|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ANALOG MULTIPLIER - in case of DC INPUT( slow dc with 100Hz & 50Hz frequency )** | | | | | | |
| **Various Detected Faults in MULTIPLIER in the presence of MULTIPLE faults with deviations** | | | | | | |
| **Injected Faults** | **=500, = 0.0103**  **Optimal Order - 16th** | | **=1000, = 0.0108**  **Optimal Order - 15th** | | **=2000, = 0.0110**  **Optimal Order - 15th** | |
| **No. of Coefficients Out of Bound** | **Fault Detection Status** | **No. of Coefficients Out of Bound** | **Fault Detection Status** | **No. of Coefficients Out of Bound** | **Fault Detection Status** |
| R11 8%**↑**  R12 10% **↑** | 5 | **√** | 6 | **√** | 3 | **√** |
| R21 20% **↑**  R22 15% **↓** | 6 | **√** | 5 | **√** | 2 | **√** |
| R31 20% **↓**  R32 20% **↑**  R41 10% **↑** | 23 | **√** | 13 | **√** | 5 | **√** |
| R52 30%**↓**  R51 20% **↑** | 5 | **√** | 5 | **√** | 7 | **√** |
| R11 15% **↑**  R12 20% **↓**  R42 18 % **↑** | 78 | **√** | 57 | **√** | 37 | **√** |