Reliability / FIT Data

IRF3007PBF

SP-Number:	SP001571144
ISP-Name:	IRF3007
Package:	PG-TO220-3

Calculated average failure rate (AFR):

tested devices:	25 147
device hours @ stress conditions:	23 524 613
Failed devices:	8
Activation Energy:	0.7 eV
Ambient Temperature:	55°C
Confidence Level:	**60%**
FIT value:	**0.65**
MTTF (h) value:	**1 538 361 346**
Confidence Level:	**90%**
FIT value:	**0.90**
MTTF (h) value:	**1 116 825 652**

Additional information:

FIT-rate calculations are based on JEDEC JESD85 („Methods for Calculating Failure Rates in Units of FITs“) with respect to the technology used.

The sample size used to calculate the FIT-rate of a product, includes also other similar products from the same technology family to gain higher statistical accuracy. Within a technology family all members are equal in respect to the fabrication process and technology design.

Failure Rate given in the report represents an Average Failure Rate (AFR) which relates to the technology reliability.

The actual FIT-rate of the component depends on its application and may deviate from the listed FIT-rate.

AFR are shown as upper limits of the confidence interval. High failure rate may be caused by limited number of devices tested. All executed reliability tests are performed according to the relevant industrial standards.

This FIT-Rate report does not replace the base failure rate for ISO26262-compliant or ISO26262-ready products. For these products refer to the relevant safety manuals or safety application notes.

Published by
Infineon Technologies AG
Am Campeon 1-15, 85579 Neubiberg
Germany

© 2024 Infineon Technologies AG
All rights reserved.

2025-03-19

Please note!
This Document is for information purposes only and any information given herein shall in no event be regarded as a warranty, guarantee or description of any functionality, conditions and/or quality of our products or any suitability for a particular purpose. With regard to the technical specifications of our products, we kindly ask you to refer to the relevant product data sheets provided by us.

The data contained in this document is exclusively intended for technical qualified and skilled staff. It is the responsibility of customer to evaluate the suitability of the product for the intended application and to verify all relevant data contained in this document in the final application.

We reserve the right to change this document and/or the information given herein at any time.

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

Warnings
Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representa-tives of Infineon Technologies, our products may not be used in any life-endangering applications, inclu-ding but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.

Scan QR code and explore offering
www.infineon.com