



Filter test set for EMC compliance

The TE6291 filter test set measures the electrical performance of filters without the need to dismantle any equipment.

The test set is a powerful maintenance tool, as detecting and replacing damaged or degraded filters ensures that Line Replaceable Units are protected from electromagnetic interference. This allows the aircraft to remain operational and to meet necessary clearance standards.

The TE6291 computes insertion loss from one side of the connector only.

It records unserviceable and degraded filters and records all measurements for trend analysis.

The test set measures C, Pi, L and T single section low pass filters.

Benefits

- Single-sided measurement
- Non-intrusive testing
- Reports unserviceable and degraded filters
- Automatic operation
- Self-calibrating
- Trend analysis for preventative maintenance
- Assists in maintaining EMC compliance
- Simple configuration



Technical data

Filters measured

Single section low pass Pi filter

- Capacitance value: 1nF to 50nF
- Inductance value: >200nH

Single section low pass L filter

- Capacitance value: 100pF to 50nF
- Inductance value: >200nH

Single section low pass C filter

- Capacitance value: 100pF to 50nF

Single section low pass T filter

- Capacitance value: 100pF to 50nF
- Inductance value: >100nH

DC leakage test

- 1000 ohms to 10M ohms

Qualification

- MIL-STD-810 Environmental
- MIL-STD-461 EMC

Signal source

Frequency range

- 10kHz to 40MHz in logarithmic steps

Applied signal

- 1.5V RMS sinewave

Source impedance

- 50 ohms

Measurement time

- <5 seconds per pin

Load impedance limits

- >10R resistive
- >2mH shunt inductance
- Total capacitance <60nF (including filter)
(Note: voltage-dependent loads may affect the load resistance)

Power supply

- 85V to 265V AC, 40Hz to 400Hz
- 18V to 32V DC

Specification

Dimensions

- 460 x 360 x 540mm (18 x 14 x 21 inches)

Weight

- 18kgs (40lbs)

Temperature range

- +5C to +40C (41F to 104F)

PC operating system

- DOS or DOS shell (c:\prompt)

Accessories

Supplied

- 3m control cable
- Supply input cables (AC & DC)
- TS6291 software
- Single probe

Optional

- High frequency probe cable (2m or 5m)
- System check adaptor



Part No. TE6291
NSN 4920-99-3010459



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