

SEIKO EPSON CORPORATION
Microdevice Operation Div. TDBU
EPSON TOYOCOM CORPORATION

Carrier tape fixing method PCN at the end of reel core

Dear Valued Customer:

Thank you for choosing EPSON TOYOCOM CORP. products as your products of choice. EPSON TOYOCOM CORP. always makes an effort to improve the characteristics, performance and delivery of our products. Today ETC would like to announce that the carrier tape fixing method will change on all of the products that we ship in Tape & Reel form.

1. Products Affected: All of products with Tape& Reel form

1) Sensing Device

- XV-3500CB/XV-3700CB/XV-8000CB/XV-8100CB/XV-8000LK

2) SPXO

- SG-3050BC/SG-3030JC/SG-3040JC/SG-3030JF/SG-3030LC/SG-3040LC
- SG-645 series/SG-636 series/SG-615 series
- SG-310 series/SG-210 series/SG-211 series/ SG-150 series
- TCO-710x series/SG-770 SCD/TCO-708x series
- SG-8003BA/SG-8003CE/SG-8003LB/SG-8003JF/SG-8003CA
- SG-8002CE/SG-8002LB/SG-8002JF/SG-8002CA/SG-8002JC/SG-8002JA
- SG-9001LB/SG-9001CA/SG-9001JC
- HG-2150CA
- HG-8002JA (Not accept new order due to under EOL process)

3) VCXO

- VG-4231CE/VG-4231CB/VG-4531CB/VG-4231CA/VG-4501CA/VG-4512CA
- TCO-291J/TCO-2000 series/TCO-2100 series(Not accept new order due to under EOL process)
- VG-1201CA(Not accept new order due to under EOL process)

4) TCXO

- TG-3530SA
- TG-5021BA/TG-5021CG/TG-5025CG/TG-5025BA/TG-5010LH/TG-5012LH
- TG-5031BA/TG-5045BA/TG-5010CG/TG-5005CG/TG-5021CE
- TG-5035CJ/TG-5035CG/TG-5035CE/TC-5860 series/TCO-8870 series
- TG-5005CE(Not accept new order due to under EOL process)

5) RTC

- RX-4045SA/RX-4045NB/RX-4581NB/RX-4565SA/RX-4801SA
- RTC-4701JE/RTC-4701NB/RTC-4574SA/RTC-4574JE/RTC-4574NB/RX-4574LC
- RTC-4543SA/RTC-4543SB/RX-4575LC/RX-4571LC/RX-4571NB/RX-4571SA
- RX-5412SF/RX-8025SA/RX-8025NB/RTC-8564JE/RTC-8564NB/RX-8564LC
- RX-8571LC/RX-8571NB/RX-8571SA/RX-8581SA/RX-8581JE/RX-8581NB
- RX-8731LC/RX-8801SA/RTC-7301SA/RTC-72423/RX-4803SA/RX-8803SA
- RA-4574SA/RA-8564SA/RA-8581SA
- RX-4801JE/RX-8801JE(Not accept new order due to under EOL process)

6) AT crystal units

- TSX-7050/TSX-1/TSX-1A(Not accept new order due to under EOL process)
- TSX-6035/TSX-5(Not accept new order due to under EOL process)
- TSX-5032/TSX-8A(Not accept new order due to under EOL process)
- TSX-4025/TSX-10A(Not accept new order due to under EOL process)
- TSX-3225/FA-365/FA-238/FA-238V/FA-238G/FA-23A/FA-20H

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- FA-206/FA-128/FA-12T/FA-118T
- MA-306/MA-406/MA-505/MA-506
- FA-248/FA-23H/MA-406H(Not accept new order due to under EOL process)

