Discussion on case temperature \((T_c)\) and ambient temperature \((T_a)\) when specifying the operating conditions of dynamic modules for telecom use

Summary

The pros and cons in the usage of case temperature \((T_c)\) and ambient temperature \((T_a)\) when specifying the operating conditions are shown in this document. Case temperature \((T_c)\) can specify the module operating condition without considering any other conditions such as airflow and how module is implemented in the telecom equipment. On the other hand, by using specifying the operating condition by ambient temperature \((T_a)\), it can be judged roughly if module can work without evaluating module temperature by using actual module. And also many modules can be tested in the same chamber at the same time by monitoring \(T_a\) in component supplier.