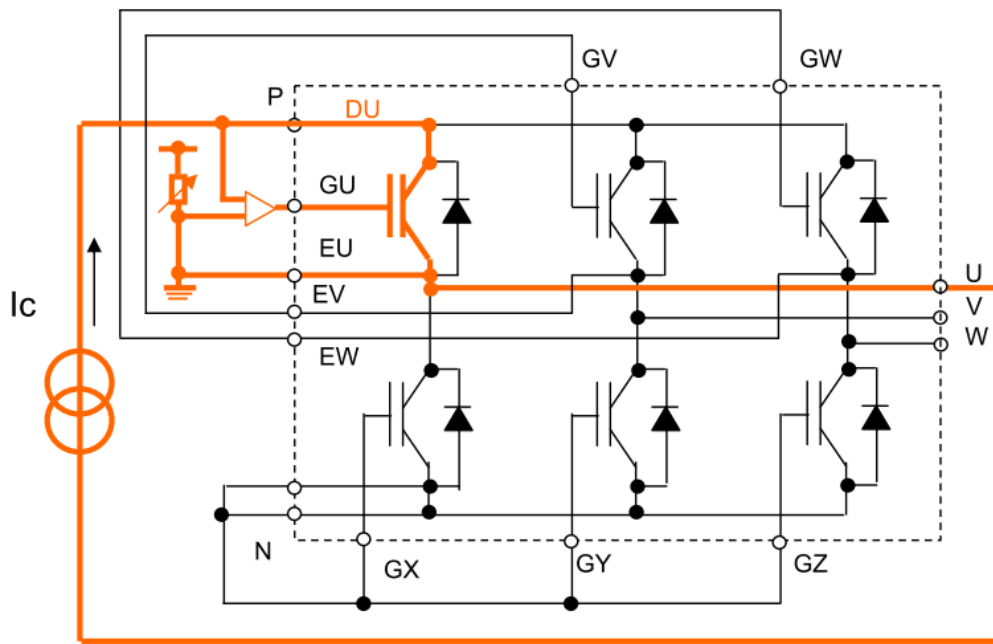
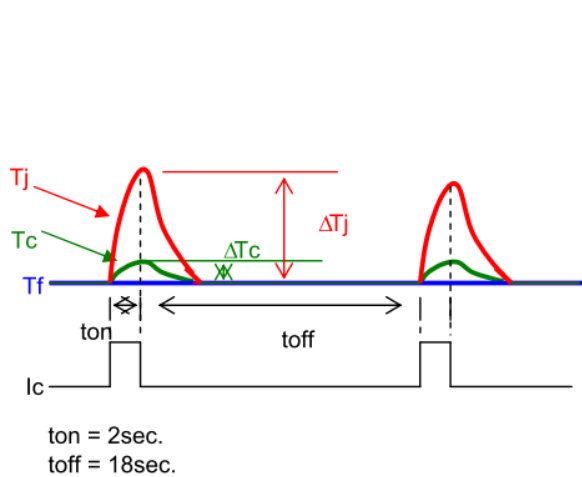


**FUJI X-series IGBT Module**

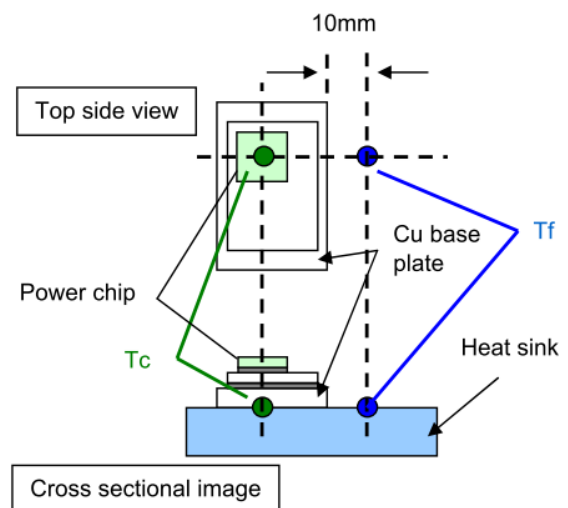
**$\Delta T_{vj}$  power cycling test method and life time curve (technical document)**