7) TF crystal units

- MC-146/MC-156/MC-306/MC-30A/MC-405/MC-406
- FA-255/FC-145/FC-135/FC-13F/FC-13E/FC-13T/FC-13A/FC-13D/FC-12M

8) SAW OSC

- XG-1000CA/XG-1000CB/EG-2021CA/EG-2001CA/EG-2002CA
- EG-2121CA/EG-2102CA/EG-2101CA/EG-4121CA/EG-4101CA

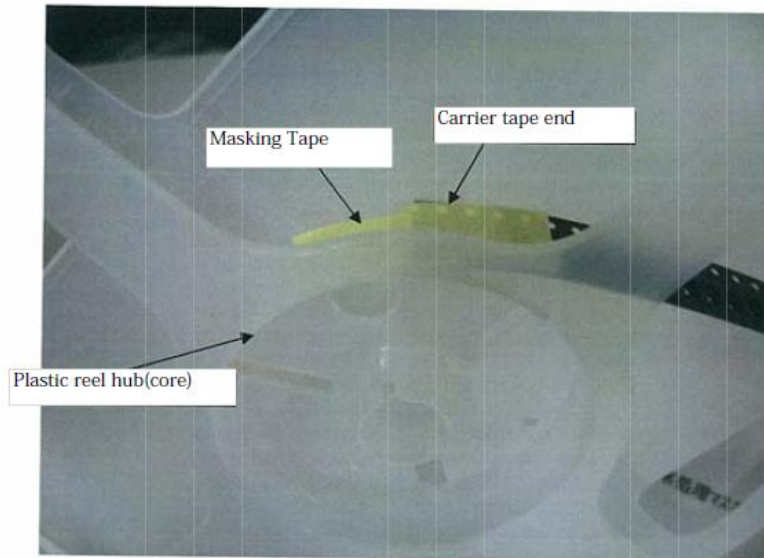
9) SAW resonator/Filter

- NS-21R/NS-32R/FS-335/FS-555/FS-585/FF-555/FF-32N

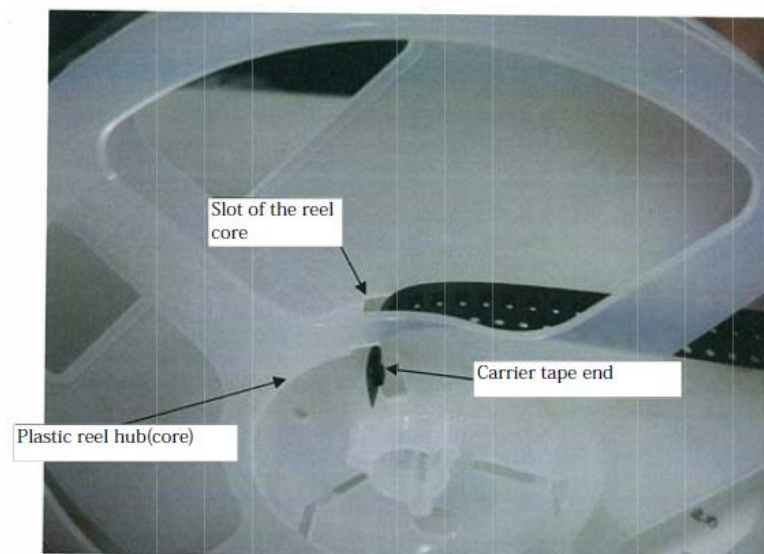
2. **PCN items**

Carrier tape end of reel core side fixing method will be changed.

Present: Fix the carrier tape end on the reel core using masking tape.



NEW: Carrier tape end will be fixed by inserting the slot of the plastic reel hub (core).



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3. **PCN reason**

Some customers requested ETC to improve the problem that the carrier tape end does not free when it will be end during the mounting machine operation due to the masking tape adhesivity.

4. **Schedules**

ETC will start new T&R method from Oct/2011 production. We will replace with FIFO after October production, so if you have any strong concern on this PCN and wait until your verification, please contact your area EPSON TOYOCOM CORP. sales. We will ship the new method taping unless we will receive objection of this change.

5. **Others**

There is no change on the specification sheet, and environmentally hazardous substances because of nothing change of any using material of packing and shipping materials. The shipping specification will be revised. If you need to replace it, please request ETC sales members.

We believe this PCN will improve efficiency of your assembling work.

Sincerely yours,

Epson Toyocom Corporation
Business Planning Department