

Product Name: TLP2531

Package Name: DIP8 THD

1. Thermal tests

| Test Item | Test Condition | Failure Size / Sample Size |
|------------------------|---|----------------------------|
| 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 |
| Lead integrity | Weight = 2.5 N 0 deg. to 90 deg. to 0 deg. Bend , 3times | 0 / 11 |
| - | - | - |
| - | - | - |
| - | - | - |

3. Life tests

| Test Item | Test Condition | Failure Size / Sample Size |
|----------------------------------|---|----------------------------|
| Steady state operation | Ta = 70 deg.C, IF = 25mA, PO = 35mW ,1000 h | 0 / 30 |
| High temp. bias | Ta = 100 deg.C, VCC = VO = 15V ,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 |
|--------------|------------------------|
| TLP2531 | 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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Product Name: TLP2531
Package Name: DIP8 THD

1.Flow

Number: Only once
Solder temperature : 260 deg.C maximum
Soldering time : Within 10 seconds
Preheat : 150 deg.C , 60 to 120 seconds

NOTE: Apply up to stopper part or point 1.5 mm or 2.0mm more far from the body of device. (It depends on each specifications.)

If the double-wave method is used, keep the total dwell time for a first bath and a second bath within 10 seconds.

Preheating conditions are based on the surface temperature of the PWB by the solder mounting side.

(When the PWB surface by the device side is preheated, its condition should not exceed the maximum storage temperature of a device.)

2.Others

We urge you to verify well before mounting to assure enough solder joint strength.

Always solder the Product in accordance with the heat-resistance mounting conditions set forth above. In the event the Product is soldered otherwise, the applicable product warranty, if any, is void.

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