

Title (en)
CIRCUIT FOR PROTECTING AGAINST REVERSE POLARITY

Title (de)
SCHALTUNG ZUM SCHUTZ GEGEN VERPOLUNG

Title (fr)
CIRCUIT DE PROTECTION CONTRE LES INVERSIONS DE POLARITÉ

Publication
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Application
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Priority

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Abstract (en)
[origin: CA2815248A1] The invention relates to a circuit for protecting an electric load against reverse polarity using a MOSFET (metal oxide semiconductor field-effect transistor) (T1), wherein the circuit is connected on the input side to a voltage supply and on the output side to the load and wherein the source connection of the MOSFET (T1) is connected to the voltage supply and the drain connection of the MOSFET (T1) is connected to the load, wherein said circuit is characterized, in regard to the development of reliable reverse polarity protection having dynamic behavior similar to a diode and at the same time low power loss, in that the gate of the MOSFET (T1) is connected to the collector of a first bipolar transistor (T3) and the source of the MOSFET (T1) is connected to the emitter of the first bipolar transistor (T3) and in that the base of the first bipolar transistor (T3) is controlled by means of a control current, wherein the control current is derived from the voltage at the drain of the MOSFET (T1).

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