Diode, low frequency

Base Failure Rate λ_b

Diode Type/Application	λ_b [Failures/10^6 Hours]
General Purpose Analog	0.0038
Switching	0.0010
Power Rectifier, Fast Recovery	0.069
Power Rectifier/Schottky Power Diode	0.0030
Power Rectifier with High Voltage Stacks	0.0050/Junction
Transient Suppressor/Varistor	0.0013
Current Regulator	0.0034
Voltage Regulator and Voltage Reference (Avalance and Zener)	0.0020

Source: MIL-HDBK-217F, page 48

Diode, high frequency (Microwave, RF)

Base Failure Rate λ_b

Diode Type	λ_b [Failures/10⁶ Hours]
SI IMPATT (≤ 35GHz)	0.22
Gunn/Bulk Effect	0.18
Tunnel and Back (Including Mixers, Detectors)	0.0023
PIN	0.0081
Schottky Barrier (Including Detectors) and Point Contact (200 MHz ≤ Frequency ≤ 35 GHz)	0.027
Varactor and Step Recovery	0.0025

Source: MIL-HDBK-217F, page 50

Transistor, Low Frequency, bipolar

Base Failure Rate λ_b

Type	λ_b [Failures/10^6 Hours]
NPN and PNP	0.00074

Source: MIL-HDBK-217F, page 52

Transistor, Low Frequency, SI FET

Base Failure Rate λ_b

Type	λ_b [Failures/10^6 Hours]
MOSFET	0.012
JFET	0.0045

Source: MIL-HDBK-217F, page 54