

RELIABILITY DATA

LTC2058, LTC2063, LTC2064, LTC2066, LTC2067

2/14/2019

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS AT +125°C	NUMBER OF FAILURES
DFN	77	1734	1734	77	0
SC70	234	1645	1809	234	0
SOIC	77	1720	1720	77	0
	388			388	0

• BIASED HIGHLY ACCELERATED STRESS TEST AT +130°C / 85%RH

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ AT +85°C	NUMBER OF FAILURES
MSOP	231	1614	1630	739.2	0
SC70	230	1548	1614	441.6	0
SOIC	240	1620	1630	921.6	0
	701			2,102.4	0

• AUTOCLAVE AT +121°C / 100%RH

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
MSOP	230	1614	1630	64.34	0
SC70	231	1548	1614	38.81	0
SOIC	231	1620	1630	64.68	0
	692			167.83	0

• TEMP CYCLE FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
MSOP	243	1614	1630	287.5	0
SC70	233	1548	1614	194.5	0
SOIC	231	1620	1630	346.5	0
	707			828.5	0

• HIGH TEMPERATURE BAKE +175°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
MSOP	158	1630	1630	117.5	0
SC70	49	1615	1615	24.5	0
SOIC	154	1630	1630	154.0	0
	361			296.0	0

Failure Rate Equivalent to +55C, Assuming 60% Confidence Level & Activation Energy of 0.7eV = 30.3 FIT

Mean Time Between Failures (MTBF) = 3761.9 yr

(1) Assumes 20X acceleration from +85°C to +130°C.

Note: HAST, AutoClave, and Temp Cycle tests are preceded by JEDEC Preconditioning: 168h 85°C/85% R.H. plus 3x IR at 260°C

Note: 1 FIT = 1 Failure in One Billion Hours.