CnC Tech

Industrial Cable and Connector Technology

CnC Tech Soldering Recommendations for the 3X10, 3X20, and 3221 Series

Recommended temperature and time periods for the soldering process

Series	Soldering Method	Temperature in the furnace (lead-free)	Plastic	Furnace time	Soldering time
3020-XX-0100-00	wave	235°C ± 5°C	9T	4~6 mins.	5±0.5 sec
	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3020-XX-0200-00	wave	235°C ± 5°C	9T	4~6 mins.	5±0.5 sec
	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3020-XX-0300-00	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3020-XX-0300-00-TR (6T)	reflow	260°C ± 5°C	6T	4~6 mins.	5±0.5 sec
3020-XX-0300-00-TR	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3220-XX-0100-00	wave	235°C ± 5°C	9T	4~6 mins.	5±0.5 sec
	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3220-XX-0200-00	wave	235°C ± 5°C	9T	4~6 mins.	5±0.5 sec
	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3220-XX-0300-00	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3220-XX-0300-00-TR	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3221-XX-0100-00	wave	235°C ± 5°C	9T	4~6 mins.	5±0.5 sec
	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3221-XX-0200-00	wave	235°C ± 5°C	9T	4~6 mins.	5±0.5 sec
	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3221-XX-0300-00	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3221-XX-0300-00-TR	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3010-XX-001-12-00	wave	235°C ± 5°C	PBT	4~6 mins.	5±0.5 sec
3010-XX-001-13-00	wave	235°C ± 5°C	PBT	4~6 mins.	5±0.5 sec
3010-XX-002-12-00	wave	235°C ± 5°C	PBT	4~6 mins.	5±0.5 sec
3010-XX-002-13-00	wave	235°C ± 5°C	PBT	4~6 mins.	5±0.5 sec
3010-XX-003-12-00	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3010-XX-003-13-00	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3210-XX-003-12-00	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3110-XX-003-11-00-TR	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3110-XX-003-12-00-TR	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3110-XX-003-13-00-TR	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3110-10-001-11-00	wave	235°C ± 5°C	9T	4~6 mins.	5±0.5 sec
	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3110-10-001-12-00	wave	235°C ± 5°C	9T	4~6 mins.	5±0.5 sec
	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec
3110-10-001-13-00	wave	235°C ± 5°C	9T	4~6 mins.	5±0.5 sec
	reflow	260°C ± 5°C	9T	4~6 mins.	5±0.5 sec

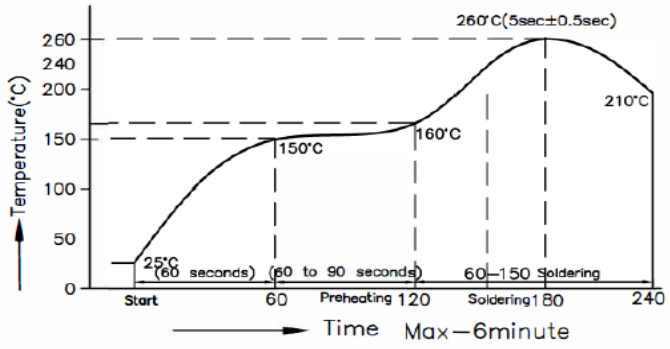
Series	Soldering Method	Temperature	Plastic	Soldering time
3020-XX-0100-00 (6T)	manual	380°C-400°C	6T	1±0.5 sec
3020-XX-0200-00 (6T)	manual	380°C-400°C	6T	1±0.5 sec
3020-XX-0300-00 (6T)	manual	380°C-400°C	6T	1±0.5 sec
3010-XX-003-12-00 (6T)	manual	380°C-400°C	6T	1±0.5 sec
3010-XX-003-13-00 (6T)	manual	380°C-400°C	6T	1±0.5 sec
3210-XX-001-12-00 (6T)	manual	380°C-400°C	6T	1±0.5 sec

*Nylon 6T insulator material (tray packaging) are only for use in Manual Soldering.
*Nylon 9T insulator material and Nylon 6T insulator material (TR packaging) are for use in Reflow, Wave or Manual Soldering.

