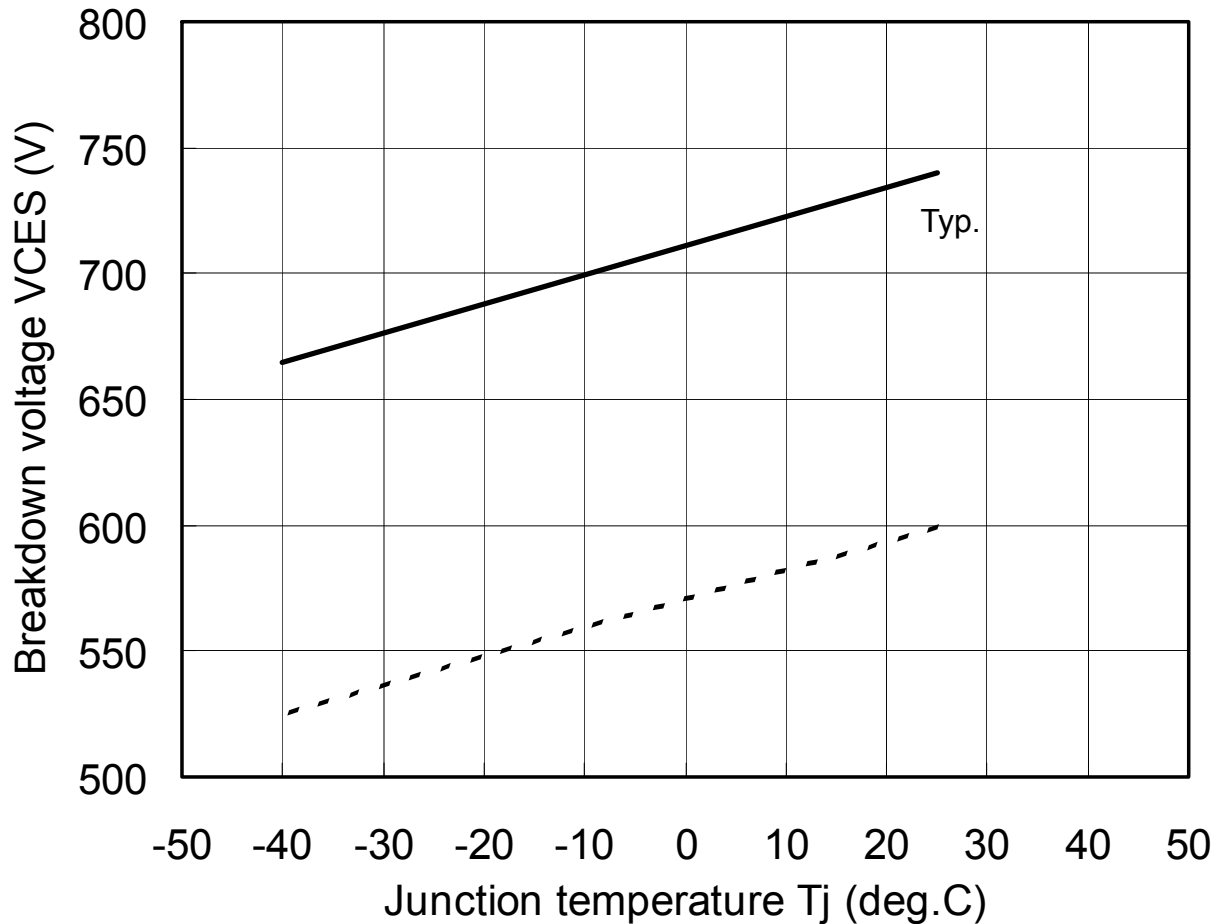


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## – Fuji IGBT Module V Series 600V Family –

Junction breakdown voltage  $V_{CES}$  and junction temperature  $T_j$

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Junction Temperature Dependence of Junction Breakdown Voltage

(same as 1200V)

Generally in semiconductor devices, when the temperature becomes lower, the lattice vibration within the silicon crystal decreases and the collision of carriers is suppressed. Therefore, impact ionization ratio increases and so the breakdown voltage of the semiconductor device becomes lower. Therefore, when you use the module at low temperature, take the breakdown voltage drop into account in design.

Technical data: MT5F24333