7th-Generation “X Series” IGBT Module “Dual XT”

Improved package with 1200V 800A rating

Power conversion equipment has been increasingly required to exhibit compactness, low loss and high reliability, and therefore, Fuji Electric developed the 7th-generation “X Series” IGBT module “Dual XT” (X Series Dual XT) as a module that expands rated current.

The X Series Dual XT has reduced power loss through semiconductor chip characteristic enhancement, while also improving the package current-carrying capability through package structure enhancement. In addition, by improving the ΔT j power cycle capability and the heat resistance of the insulation-use silicone gel, the module achieves a junction temperature of Tjop=175 °C under continuous operation. It is also the industry’s first module in this package size that has a 1,200-V/800-A rating.

Main features:
- Reduced power loss
- Expanded current rating
- Increased output power
- TJ (op), max = 175°C
- T storage = -40°C to +175°C
- Available with solder pins or pressfit contacts