⚠注意・使用上の注意/⚠Caution · Notice

■使用上の注意（保管・使用環境）/Notice (Storage and Operating Conditions)

The Moisture Sensitivity Level of the DIL component is Level 3 according to theIPC/JEDEC J-STD-020D. The part is delivered in a dry pack. The manufacturing floor time (out of bag) at the customer's end is 168 hours. Maximum soldering peak temperature for the DIL package is 245°C/40sec, measured from the package body.

Following instruction shall be followed:

1. Calculated shelf life in sealed bag: 12 months at <40°C and <90% relative humidity (RH).
2. Maximum soldering peak temperature for the package is 245°C/40sec, measured from the package body.
3. After bag is opened, devices that will be subjected to reflow solder or other high temperature process must be
   a) Stored at <10%RH
   or
   b) Mounted within 168 hours of factor conditions <30°C/60%RH.
   Note: Do not re-store devices that have exposed >10% RH conditions.
4. Devices require bake, before mounting, if:
   a) Humidity Indicator Card is > 10% when read at 23±5°C
   b) 3a or 3b not met.
5. If baking is required, devices may be baked for 24 hours at 85°C.
   Note: Also Tape&Reel materials are applicable for baking at 85°C.

Note: Packing materials and procedures according to IPC/JEDEC J-STD-033

Note: Level and body temperature defined by IPC/JEDEC J-STD-020

■使用上の注意（実装上の注意）/Notice (Soldering and Mounting)

A forced convection reflow oven is recommended to be used for soldering DIL components. IR-based reflow ovens are not generally suitable for lead-free soldering.
Figure 7 presents a general forced convection reflow solder profile and it also shows the typical phases of a reflow process. The reflow profile used for soldering the DIL package should always follow the solder paste manufacturer's specifications and recommended profile.
If washing process is done after the soldering process, it must be noted that ultrasonic agitation wash after reflow is not allowed for Murata's DIL packaged MEMS components. As mentioned before (section 5.2) a no-clean paste is recommended.

The typical ramp up rate is 3°C/second max. For lead-free soldering with SnAgCu solder the pre-heat temperature zone is ~ 150°-200° and should last for ~ 60-180 seconds. Time above the liquidus temperature (~217°C) should be ~ 60-150 seconds. The reflow peak max. temperature should not exceed 245°. Temperature within actual peak temperature is typically ~20-40 seconds.
Ramp down rate should generally be 6°C/second max.
Maximum number of assembly reflow cycles for SCC2000 series components is three.