

Product Name: TC7SH09F

Package Name: SMV

1. Thermal tests

Test Item	Test Condition	Failure Size / Sample Size
Heat resistance (Reflow)	Peak : 260 deg.C(a moment) Reflow zone : 230 deg.C 30 to 50 s Preheat : 180 to 190 deg.C , 60 to 120 s 4 times	0 / 32
Heat resistance (Flow)	Peak : 260 deg.C Immersion time : 10 s Once	0 / 32
Heat resistance (Iron)	Temperature of the iron tip : 400 deg.C Time : 3 s Once	0 / 32
Temperature cycling	- 65 deg.C(30 min) to 150 deg.C(30 min) ,100 cycles	0 / 50

2. Mechanical tests

Test Item	Test Condition	Failure Size / Sample Size
Solderability	Solder bath : Sn-Ag-Cu 245 deg.C , 5 s ,once (using Flux) Solder bath : Sn-Pb 230 deg.C , 5 s ,once (using Flux)	0 / 11
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-	-	-
-	-	-
-	-	-

3. Life tests

Test Item	Test Condition	Failure Size / Sample Size
Steady state operation	Ta = 125 deg.C, VCC = 5.5V ,1000 h	0 / 30
High temp. storage	Ta = 150 deg.C ,1000 h	0 / 30
High temp. high humidity storage	Ta = 85 deg.C, RH = 85% ,1000 h	0 / 30
High temp. high humidity bias	Ta = 85 deg.C, RH = 85%, VCC = 5.5V ,1000 h	0 / 30
Pressure cooker test	Ta = 121 deg.C(203kPa)(Unsaturated) ,96h	0 / 20
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Estimated Failure Rate

Product Name	Estimated failure rate
TC7SH09F	1.7 Fit or less

Above estimated value is determined with the standard operation under the general environment:*

*The general environment here means the conditions of $T_j = 55$ degree C and no application of surge and so on.

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