

Reliability on Polymer Aluminum Electrolytic Capacitor

Part No. : ECAS Series

Quality Assurance Dept. Passive Device Division Murata Manufacturing Co., Ltd.

<Field data>

The Failure Rate is estimated from the results of returned failure products (customer's incoming inspection, in-process, field failures, etc.). The failure rate calculation is as follows.

Calculation of Failure Rate:

 $\lambda = \frac{\gamma \times K}{T} \times 10^9$ (Fit)

=0.5 Fit or less

Where:

- λ = Failure Rate
- γ = Number of accumulated failures
- T = Accumulated component hours
- FIT = Failures in Time
- K = Coefficient of confidence level at 60% (Reference Table 1)

Number of failures	К	Number of failures	К
0	0.916	3	1.39
1	2.02	4	1.31
2	1.55	5	1.26

Table 1 K:Coefficient of confidence level 60%

This is a calculated result based on the current status. It is expected that the failure rate will be decreased by accumulating the data.