

**RELIABILITY MONITOR REPORT
FOR**

SOT Package

Dallas Semiconductor

**4401 South Beltwood Parkway
Dallas, TX 75244-3292**

**This Report was prepared by
Dallas Semiconductor Reliability Engineering**

Summary:

The data in the tables that follow was generated as the result of an on-going Package Reliability Monitor. The assemblies covered by this package monitor are:

ASSY SITE	PINS	PACKAGE			
Carsem	3	SOT223	Carsem	3	SOT23
Carsem	5	SOT23	Carsem	8	SOT23
Carsem	3	SOT23 (Pb-Free)	Carsem	5	SOT23 (Pb-Free)
Fastech	3	SOT23	Fastech	5	SOT23
Hana	3	SOT223	Hana	3	SOT223 (Pb-Free)
ISPL (ATEC, PI)	3	SOT23	ISPL (ATEC, PI)	5	SOT23
ISPL (ATEC, PI)	3	SOT23 (Pb-Free)	ISPL (ATEC, PI)	5	SOT23 (Pb-Free)
ISPL (ATEC, PI)	3	SOT23 ATEC	NSEB	3	SOT23
NSEB	5	SOT23	NSEB	3	SOT23 (Pb-Free)
NSEB	5	SOT23 (Pb-Free)	NSEB	8	SOT23 (Pb-Free)
Unisem	3	SOT23			

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 8460 FITS: 13.5

The parameters used to calculate this failure rate are as follows:

Cf: 60% Ea: 0.7 B: 0 Tu: 25 °C Vu: 5.5 Volts

The reliability data follows. At the start of this data is a description of the assembly vehicle used to generate this reliability data. The next section is the detailed reliability data for each stress. The reliability data section includes the latest data available. This report covers data between 04/01/2005 and 03/31/2006 .

Assembly Information:

Package Type: SOT23 50
 Flammability: UL 94-V0
 Moisture Sensitivity
 (JEDEC J-STD20A) Level 1
 Date Code Range: 0513 to 0513

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0513	DS4303	125C, 3.6 VOLTS	1000 HRS	72	0	
Total:						0	

Assembly Information:

Package Type: SOT23 (Pb-Free) 50
 Flammability: UL 94-V0
 Moisture Sensitivity
 (JEDEC J-STD20A) Level 1
 Date Code Range: 0523 to 0523

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
LOW TEMP OP LIFE	0523	DS4303	25 C, 3.6 VOLTS	1000 HRS	72	0	
Total:						0	

PRECONDITIONING LEVEL 1

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0523	DS4303	125C	24 HRS	308		
MOISTURE SOAK			85 C/85% R.H.	168 HRS	308		
CONVECTION REFLOW			260C +/-5C	3 PASS	308	0	
					Total:	0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
STORAGE LIFE	0523	DS4303	150C	1000 HRS	77	0	
					Total:	0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
TEMP CYCLE	0523	DS4303	-55C TO 125C	1000 CYS	77	0	
					Total:	0	

TEMPERATURE HUMIDITY BIAS

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HAST	0523	DS4303	130C, 85%R.H.,3.5V	100 HRS	76	0	
					Total:	0	

UNBIASED MOISTURE RESISTANCE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
AUTOCLAVE	0523	DS4303	121C, 2 ATM STEAM, UNBIASED	168 HRS	71	0	
					Total:	0	

FAILURE RATE:**MTTF (YRS): 8460****FITS: 13.5**