<https://en.wikipedia.org/wiki/68%E2%80%9395%E2%80%9399.7_rule>

BY 68-95-97-9.7 rule, considering a standard deviation 99.7, there is a possibility that all 1-99.7 is a outlier.

Hence 1-99.7 probability that it is a outlier.

Hence In any standard distribution 0.0025% probability that every point is a outlier.

0.0025\*100-> 0.25% a outlier

<http://www.edgarstat.com/tukeys_outliers_help.cfm>

Tukey’s outlier filter: 1.5times the Inter quartile Distance

|  |  |  |  |
| --- | --- | --- | --- |
| 0.0025% | 100 | 0.25% | 0.25 |
| 0.0025% | 60 | 0.15% | 0.30 |
| 0.0025% | 60 | 0.15% |
| 0.0025% | 30 | 0.075% | 0.2625 |
| 0.0025% | 40 | 0.1% |
| 0.0025% | 20 | 0.05% |
| 0.0025% | 10 | 0.025% |
| 0.0025% | 5 | 0.0125$ |