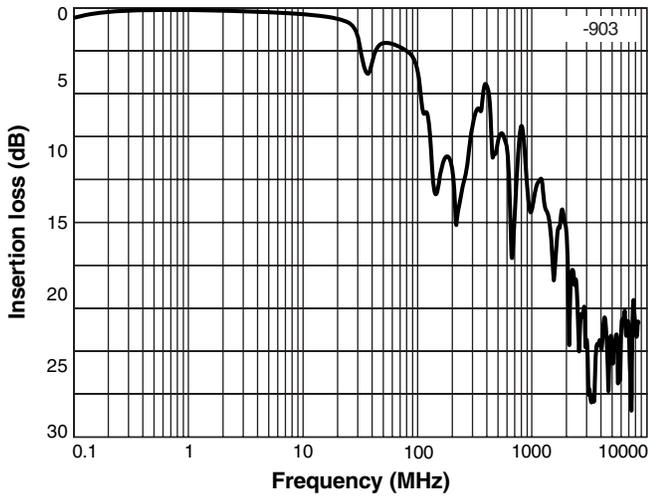
Recommended Land Pattern

Packaging 400/7" reel; 1200/13" reel Plastic tape: 16 mm wide, 0.40 mm thick, 8 mm pocket spacing, 5.5 mm pocket depth.

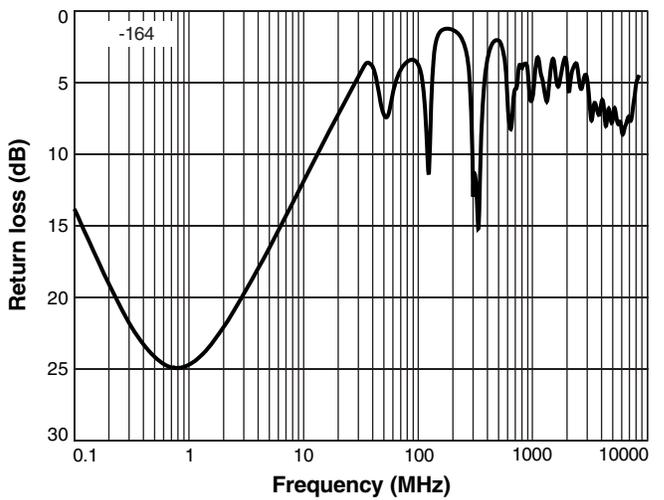
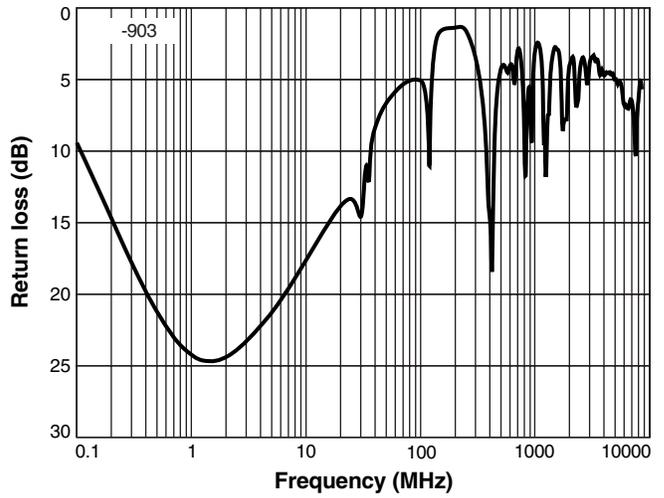


HTX8045 Series

Insertion loss



Return loss



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