

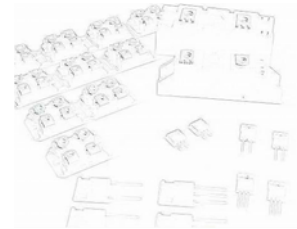
Reliability Experiment Summary

SBD, MBR30U100CTH (30A, 100V, TO-220AB, Halogen-Free)

March 2012

Date Code: LS1151

NO	TEST ITEM	TEST CONDITION	DURATION	FAILURE RATE	PARAMETER	AVG	STD	MAX	MIN	
1	OPERATING LIFE	IF = 15A @ Ta = 25°C	72 HOURS	0 / 22	INITIAL	V _F (V)	0.71705	1.8381	0.7200	0.7140
						V _B (V)	121.29	2.4686	123.90	115.80
						I _R (μA)	4.1491	0.8836	6.2200	2.7900
					FINAL	V _F (V)	0.71736	2.2156	0.7200	0.7130
						V _B (V)	121.10	2.8473	123.90	114.40
						I _R (μA)	4.1464	0.7571	5.4900	2.8100
2	HIGH TEMPERATURE REVERSE BIAS	V _B = 80V @ Ta = 125°C	72 HOURS	0 / 22	INITIAL	V _F (V)	0.7160	0.3948	0.7170	0.7160
						V _B (V)	120.65	0.6486	121.50	118.10
						I _R (μA)	3.7127	0.1418	3.9500	3.4500
					FINAL	V _F (V)	0.71636	0.4924	0.7170	0.7160
						V _B (V)	120.79	0.3956	121.60	120.00
						I _R (μA)	3.7236	0.1508	4.0400	3.4300
3	PRESSURE COOKER	Ta = 121°C P = 15PSIG	8 HOURS	0 / 22	INITIAL	V _F (V)	0.71709	1.0193	0.7200	0.7160
						V _B (V)	120.8	1.3436	123.80	116.80
						I _R (μA)	3.8055	0.2225	4.2600	3.2600
					FINAL	V _F (V)	0.71659	1.2968	0.7190	0.7130
						V _B (V)	120.35	1.7660	123.60	114.20
						I _R (μA)	3.8218	0.2904	4.1200	3.2500



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NO	TEST ITEM	TEST CONDITION	DURATION	FAILURE RATE	PARAMETER	AVG	STD	MAX	MIN	
4	FORWARD SURGE	8.3ms HALF-SINE SUPERIMPOSED, Duration = 1 SHOT	IFSM=350 A	0 / 22	INITIAL	V _F (V)	0.71755	1.9935	0.7200	0.7130
						V _B (V)	121.85	2.7229	123.90	111.70
						I _R (μA)	3.6809	0.3163	4.8600	3.3100
					FINAL	V _F (V)	0.71709	2.1137	0.7190	0.7140
						V _B (V)	121.97	2.2274	123.90	115.10
						I _R (μA)	3.6982	0.3074	4.7600	3.3200
5	TEMPERATURE CYCLING	AIR TO AIR 100 °C / 30MIN -10 °C / 30MIN	8 CYCLES	0 / 22	INITIAL	V _F (V)	0.71473	1.6383	0.7170	0.7100
						V _B (V)	120.89	2.1191	123.00	113.50
						I _R (μA)	4.0982	0.6892	5.7100	3.3400
					FINAL	V _F (V)	0.71409	1.9739	0.7160	0.7080
						V _B (V)	120.83	2.1191	123.00	113.20
						I _R (μA)	4.1150	0.7134	5.7500	3.3500

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