

Product Name: TMP89FM40NG

Package Name: SDIP24

1. Thermal tests

Test Item	Test Condition	Failure Size / Sample Size
Resistance to Soldering Heat for Packages	Solder temperature : 260 deg.C Max, Immersion time : 10s 1 time	0 / 32
Temperature Cycling	-65deg.C (20min) to 25deg.C to 150deg.C (20min) to 25deg.C 300 cycles	0 / 32
-	-	-
-	-	-

2. Mechanical tests

Test Item	Test Condition	Failure Size / Sample Size
Solderability	Solder temperature : 245deg.C for Solder type Sn-3Ag-0.5Cu Solder immersion time : 5s , Flux type : non-active flux , 1 time	0 / 22
Lead Integrity (Tension)	Tension : according to relevant specification Maintain the specified tension for 30s	0 / 22
Lead Integrity (Bend)	Force : according to relevant specification Bend from -15deg. to 15deg. to 0deg. 1 time	0 / 22
-	-	-
-	-	-

3. Life tests

Test Item	Test Condition	Failure Size / Sample Size
High Temperature Operating Life	Max operating temperature, Max operating voltage , 1000h	0 / 32
High Temperature Storage Life	Max storage temperature , 1000h	0 / 32
High Temperature High Humidity Bias	Ta=85deg.C, RH=85%, Max operating voltage , 1000h	0 / 32
Autoclave	Ta=121deg.C, RH=100%, 203kPa , 96h	0 / 32
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Estimated Failure Rate

Product Name	Estimated Failure Rate
TMP89FM40NG	9 Fit

Note)

This failure rate was calculated on the assumption that the device operated normally at $T_a = 60$ deg.C, under normal environmental conditions without any surge, etc.

This calculation was performed at development stage using data from the same technology with the reported device above.

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