Reflow Soldering

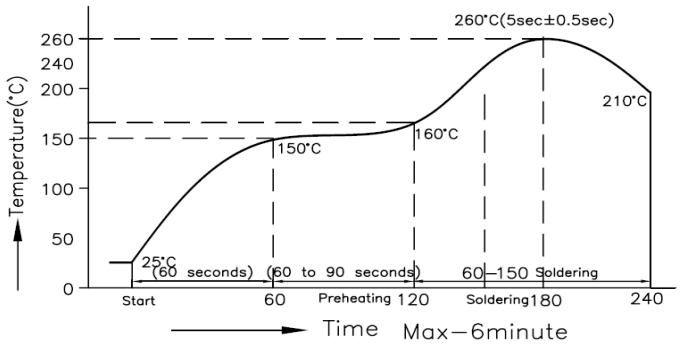
Solderbility Profile

Sub=Nylon 6T Material Temperature Specification

Solder regular Condition	1)Soldering temp:260°C±5°C 2)Time:5±0.5 sec 3)Solder wetting percentage:95% min
Reflow Condition	**Test Conditions**
 Nylon 6T Recommended Temperature Profile	1)Solder Method: Reflow or Wave -Soldering 2)Environment: Room air 3)Solder Composition: Soldering Paste 4)Test Board: 52mmX36.5mmX1.6mm thick 5) This temperature profile is based on the above conditions. Individual applications the actual temperature may vary.Consult your solder paste and equipment manufacturer for specific recommendations 6)There must not be visible defect after testing

Solderbility Profile

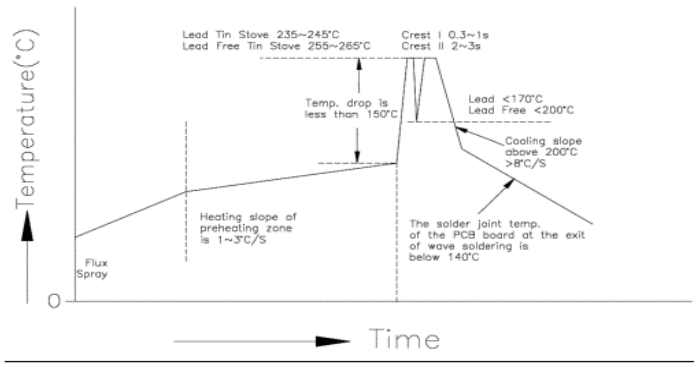
Sub=Nylon 9T Material Temperature Specification

Solder regular Condition	1)Soldering temp:260°C±5°C 2)Time:5±0.5 sec 3)Solder wetting percentage:95% min
Reflow Condition	Test Conditions
 Nylon 9T Recommended Temperature Profile	1)Solder Method: Reflow or Wave 2)Environment: Room air 3)Solder Composition: Soldering Paste 4)Test Board: 52mmX36.5mmX1.6mm thick 5) This temperature profile is based on the above conditions. Individual applications the actual temperature may vary.Consult your solder paste and equipment manufacturer for specific recommendations 6)There must not be visible defect after testing

Wave Soldering

Solderbility Profile

Temperature Specification

Solder regular Condition	1)Lead tin stove 235~245 °C Lead Free tin stove 255~265 °C 2)Time:5±0.5 sec 3)Solder wetting percentage:95% min.
Wave Soldering Condition	Neltron Test Conditions
	1)Solder Method: Wave 2)Environment: Room air 3)Solder Composition: Soldering Paste 4)Test Board: 52mmX36.5mmX1.6mm thick 5) This temperature profile is based on the above conditions. Individual applications the actual temperature may vary.Consult your solder paste and equipment manufacturer for specific recommendations 6)There must not be visible defect after testing