

Estimated Failure Rate

Product Name	Estimated Failure Rate
TMPM384FDFG	1 Fit or less

Note)

This failure rate was calculated on the assumption that the device operated normally at $T_a = 55 \text{ deg.C}$, 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.

The Estimated Failure Rate contained herein represents the result of our internal product reliability tests, and is provided for your reference only.
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For detailed reliability test information, please contact your Toshiba sales representative.

Product Name: TPM384FDFG

Package Name: LQFP144

1.Reflow

Number: 2 times maximum

Peak temperature : 260 deg.C maximum instantaneously

Heat : 230 deg.C minimum for 30 to 50 seconds

Pre-heat : 150 to 190 deg.C for 60 to 120 seconds

NOTE: All temperatures refer to the package body surface.

The heat-resistant temperature profile is shown in Fig.1.

The temperatures in this profile are the maximum guaranteed temperatures that the device endures.

Select the temperatures for a pre-heat and a heat most suitable for your solder paste type, etc. within the conditions described in Fig.1.

This package is dry-packed in a moisture barrier bag. After opening the bag, keep the devices at or lower than 30deg.C/ 70%RH and complete a final reflow process within 168hours.

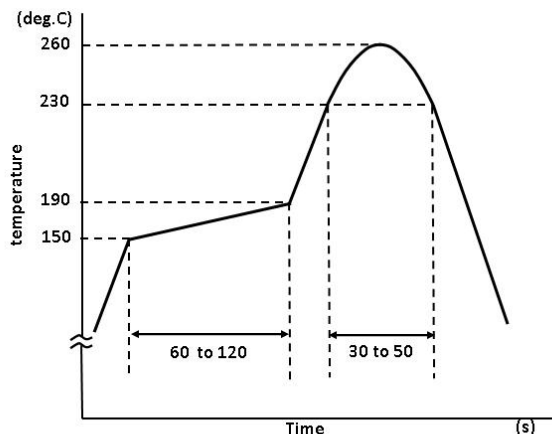


Fig.1 Example of Heat-resistant Temperature Profile

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.

Moisture Absorption Control Level (Moisture Sensitivity Level)

Product Name : TPM384FDG

Package Name : LQFP144

Always store the Product under moisture sensitivity level equivalent to level 3 (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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