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Dictionary of Electrical and Computer Engineering

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capacitance relay

protected area a few feet above ground changes the antenna-ground capacitance and sets off the alarm. { kə'pas-ə-təns; aop-ə,rəd-əd in'trū-zhən d'i'tek-tər }

capacitance relay [ELECTR] An electronic relay that responds to a small change in capacitance, such as that created by bringing a hand near a pickup wire or plate. { kə'pas-ə-təns 'rē,lā }

capacitance standard See standard capacitor. { kə'pas-ə-təns ,stan-dərd }

capacitive coupling [ELEC] Use of a capacitor to transfer energy from one circuit to another. { kə'pas-ə-təns ,kəp-līg }

capacitive diaphragm [ELECTROMAG] A resonant window used in a waveguide to provide the equivalent of capacitive reactance at the frequency being transmitted. { kə'pas-əd-iv 'dī-ə,frəm }

capacitive-discharge ignition [ELECTR] An automotive ignition system in which energy is stored in a capacitor and discharged across the gap of a spark plug through a step-up pulse transformer and distributor each time a silicon controlled rectifier is triggered. { kə'pas-əd-iv 'dis,čārj ig 'rīsh-ən }

capacitive-discharge pilot light [ELECTR] An electronic ignition system, operating off an alternating-current power line or battery power supply, that produces a spark for lighting a gas flame. { kə'pas-əd-iv 'dis,čārj 'pī-lət, līt }

capacitive divider [ELEC] Two or more capacitors placed in series across a source, making available a portion of the source voltage across each capacitor; the voltage across each capacitor will be inversely proportional to its capacitance. { kə'pas-əd-iv 'dī-vīd-ər }

capacitive electrometer [ENG] An instrument for measuring small voltages; the voltage is applied to the plates of a capacitor when they are close together, then the voltage source is removed and the plates are separated, increasing the potential difference between them to a measurable value. Also known as condensing electrometer. { kə'pas-əd-iv ,ī,lek'trām-əd-ər }

capacitive feedback [ELECTR] Process of returning part of the energy in the plate (or output) circuit of a vacuum tube (or other device) to the grid (or input) circuit by means of a capacitance common to both circuits. { kə'pas-əd-iv 'fēd ,bək }

capacitive loading [ELECTROMAG] 1. Raising the resonant frequency of an antenna by connecting a fixed capacitor or capacitors in series with it. 2. Lowering the resonant frequency of an antenna by installing a capacitance hat. { kə'pas-əd-iv 'lōd-īg }

capacitive post [ELECTROMAG] Metal post or screw extending across a waveguide at right angles to the E field, to provide capacitive susceptance in parallel with the waveguide for tuning or matching purposes. { kə'pas-əd-iv 'pōst }

capacitive pressure transducer [ENG] A measurement device in which variations in pressure upon a capacitive element proportionately change the element's capacitive rating and thus the strength of the measured electric signal

from the device. { kə'pas-əd-iv 'presh-ər tranz ,dū-sər }

capacitive reactance [ELECTROMAG] Reactance due to the capacitance of a capacitor or circuit, equal to the inverse of the product of the capacitance and the angular frequency. { kə'pas-əd-iv rē'ak-təns }

capacitive tuning [ELECTR] Tuning involving use of a variable capacitor. { kə'pas-əd-iv 'tūn-īg }

capacitive window [ELECTROMAG] Conducting diaphragm extending into a waveguide from one or both sidewalls, producing the effect of a capacitive susceptance in parallel with the waveguide. { kə'pas-əd-iv 'wīn-dō }

capacitor [ELEC] A device which consists essentially of two conductors (such as parallel metal plates) insulated from each other by a dielectric and which introduces capacitance into a circuit, stores electrical energy, blocks the flow of direct current, and permits the flow of alternating current to a degree dependent on the capacitor's capacitance and the current frequency. Symbolized C. Also known as condenser; electric condenser. { kə'pas-əd-ər }

capacitor antenna [ELECTROMAG] Antenna consisting of two conductors or systems of conductors, the essential characteristic of which is its capacitance. Also known as condenser antenna. { kə'pas-əd-ər an'ten-ə }

capacitor bank [ELEC] A number of capacitors connected in series or in parallel. { kə'pas-əd-ər ,bāŋk }

capacitor box [ELECTR] A box-shaped structure in which a capacitor is submerged in a heat-absorbing medium, usually water. Also known as condenser box. { kə'pas-əd-ər ,bāks }

capacitor color code [ELEC] A method of marking the value on a capacitor by means of dots or bands of colors as specified in the Electronic Industry Association color code. { kə'pas-əd-ər 'kəl-ər ,kōd }

capacitor-input filter [ELECTR] A power-supply filter in which a shunt capacitor is the first element after the rectifier. { kə'pas-əd-ər ,īn,pūt ,fīl-tər }

capacitor loudspeaker See electrostatic loudspeaker. { kə'pas-əd-ər 'laüd,spēk-ər }

capacitor microphone [ENG ACOUS] A microphone consisting essentially of a flexible metal diaphragm and a rigid metal plate that together form a two-plate air capacitor; sound waves set the diaphragm in vibration, producing capacitance variations that are converted into audio-frequency signals by a suitable amplifier circuit. Also known as condenser microphone; electrostatic microphone. { kə'pas-əd-ər 'mī-kra,fōn }

capacitor motor [ELEC] A single-phase induction motor having a main winding connected directly to a source of alternating-current power and an auxiliary winding connected in series with a capacitor to the source of ac power. See capacitor-start motor. { kə'pas-əd-ər ,mōd-ər }

capacitor-resistor unit See rescap. { kə'pas-əd-ər 'rīz-īs-tər ,yū-nāt }