− Fuji IGBT Module U and V Series −

$\Delta T_j$ power cycle test method and lifetime curve (technical reference material)

Test equivalent circuit

Current flow pattern of $\Delta T_j$ power cycle and temperature change

Tc and Tf measurement positions
1) The judgment criterion for failure is the point when the test element becomes open or short.
2) The radiation fin and module are mounted according to our test standards.
3) The capacity data in the lifetime curve is the one when the failure rate is 1% in the Weibull analysis.
4) The capacity data in the lifetime curve shows the result of multiple models.
5) The dotted lines show the estimated lifetime, not the guaranteed value.
6) The IGBT (FWD) chips connected in parallel are not included.
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- Computers
- Machine tools
- OA equipment
- Audiovisual equipment
- Communications equipment
- Electrical home appliances
- Personal equipment
- Measurement equipment
- Terminal devices
- Industrial robots etc.

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- Transportation equipment (mounted on cars and ships)
- Traffic-signal control equipment
- Emergency equipment for responding to disasters and anti-burglary devices
- Medical equipment
- Trunk communications equipment
- Gas leakage detectors with an auto-shut-off feature
- Safety devices

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- Submarine repeater equipment
- Aeronautic equipment
- Nuclear control equipment

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