# − Fuji IGBT Module V Series 1200V Family −

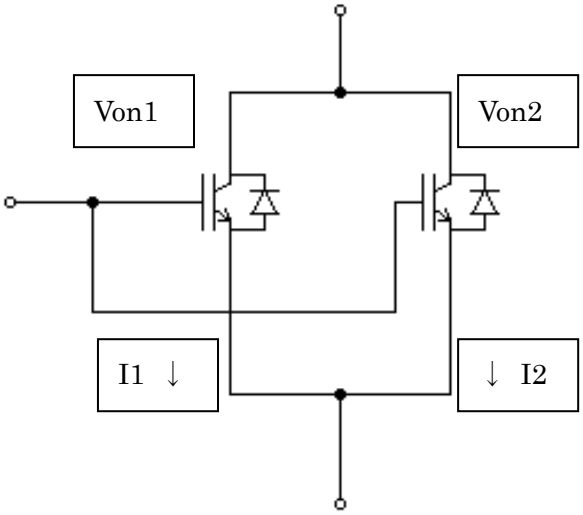
## Parallel connection of 2in1 package modules

Circuit configuration and formula

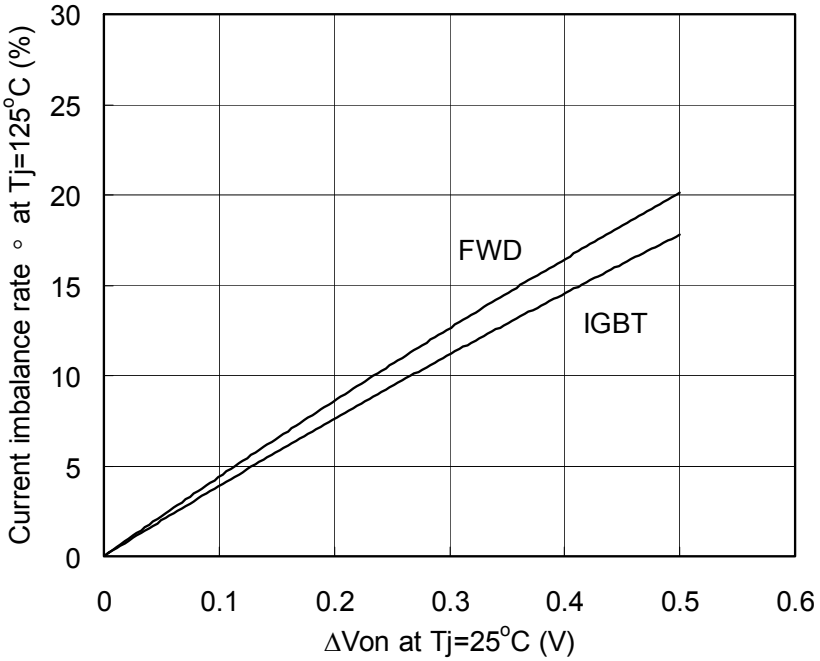
ΔVon=|Von2-Von1| (Von2>Von1)

Ic (ave)=(I1+I2)/2

Current imbalance is caused by the difference between Von1 and Von2, and current is divided into I1 and I2. In this case, the current imbalance can be obtained from the following calculating formula.




$$\alpha = \left( \frac{I_1}{I_{C(ave)}} - 1 \right) \times 100 \quad (\%)$$




Δ Von and current imbalance rate

When nIGBT modules are connected in parallel, the maximum allowable current ΣI can be expressed in the following formula by using the current imbalance rate α at two-parallel connection. This maximum allowable current ΣI is used for reference only.

$$\sum I = I_{C(\max)} \left[ 1 + (n-1) \frac{\left( 1 - \frac{\alpha}{100} \right)}{\left( 1 + \frac{\alpha}{100} \right)} \right]$$

Technical data: MT5F24335

Fuji Electric
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