

## **MTBF Estimation [AA050ME01]**

The reliability test results are shown in below.

Condition (High temperature/ High humidity operation test)	50degree C/ 90%RH, 500hours
Acceleration factor (for 25degree C, 50%)	40
Basic failure rate (Reference : JIS Standard C5003)	2.3
Number of test samples	n=6
Result	GO (r=0)

We estimate the failure rate( $\lambda$ ) in 90% Confidence level.

$$\lambda = 2.3 / ( 40 \times 500 \times 6 )$$

$$\approx 19 \text{ K FIT}$$

$$\text{MTBF} = 1 / \lambda$$

$$= 1 / (19 \text{ K} \times 10^{-9})$$

$$\approx 52000 \text{ hrs}$$

Note:

\*1: The MTBF doesn't include backlight.

\*2: The MTBF is a calculated expectation time.

\*3: The MTBF isn't assured time.