

TSM1NB60CW Comparison Report

Prepared by Ann Wang
Approved by Danny Lin
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Reversion for

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Comparison report

Compared:

	Before	After	Result																																																			
compared:	1. Wafer : 5" 2. DC&EAS see attached test data 3. RthJC=10°C/W 4. Soft solder(see below MCD data)	1. Wafer : 6" 2. DC&EAS see attached test data 3. RthJC=10°C/W 4.Epoxy(see below MCD data)	New version characteristic s are fully compatible with old version and fully meet data sheet																																																			
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Customer TSC Mode: 8 Model: TK-1168
 Device: TSM1NB60CW Lot No.: TSM1NB60CW Test by: ttk
 Label1 Label4
 Label2 Label5 Test time: 2016-10-14 16:44
 Label3 Print time: 2016-10-14 16:44

- 1: VFSDS1 IS=0.10mA PW=0.3mS Min=0.300V Max=2.000V VRG=9.999V (VFSDS1) (PRT) 8 0 100.00%
- 2: VGSTH1 ID=100.0uA PW=0.3mS Min=2.000V Max=4.000V VRG=9.999V (VGSTH1) (PRT) 8 0 100.00%
- 3: IGSS1 VGS=20.00V PW=50mS Max=90.0nA IRG=999.9nA (IGSS1) (PRT) 8 0 100.00%
- 4: IGSS2 VGS=20.00V PW=50mS Max=90.0nA IRG=999.9nA (IGSS2) (PRT) (REV) 8 0 100.00%
- 5: IDSS1 VDS=600V PW=50mS Max=9.000uA IRG=9.999uA (IDSS1) (PRT) 8 0 100.00%
- 6: RDSON1 ID=0.300A VGS=10.00V PW=0.3mS Max=13.000Ohm ORG=99.990Ohm (RDSON1) (PRT) 8 0 100.00%
- 7: VFSDS2 IS=1.000A PW=0.3mS Max=1.400V VRG=9.999V (VFSDS2) (PRT) 8 0 100.00%
- 8: VGSTH2 ID=250.0uA PW=2.5mS Min=2.500V Max=4.500V VRG=9.999V (VGSTH2) (PRT) 8 0 100.00%
- 9: RDSON2 ID=0.500A VGS=10.00V PW=0.3mS Max=10.000Ohm ORG=99.990Ohm (RDSON2) (PRT) 8 0 100.00%
- 10: BVDSS1 ID=250.0uA PW=5mS Min=600V Max=800V VRG=1999V (BVDSS1) (PRT) 8 0 100.00%
- 11: BVDSS2 ID=1.000mA PW=5mS Min=600V Max=800V VRG=1999V (BVDSS2) (PRT) 8 0 100.00%
- 12: BVDSS3 ID=10.00mA PW=5mS Min=600V Max=800V VRG=1999V (BVDSS3) (PRT) 8 0 100.00%
- 13: FUNC1 Max=30V dBVDSS=BVDSS2-BVDSS1 (FUNC1) (PRT) 8 0 100.00%
- 14: IDSS2 VDS=600V PW=50mS Max=9.000uA IRG=9.999uA (IDSS2) (PRT) 8 0 100.00%
- 15: IGSS3 VGS=20.00V PW=50mS Max=90.0nA IRG=999.9nA (IGSS3) (PRT) 8 0 100.00%
- 16: IGSS4 VGS=20.00V PW=50mS Max=90.0nA IRG=999.9nA (IGSS4) (PRT) (REV) 8 0 100.00%

Item	Count	Min	Max	Avg	Sigma	K-3Sigma	K+3Sigma	MIN	MAX	Limit L	Limit H
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GO: 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
 NG: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Yield%: 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00%
 NO.] VFSDS1] VGSTH1] IGSS1 (I] IGSS2 (I] IDSS1 (RDSON1] VFSDS2] VGSTH:] RDSON2 (C] BVDSS1] BVDSS:] BVDSS:] FUNC1] IDSS2 (I] IGSS3 (I] IGSS4 (nA)

5"	1(T:732)	0.509	3.592	0.1	1.9	0.023	7.87	0.866	3.705	8.14	666	668	684	2	0.020	13.1	0.1
	2(T:732)	0.507	3.545	0.2	2.1	0.025	7.86	0.874	3.656	8.19	686	682	687	4	0.021	13.4	0.1
	3(T:732)	0.511	3.559	0.1	2.1	0.024	7.67	0.876	3.670	7.98	664	667	684	3	0.020	13.3	0.1
	4(T:732)	0.508	3.566	0.1	1.9	0.024	7.80	0.866	3.678	8.14	664	666	683	2	0.021	13.1	0.1
4II	max	0.511	3.592	0.200	2.100	0.025	7.870	0.876	3.705	8.190	686.000	682.000	687.000	4.000	0.021	13.400	0.100
	average	0.509	3.566	0.125	2.000	0.024	7.800	0.871	3.677	8.113	670.000	670.750	684.500	2.750	0.021	13.225	0.100
	min	0.511	3.592	0.200	2.100	0.025	7.870	0.876	3.705	8.190	686.000	682.000	687.000	4.000	0.021	13.400	0.100

6"	5(T:732)	0.511	3.433	0.1	2.3	0.024	7.18	0.847	3.538	7.48	650	659	669	9	0.020	13.5	0.1
	6(T:732)	0.508	3.523	0.1	1.9	0.023	7.18	0.844	3.631	7.48	655	656	668	1	0.020	13.0	0.1
	7(T:732)	0.508	3.457	0.1	2.2	0.024	7.29	0.845	3.562	7.60	658	655	672	3	0.020	13.5	0.1
	8(T:732)	0.508	3.455	0.1	2.0	0.023	7.24	0.845	3.560	7.54	652	663	670	11	0.020	13.1	0.1
6S1	max	0.511	3.523	0.100	2.300	0.024	7.290	0.847	3.631	7.600	658.000	663.000	672.000	11.000	0.020	13.500	0.100
	average	0.509	3.467	0.100	2.100	0.024	7.223	0.845	3.573	7.525	653.750	658.250	669.750	6.000	0.020	13.275	0.100
	min	0.511	3.523	0.100	2.300	0.024	7.290	0.847	3.631	7.600	658.000	663.000	672.000	11.000	0.020	13.500	0.100

EAS test

5"	BVDSS	VDD	L(mH)		6"	BVDSS	VDD	L(mH)	
411	600	50	10		6S1	600	50	10	
	IAS(A)		EAS(mJ)			IAS(A)		EAS(mJ)	
1	1.8		16.2		1	2		20	
2	2		20		2	1.9		18.05	
Max	2		20		Max	2		20	
Ave	1.9		18.05		Ave	1.95		19.0125	
Min	1.8		16.2		Min	1.9		18.05	