

Halogen free flux cored solder wire



53X-60NH Sn 3.0Ag 0.5Cu



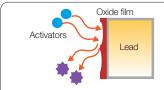
Quality wetting despite being halogen free

Improves reaction speed of the activators

S3X-60NH achieves sufficient wetting to heavily oxidized surfaces, mostly used in add on parts such as connector leads. This is done by drastically improving the reaction speed of removing oxide film.

Figure 1. Behavior of activators removing oxide film

Competitive product (Halogen free)



Activators react too slowly to remove all oxide films before the activation strength runs out.

S3X-60NH Oxide film Lead

Activators react so quickly that all oxide film is removed before the activation strength runs out.

Excellent wetting performance

Figure 2. Image of flowing process to a connector lead

Material: Connector = Ni/Au Pad = Cu (4 x 1.5mm) Iron tip temperature: 370°C

Competitive product (Halogen free)



Not flowing to the edge

Cold solder joint

S3X-60NH



Flows quickly to the edge



Forms a good solder fillet

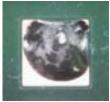
Decreases frequency of iron tip cleaning

S3X-60NH decreases the frequency of iron tip cleaning by minimizing the occurrence of carbon build up on the iron tips. This results in improving temperature transfer and thus production yield, too.

Figure 3. Continual shots w/t tip cleaning (Image of 35th shot)

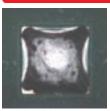
Material: Pad = Cu (3 x 3mm) Iron tip temp. = 370°C Method = Shot by hand soldering w/t cleaning

Competitive product (Halogen free)



Inadequate wetting due to carbon accumulation on the iron tip.

S3X-60NH



Good wetting continues.

Product specifications

1 Todati Specifications	
Product name	S3X-60NH
Alloy composition (%)	Sn 3.0Ag 0.5Cu
Melting point (°C)	217-219
Flux content (%)	3.0
Halide content (%)	0
Flux type	ROL0
Diameter (mm ϕ)	0.3 0.4 0.5 0.6 0.8 1.0 1.2 1.6













