

SNUBBER CAPACITORS FOR IGBT

(INSULATED GATE BIPOLAR TRANSISTOR)

The snubber's primary function is to suppress transient voltages in applications where the switching is turned off and a large spike or peak current is generated. When an IGBT switches off, for example, a transient or surge voltage is generated by the parasitic inductance in the power circuit, and that transient voltage needs to be controlled. If the transient voltage is not controlled, it may exceed the IGBT's voltage rating, causing it to fail.

IGBT's switch ten times faster than older Darlington transistors, and have made it possible for inverters in uninterruptible power supply systems (U.P.S.) to operate at 20 KHz or above.

Some Applications Where IGBT's Can Be Found:

- Motor controls (AC Motor Speed Control)
- U.P.S. Systems
- Inverters/Converters
- Microwave Ovens
- Electric Cars
- Switch Mode Power Supplies
- SCR Commutation (Silicon Controlled Rectifier)
- Welding, Arc/Welding Equipment

Who Makes IGBT's?

- Powerex
- Toshiba
- Fuji/Collmer
- International Rectifier
- Motorola
- Harris Semiconductor

Who Are Our Competitors in the Power Film Area?

(A few also make IGBT mount snubbers)

- Cornell Dubilier
- Aerovox
- Arco
- Electronic Concepts
- Rifa
- Wima
- Phillips