

**RELIABILITY MONITOR  
STRESS TESTS  
MODULES**

<u>DEVICE</u>	<u>STRESS</u>	<u>DURATION</u>	<u>SAMPLE/C</u>	<u>CONDITIONS</u>	<u>NOTE</u>
All Modules*	Hi Temp Storage Life	48 hours	200/0	85°C / No Bias	Split Lots After Stress DS1225/30/DS12887 only
	Hi Temp Storage Life	1000 hours	20/0	70°C / No Bias	DS1643/DS5000T only
	Temperature Cycle	1000 cycles	100/0	0°C to 70°C	
	Temp Humidity Bias	959 hours	100/0	85°C/85% RH, 5.5V	DS12887 only
	Moisture Soak	960 hours	100/0	60°C/90% RH	DS1225/30/DS1643 & DS5000T only
	Package Integrity Tests				
	Physical Dimensions		6/0		To Data Sheet Specs
	Solderability	4 Hr. Steam Age	3/0	Solder = 245°C	24 Leads Tested

\* DS5000T sample size is 15 pieces per each Storage Life, Temp. Cycle & Moisture Soak.

\* DS1230 LPM and DS1643 sample sizes are 77 pieces each for Storage Life, Temp. Cycle & Moisture Soak.

Table 2

## RELIABILITY MONITOR STRESS TESTS

<u>DEVICE</u>	<u>STRESS</u>	<u>DURATION</u>	<u>SAMPLE/C</u> IC's	<u>CONDITIONS</u>	<u>NOTE</u>
Telecom PDIP only	Preconditioning #1				
	Temperature Cycle	10 cycles	231/0	-55°C to +125°C	Split Lots After Stress
	Infant Life	48 hours	231/0	125°C, 7.0 V	
All Surface Mount Pkg's	Preconditioning #2				
	Bake	24 hours	231/0	125°C, no bias	See individual devices To Infant Life
	Moisture Soak	Level 1 or 4	231/0	Level 1 or 4	
Vapor Phase Reflow	3 passes	231/0	230°C, +/- 10°C		
All IC's (Telecom sees infant life as part of P/C)	Infant Life	48 hours	231/0	125°C, 7.0 V	Split Lots After Stress
	High Voltage Life	1000 hours	77/0	125°C, 7.0 V	
	Hi Temp Storage Life	1000 hours	38/0	150°C, no bias	E/EEPROM only
	Temperature Cycle	1000 cycles	39/0	-55°C to +125°C	
	Temp Humidity Bias	959 hours	77/0	85°C/85% RH, 5.5V	
	Temp Humidity Bias	100 hours	77/0	120°C/85% RH, 5.5V	10 Device/Pkg Types
	Autoclave	96 hours	38/0	121°C, 2 Atms, no bias	All Except E/EEPROM
	Package Integrity Tests				
	Ultrasound		2/0		All Surface Mount Pkg's

Table 3

**RELIABILITY MONITOR  
STRESS TESTS**  
SIPSTIK's

<u>DEVICE</u>	<u>STRESS</u>	<u>DURATION</u>	<u>SAMPLE/C</u>	<u>CONDITIONS</u>	<u>NOTE</u>
All SipStiks	Hi Temp Storage Life	1000 hours	11/0	85°C	
	Temperature Cycle	500 cycles	11/0	-40°C to +85°C	
	Moisture Soak	384 hours	11/0	60°C/90% RH	

Table 4

**RELIABILITY MONITOR**  
**STRESS TESTS**  
TOUCH CAN

<u>DEVICE</u>	<u>STRESS</u>	<u>DURATION</u>	<u>SAMPLE/C</u>	<u>CONDITIONS</u>	<u>NOTE</u>
All Touch Can	Hi Temp Storage Life	1000 hours	30/0	70°C	
	Temperature Cycle	1000 cycles	30/0	0°C to +70°C	
	Moisture Soak	960 hours	30/0	60°C/90% RH	

Table 5