Equivalent test circuit

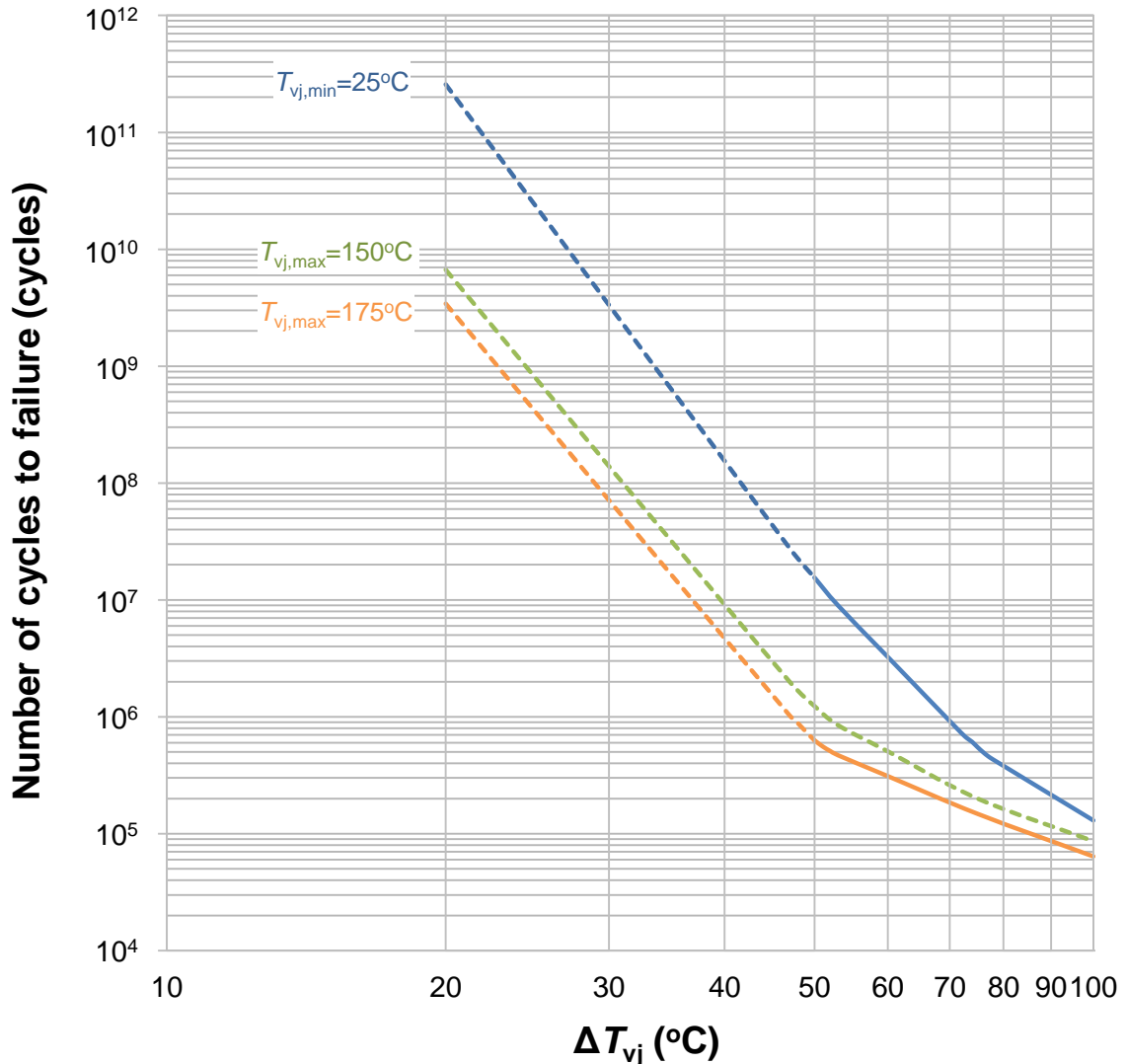


$\Delta T_{vj}$  power cycling test diagram and temperature



Measurement point of  $T_c$  and  $T_f$

Package: Sml PIM, EconoPIM™, EconoPACK™, Dual XT, Standard 2in1, PrimePACK™



**$\Delta T_{vj}$  Power Cycling Life Time Curve**

- \*1) The definition of failure criteria in this test is at the time when the tested device has open or short circuited.
- \*2) The heat sink used in the test and the mounting condition for the modules is in accordance with Fuji's standard.
- \*3) The life time shown in this figure is at  $F(t)=1\%$  of the accumulated failure rate by Weibull analysis chart.
- \*4) The life time shown in this figure is the tested result which is obtained by using several types of the modules.
- \*5) The dotted line shows the estimated life time.

Note : EconoPIM™, EconoPACK™, PrimePACK™ is registered trademark of Infineon Technologies AG, Germany

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