

## Sn60Pb40 C6

Water Soluble Core Wire

### **Product Description**

Sn60Pb40 C-6 is a "neutral" organic water-soluble formula for use in flux-cored solder wire. Sn60Pb40 C-6 has specially been developed to be more heat stable as compare to normal organic water-soluble core flux. Due to its "neutral" organic nature, the flux is partially decomposed during the heat of soldering, resulting in residue which is able to be hold-on for several hours without causing corrosion problem on the joint before it is completely removed by warm water rinse, in comparison with an equivalent amount of organic acid flux which needs immediate washing of flux residue.

## Application

Sn60Pb40 C6 core wire is easy to use for automatic, manual, rework, point and brush soldering. For the best soldering results, the recommended

parameters are shown:

Solder Iron Tips:	All Types especially the	
	tapered types	
Soldering Temp:	270 - 350°C	
Soldering Time:	1 - 3 secs	

- Keep solder iron tips clean.
- Tinned iron tips before use.
- Wear gloves when soldering to avoid contaminating the wire.

(Note: Soldering parameters are dependent on tip type, soldering station wattage configuration, wire diameter and type of applications.)

# Specification

Item	Result
Alloy Composition	Sn60Pb40
Flux Content	2.3 +/- 0.2 wt%
Halide Content	> 1wt%
JIS Z 3197 8.1.4.2.1	
JIS Z 3197 8.1.1	
Surface Insulation	
Resistance	
(85°C, 85%RH, 168hrs)	
IPC-TM-650 2.6.3.3	> 1 x 10 <sup>8</sup> $\Omega$ , Pass
JIS Z 3197 8.5.3	> 1 x 10 <sup>11</sup> $\Omega$ , Pass
Electromigration	Pass
(85°C, 88.5%RH, 596hrs)	
IPC-TM-650 2.6.14.1	
Copper Corrosion Test	Pass
IPC-TM-650 2.6.15	
JIS Z 3197 8.4.1	
Copper Mirror Test	Classified as "H",
IPC-TM-650 2.3.32	Pass
JIS Z 3197 8.4.2	
Flux Activity	ROH1
Classification	
IPC J-STD-004	
Spread Factor	> 95%
JIS Z 3197 8.3.1.1	

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#### **RESIDUAL REMOVAL**

Sn60Pb40 C-6 will leave a residue after soldering which is hygroscopic and ionizable. Complete removal, particularly for electrical and electronic applications, is recommended. Removal of ionizable salts can best be accomplished by washing the assembly in water, followed by a thorough warm water rinse. If the residue is charred due to excessive heating during soldering, some mechanical method will have to be used to remove the decomposed char. Ionizable salts can still be removed by aqueous cleaning methods.

#### STORAGE

Store the solder wire in a cool, dry and non-corrosive environment. Wrap up the solder wire when not in use to reduce exposure to environment. Sn60Pb40 C6 core wire can be kept for 2 years if proper storage conditions are observed.

#### **HEALTH and SAFETY**

Wear a chemical mask if the operators are allergic to the fumes released during soldering. For more information, please refer to Material Safety Data Sheet.

#### PACKAGING

Sn60Pb40 C6 core wire is commonly available in various diameters such as 0.5, 0.6, 0.8, 1.0, 1.2, 1.6 and 2.0 mm. For different diameters, please specify your requirements.

Packaging	0.25kg	0.50kg	1.0kg
Diameter (mm)	0.5 to 2.0	0.5 to 2.0	0.8 to 2.0

DISCLAIMER OF LIABILITY

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