

Product Name: TLP292-4

Package Name: SO16

1. Thermal tests

| Test Item | Test Condition | Failure Size / Sample Size |
|--------------------------|--|----------------------------|
| Heat resistance (Reflow) | Peak : 260 deg.C Reflow zone : 255 deg.C 30 to 40 s, 217 deg.C 60 to 150 s Preheat : 150 to 200 deg.C , 60 to 120 s 2 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 : 350 deg.C Time : 3 s Once | 0 / 32 |
| Temperature cycling | - 55 deg.C(30 min) to 125 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 |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |

3. Life tests

| Test Item | Test Condition | Failure Size / Sample Size |
|----------------------------------|---|----------------------------|
| Steady state operation | Ta = 25 deg.C, IF = ± 50 mA, PC = 100mW ,1000 h | 0 / 30 |
| High temp. bias | Ta = 125 deg.C, VCE = 80V ,1000 h | 0 / 30 |
| High temp. storage | Ta = 125 deg.C ,1000 h | 0 / 30 |
| High temp. high humidity storage | Ta = 85 deg.C, RH = 85% ,1000 h | 0 / 30 |
| Pressure cooker test | Ta = 121 deg.C(203kPa)(Unsaturated) ,96 h | 0 / 20 |
| - | - | - |

The information contained in Reliability Test Report represents the result of our internal reliability tests conducted in accordance with JEITA ED-4701 test standards, and is provided for your reference only.
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For detailed reliability test information, such as test conditions and criteria, please contact your Toshiba sales representative.

Estimated Failure Rate

| Product Name | Estimated failure rate |
|--------------|------------------------|
| TLP292-4 | 0.84 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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Moisture Absorption Control Level (Moisture Sensitivity Level)

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Always store the Product under moisture sensitivity level equivalent to level 1 (JEDEC J-STD-020 Moisture Sensitivity Level). In the event the Product is stored otherwise, the applicable warranty, if any, is void.

Always perform reflow soldering in accordance with methods and conditions as specified in applicable engineering documents or specifications provided by Toshiba, or as instructed in writing by your TOSHIBA sales representative.

In the event the Product is soldered otherwise, the applicable product warranty, if any, is void.

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