

# HF532 Halide Free No Clean Core Flux

# **DESCRIPTION**

HF532 Rosin Flux is the universally suitable flux for use in the flux core solder wire and complies with the specification DIN 8511, Type F-SW32 (German Standard). HF-532 is formulated with high quality purified Class A Type 1, Grade WW rosin conforming to U.S Federal Specification LLL-R-626 together with organic, halogen-free additives which are specially combined with regard to the thermal course of the soldering process. This non-corrosive RMA flux leaves minimal residue that exhibits good electrical insulation.

## **APPLICATION**

HF532 has been developed for use in electronics industries where RA Type rosin halides fluxes from flux cored solder wire are considered potentially corrosive and a more active flux than plain rosin flux is required.

## **SPECIFICATIONS**

Density	=	1.08 g/cm <sup>3</sup> at 25°C
Chloride Content	=	None
Water Extract Resistivity	=	>1 x $10^4 \Omega$ -cm
Copper Mirror Test	=	Pass
Surface Insulation Resistant	ce =	>1 x $10^{12} \Omega$

## **RESIDUE REMOVAL**

Since the residues is dry and non-tacky and practically inert after soldering, residue removal is usually not required. For assembly which is to be operated above the melting point of rosin (more than 65°C), HF532 can be completely removed by Asahi Flux Cleaner.

## **VOLTAGE APPLIED MOISTURE RESISTANCE TEST TO JIS Z 3197-1986**

Insulation Resistance Test in Accordance to JIS Z 3197 - 1986 Clause 6.8

### **TEST PARAMETERS**

Test Samples	:	Comb Electrodes
Drying Temp	:	100 °C
Drying Time	:	30 mins
Conditioning Temp	:	$40 \pm 2 \ ^{\circ}\text{C}$
Conditioning RH	:	90 - 95 % RH
Conditioning Time	:	96 Hrs
Measuring Temp	:	23 °C
Measuring RH	:	60 %
Test Voltage Applied	:	100 V
Flux	:	HF-532

### RESULTS

		Insulation Resistance ( x $10^{12} \Omega$ )									
		Measurement in Accordance to JIS 3197 - 1986 Clause 6.8									
SPI	L	Test Points Test Points Test Points Average							rage		
No	).	18	& 2	1 & 3		5 & 3		5 & 4			_
		BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
1		3.14	1.59	8.64	1.52	4.28	0.41	1.38	1.11	4.36	1.20

Before Temperature and Humidity Test After Temperature and Humidity Test ΒT :

AT : Voltage Applied Moisture Resistance Test to JIS Z 3197 - 1986 Clause 6.9

## **TEST PARAMETERS**

Test Samples	:	Comb Electrodes
Drying Temp	:	100 °C
Drying Time	:	30 mins
Conditioning Temp	:	$40 \pm 2 \ ^{\circ}\text{C}$
Conditioning RH	:	90 - 95 % RH
Conditioning Time	:	96 Hrs
Applied Voltage	:	100 V
		Positive Polarity to Terminals 1, 3, 5
		Negative Polarity to Terminals 2,3, 4
Measuring Temp	:	23 °C
Measuring RH	:	60 %
Test Voltage Applied	:	100 V
Flux	:	HF-532

## RESULTS

	Insulation Resistance ( x $10^{12} \Omega$ )									
	Measurement in Accordance to JIS 3197 - 1986 Clause 6.9									
SPL	Test Points Test Points Test Points Average									
No.	18	& 2	2 & 3		3 & 4		4 & 5		_	
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
1	10.0	1.90	4.30	3.00	5.80	2.20	12.0	4.50	12.5	1.9
2	0.06	0.40	0.45	0.40	18.0	1.70	50.0	0.85	12.5	1.9

Solderability Testing in Accordance to IEC Publication 68-2-54 Test Ta

#### **TEST PARAMETERS**

Solder Temperature	:	235 ± 5 °C
Immersion Speed	:	5 mm / sec
Immersion Depth	:	1 mm
Immersion Time	:	5 sec
Flux	:	HF-532
Solder Composition	:	571

#### RESULTS

Test Number	1	2	3	4	5	Average
Max Non Wetting Force (mN)	0.62	0.62	0.50	0.58	0.43	0.55
Max Wetting Force (mN)	- 0.55	-0.62	-0.57	-0.60	-0.63	-0.59
Force Change (mN)	1.17	1.24	1.07	1.19	1.06	1.15
Time to Zero Axis (S)	0.75	0.65	0.65	0.55	0.95	0.75
Time to Force Accept (S)	3.95	1.65	2.85	0.75	1.65	2.17
Dewet Coefficient	1.00	1.00	1.00	0.98	1.00	1.00

DISCLAIMER OF LIABILITY

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