

RELIABILITY MONITOR REPORT
FOR

SOT Package

Dallas Semiconductor

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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)

The calculated failure rate for this assembly is:

FAILURE RATE: MTTF (YRS): 18801 FITS: 6.1

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 10/1/04 and 9/30/05 .

Assembly Information:

Package Type: SOT223 137
 Flammability: UL 94-V0
 Moisture Sensitivity
 (JEDEC J-STD20A) Level 1
 Date Code Range: 0436 to 0444

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
HIGH TEMP OP LIFE	0436	DS1233	125C, 5.5 VOLTS	1000 HRS	80	0	
HIGH TEMP OP LIFE	0444	DS1233	125C, 5.5 VOLTS	1000 HRS	80	0	
				Total:		0	

PRECONDITIONING LEVEL 1

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	FA NO
ULTRASOUND	0436	DS1233	J-STD-020		241	0	
STORAGE LIFE	0436	DS1233	125C	24 HRS	241	0	
MOISTURE SOAK			85 C/85% R.H.	168 HRS	241	0	
CONVECTION REFLOW			235C +5/-0C	3 PASS	241	0	
PRECONDITION U/S	0436	DS1233	J-STD-020		4	0	
ULTRASOUND	0444	DS1233	J-STD-020		241		
STORAGE LIFE	0444	DS1233	125C	24 HRS	241		
MOISTURE SOAK			85 C/85% R.H.	168 HRS	241		
CONVECTION REFLOW			235C +5/-0C	3 PASS	241	0	

