



Reliability Data: Reliability Estimator Results

The following failure rates are summarized by technology and mapped to the associated material part numbers. The failure rates are highly dependent on the number of units tested, therefore, it is not recommended to compare failure rates.

Part #	MTBF / FIT		MTBF / FIT Supporting Data						
	MTBF	FIT	Usage Temp. (°C)	Confidence Level (%)	Activation Energy (eV)	Test Temp. (°C)	Test Duration (hrs)	Sample Size	Number of Failures
TAS5731MPHP	1.25x10⁹	0.8							
Component 1			55	60.0	0.7	125	1000	15643	0
Component 2			55	60.0	0.7	125	1000	151921	0

Definition of Table Terminology

Part #: The TI Orderable part number

ELFR: Early Life Failure Rate

DPPM: Defects per parts per million

MTBF: Mean Time Between Failures

FIT: Failures-in-Time. The number of failures per 1E9 device-hours

Confidence Level %: Statistical confidence level

Test Temp. (°C): Temperature at which the stress test is performed

Sample Size: Sample size is how many units were tested and would be based on the normalized value for duration

Number of Failures: The number of failures per test

Usage Temp (°C): Estimated usage temperature

Activation Energy (eV): Energy in electron volts (eV) for a particular process to occur

Test Duration (hrs): Test Duration is a field that comes from the qualification testing of a product. Since more than one test is conducted and the duration varies, this field will be normalized based on calculations using Temp, quantity and fails. This value would be equivalent unit hours.

NA: Not Applicable

TBD: To be Determined

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