

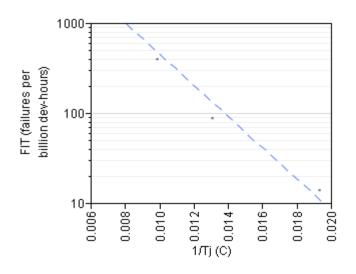
## **RF5506 Reliability Report**

## Introduction

The RF5506 provides a complete integrated solution in a single Front-End Module (FEM) for WLAN 802.11a systems. The ultra small form factor and integrated matching minimizes the layout are in the customer's application and greatly reduces the number of external components to only one bypass capacitor for supply decoupling. This simplifies the total Front End solution by reducing the bill of materials, system footprint, and manufacturability cost. The RF5506 integrates Power Amplifier (PA), Low Noise Amplifier (LNA), and a power detector coupler for improved accuracy. The device is provided in a 3mmx3mmx0.5mm, 16-pin package. This module meets or exceeds the RF Front End needs of IEEE 802.11a WLAN RF systems.

## **Random Failure Rate**

Based on the existing HTOL data set consisting of recently released FET2 parts, the random FIT vs Tj is shown below. The data set consists of over 45 million accelerated hours of stress at 125 C, assumes an activation energy of 0.7 eV, and a confidence level of 60%.



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