
A Modular Compact Marx Generator Design For The Apelc

2001: an ultra-compact marx-type high-voltage generator - an ultra-compact marx-type high-voltage ... this paper discusses the design of an ultra-compact, marx-type, high-voltage generator. this system incorporates high-performance components that are ... **a modular compact marx generator design for the gatling ...** - a modular compact marx generator design for the gatling marx generator system m.b. lara*, j. r. mayes, m.g. mayes, and c.w. hatfield applied physical electronics, l.c. **compact 200-hz pulse repetition gw mar x generator system** - marx generation, the user s r a given cyc unit (tgu) nce: d is issued to arx power su command i ltage is reach se is then se oses the thyrat am for the h rator smith adjust the pr rigger generat he high-prf 802l power s c trigger gen or. elects igh-prf, gw f and or and marx upply ... **may 22-24, 2014, brasov, romania testing of a modular over ...** - testing of a modular over-voltage trigger device for marx generators martin sack, georg mueller karlsruhe institute of technology, institute for pulsed power and microwave technology abstract over-voltage triggering is a trigger method for marx generators, which omits additional wear of electrodes. hence, it is suitable for triggered long-term operation of marx generators in industrial ... **compact marx generator using cockroft-walton voltage ...** - compact marx generator using cockroft-walton voltage multiplier circuit keywords high voltage power supply, cockroft walton voltage multiplier, marx generator, hv generator. **an ultra-compact marx-type high-voltage generator** - this ultra-compact marx generator employs a modular design that can be sized as needed for a particular application. units have been assembled with 4, 10, and 30 stages and operated at levels up to 100 kv per stage. i. introduction marx generators are frequently used in many pulsed power applications. usually, they are employed to energize pulse forming sections that can deliver greater peak ... **study of an ultra-compact, repetitive marx generator for ...** - a key objective is to keep the fundamental modular coaxial concept by reason of its scalability and compactness. simulation models were developed under the pspice software package in order to investigate the charging and discharging phases of the marx generator and also to determine the design criteria for repetitive operations. the charging resistors were replaced by ultracompact inductors ... **affordable, short pulse marx modulator** - of this type are being re-examined for the compact linear collider (clic) and numerous x-band accelerator designs. there is not, however, a fully optimized, transformerless modulator design capable of meeting the demanding requirements of very high voltage pulses at short pulsewidths. solid-state marx modulators have gained preferred status alongside alternative modulator topologies. for ... **high power pulsed electron accelerators development for ...** - high power pulsed electron accelerators development for industrial applications archana sharma, k.v.vesh, ritu agarwal, s.r.raul, k.c.mittal, g.v.rao, jndal and **development and testing of the ilc marx modulator - cern** - more compact mechanical solution. advantages of the ilc marx design include higher efficiency, smaller physical size, and a modular architecture that provides greater reliability and cost-effective pc board-level integration. introduction the international linear collider [ilc] will require 576 klystron stations, each delivering 10mw pulses of rf at a rate of 5hz. each 10mw l-band klystron ... **a review paper on the design, optimization and application ...** - a solid state modular marx generator was used for the dv/dt testing of the power semiconductor devices (mosfet), which produces voltage transients upto 1kv with the rise time of the order of 10 ns [4]. the testing was done to know the dv/dt rating of the power semiconductor devices because the dv/dt induced turn-on can result in the sudden failure of the device. the results which were shown ... **affordable, short pulse marx modulator** - re-examined for the compact linear collider (clic) and numerous x-band accelerator designs. at the very high voltages required for these systems, however, all of the existing designs are based on pulse transformers, which significantly limit their performance and efficiency. there is not a fully optimized, transformerless modulator design capable of meeting the demanding requirements of very ... **affordable short pulse marx modulator** - affordable short pulse marx modulator ... developed a short pulse, solid-state marx modulator relevant to the compact linear collider (clic) and numerous x-band accelerator designs (figure 1). the modulator is designed for high efficiency in the 100 kv to 500 kv range, for currents up to 250 a, pulse lengths of 0.2 to 5.0 μ s, and risetimes