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FACT SHEET

SAE Ground Vehicle Technical Committees: Electrical Systems Electromagnetic Compatibility (EMC) Standards Committee

The Electromagnetic Compatibility (EMC) Standards Committee reports to the Electrical Systems Group of the Motor Vehicle Council. The Committee is responsible for developing and maintaining SAE Standards, Recommended Practices, and Information Reports related to all aspects of EMC as it applies to surface vehicles and their components regardless of propulsion method or electrical system voltage. Phenomena addressed include radio frequency emissions, radio frequency immunity, electrostatic discharge (ESD) immunity, and transient voltage emission and immunity.

The Electromagnetic Immunity (EMI) Task Force and Electromagnetic Radiation (EMR) Task Force have been developed under the committee's scope.

Participants in the Electromagnetic Compatibility (EMC) Standards Committee include OEMs, suppliers, consulting firms, government, and other interested parties.

SAE Electromagnetic Compatibility (EMC) Standards Committee Standards Development & Revision Activities

- J1113/1 Electromagnetic Compatibility Measurement Procedures and Limits for Components of Vehicles, Boats (up to 15 m), and Machines (Except Aircraft) (16.6 Hz to 18 GHz)
- J1113/11 Immunity to Conducted Transients on Power Leads
- J1113/12 Electrical Interference by Conduction and Coupling—Capacitive and Inductive Coupling via Lines Other than Supply Lines
- J1113/13 Electromagnetic Compatibility Measurement Procedure for Vehicle Components— Part 13: Immunity to Electrostatic Discharge
- J1113/21 Electromagnetic Compatibility Measurement Procedure for Vehicle Components—Part 21: Immunity to Electromagnetic Fields, 30 MHz to 18 GHz, Absorber-Lined Chamber
- J1113/26 Electromagnetic Compatibility Measurement Procedure for Vehicle Components— Immunity to AC Power Line Electric Fields
- J1113/27 Electromagnetic Compatibility Measurements Procedure for Vehicle Components— Part 27: Immunity to Radiated Electromagnetic Fields—Mode Stir Reverberation Method
- J1113/4 Immunity to Radiated Electromagnetic Fields—Bulk Current Injection (BCI) Method
- J1752/1 Electromagnetic Compatibility Measurement Procedures for Integrated Circuits Integrated Circuit EMC Measurement Procedures—General and Definitions
- J1752/2 Measurement of Radiated Emissions from Integrated Circuits—Surface Scan Method (Loop Probe Method) 10 MHz to 3 GHz

SAE Electromagnetic Compatibility (EMC) Standards committee Standards Development & Revision Activities

J1752/3 Measurement of Radiated Emissions from Integrated Circuits—TEM/Wideband TEM (GTEM) Cell Method; TEM Cell (150 kHz to 1 GHz), Wideband TEM Cell (150 kHz to 8 GHz)

J1812 Function Performance Status Classification for EMC Immunity Testing

J2556 Radiated Emissions (RE) Narrowband Data Analysis—Power Spectral Density (PSD)

J2628 Characterization—Conducted Immunity

J551/1 Performance Levels and Methods of Measurement of Electromagnetic Compatibility of Vehicles, Boats (up to 15 m), & Machines (16.6 Hz to 18 GHz)

J551/15 Vehicle Electromagnetic Immunity—Electrostatic Discharge (ESD)

J551/16 Electromagnetic Immunity—Off-Vehicle Source (Reverberation Chamber Method)—Part 16: Immunity to Radiated Electromagnetic Fields

J551/17 Vehicle Electromagnetic Immunity—Power Line Magnetic Fields

J551/5 Performance Levels and Methods of Measurement of Magnetic and Electric Field Strength from Electric Vehicles, Broadband, 9 kHz To 30 MHz

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For more information

or to participate on a Electromagnetic Compatibility (EMC) Standards Committee, contact:

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