

RELIABILITY DATA
LT1524 / LT1525 / LT3524 / LT3525

8/21/2006

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽¹⁾ AT +125°C	NUMBER OF FAILURES ⁽²⁾
CERDIP	686	8343	9404	1,712.22	0
PLASTIC DIP	412	8352	9813	1,006.01	0
	1,098			2,718.23	0

• HIGHLY ACCELERATED STRESS TEST AT +131°C/85%RH

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS ⁽⁴⁾ AT +85°C	NUMBER OF FAILURES
PLASTIC DIP	187	9107	9324	482.44	0
	187			482.44	0

• PRESSURE COOKER TEST AT 15 PSIG, +121°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS	NUMBER OF FAILURES
PLASTIC DIP	1,119	8352	9807	96.35	1
SOIC/SOT/MSOP	139	9111	9422	5.50	0
	1,258			101.84	1

• TEMP CYCLE FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
CERDIP	482	8406	9935	42.80	0
PLASTIC DIP	171	9107	9937	162.76	0
SOIC/SOT/MSOP	90	9111	9120	11.16	0
	743			216.72	0

• THERMAL SHOCK FROM -65°C to +150°C

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE CYCLES	NUMBER OF FAILURES
CERDIP	362	8406	9935	5.43	0
PLASTIC DIP	134	9107	9236	31.40	0
SOIC/SOT/MSOP	90	9111	9120	9.00	0
	586			45.83	0

(1) Assumes Activation Energy = 1.0 Electron Volts
 (2) Failure Rate Equivalent to +55°C, 60% Confidence Level = 0.68 FITS
 (3) Mean Time Between Failures in Years = 167,760
 (4) Assumes 20X Acceleration from 85°C to +131°C
 Note: 1 FIT = 1 Failure in One Billion Hours.