

General Information of Littelfuse Thyristor MTBF, Failure Rate and FITS

This report is a general reference for customers regarding the estimated **Mean-Time-Between-Failure (MTBF)**, percent failure rate and FITS data of Thyristor parts.

For more information about any specific device, please contact Littelfuse for further details.

Note:

- Estimate of Failure Rate, MTBF, FITS are computed at a 60% confidence level refer to the Chi Square statistic and the Arrhenius derating model for various junction operating temperature based on JEDEC JESD85
- A value of 1eV was used for the activation energy in calculation
- Calculation is refer to result of AC Blocking reliability test conducted per MIL-STD-750 M1040
- The maximum junction temperature is 125°C in below table
- Number of sample is 231 pcs, test duration 1008hrs at 125°C, zero failure resulted in Table 1

Table 1: Littelfuse Thyristor MTBF, FITS for a Given Operation Temperature

Temp.°C	% FR/khrs	MTBF (K)	FITS
30	0.00001	13118051.3	0.08
60	0.00024	418196.4	2.39
80	0.00172	58206.1	17.18
100	0.00999	10008.2	99.92
125	0.07037	1421.1	703.70