



Report No. HTT202507599CH

# RoHS Test Report

## Application information:

Applicant name:	SUNTAN TECHNOLOGY COMPANY LIMITED
Address:	Unit H, 4/F., Dormind Industrial Building, 13 Yip Fung Street, Fanling, N.T. , Hong Kong

## Sample information:

Sample Name:	capacitor
Sample Model:	CBB60, 450VAC, 50/60HZ, 40/85/21 SH Po
Trade mark:	Suntan
Sample Received Date:	Jul. 10, 2025
Testing Period:	Jul. 10, 2025 ~ Jul. 16, 2025S
Test Requested:	As specified by client, to determine the Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs, PBDEs, The Phthalate (DEHP, BBP, DBP & DIBP) content in the submitted sample compliance with RoHS directive 2011/65/EU Annex II amending Annex (EU)2015/863 and amending Annex (EU)2017/2102.
Test Method:	Please refer to next page.
Test Results	Please refer to next page(s).
Conclusion:	PASS

Completed by:

*Haw Ma*

Reviewed by:

*Leo Zhang*

Approved by:

*Kevin Yan*  
  
Technical Manager

Shenzhen HTT Technology Co., Ltd.



# RoHS Test Report

## 1. Test Method(s):

As requested by the client, Reference to IEC 62321-3-1:2013 (Ed1.0) Procedures for the screening analysis of Lead (Pb), Cadmium (Cd), Mercury (Hg), total Chromium (Cr), and Bromine (Br) by XRF. If the screening analysis results exceed the screening limits of IEC 62321-3-1:2013 (Ed1.0) Annex A, use the chemical methods for testing.

**Table1 IEC 62321-3-1:2013 (Ed1.0) Annex A screening limits of XRF (mg/kg)**

Element	Polymer	Metal	Composite Materials
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Br	$BL \leq (300-3\sigma) < X$	Not applicable	$BL \leq (250-3\sigma) < X$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

BL = Less than screening limits of XRF

OL = More than screening limits of XRF

X = The results of screening analysis by XRF are within this range, requiring further chemical testing.

LOD = Limit of Detection

**Table2 testing methods & Equipments**

Testing Item	Testing Method	Equipment
Screening analysis by XRF		
Lead (Pb), Cadmium (Cd), Mercury (Hg) Chromium (Cr), Bromine (Br)	IEC 62321-3-1:2013 (Ed1.0)	ED-XRF
Chemical testing		
Lead (Pb)	IEC 62321-5:2013 (Ed1.0)	ICP-OES
Cadmium (Cd)	IEC 62321-5:2013 (Ed1.0)	ICP-OES
Mercury(Hg)	IEC 62321-4:2017 (Ed1.0)	ICP-OES
Hexavalent chromium (Cr(VI)) for plastic	IEC 62321-7-2:2017 (Ed1.0)	UV-VIS
Hexavalent chromium (Cr(VI)) for coating on metals	IEC 62321-7-1:2015 (Ed1.0)	UV-VIS
PBBs	IEC 62321-6:2015 (Ed1.0)	GC-MS
PBDEs	IEC 62321-6:2015 (Ed1.0)	GC-MS
DBP	IEC 62321-8:2017 (Ed1.0)	GC-MS
BBP	IEC 62321-8:2017 (Ed1.0)	GC-MS
DEHP	IEC 62321-8:2017 (Ed1.0)	GC-MS
DIBP	IEC 62321-8:2017 (Ed1.0)	GC-MS



# RoHS Test Report

## 2. Method Detection Limit (MDL):

For XRF screening analysis (mg/kg)

Item	Pb	Cd	Hg	Br	Cr
Polymer	20	20	20	20	20
Other materials	50	50	50	50	50

For chemical testing (mg/kg)

Item	Pb	Cd	Hg	PBBs	PBDEs	DEHP	BBP	DBP	DIBP	Cr(VI)
General materials	2	2	2	10	10	50	50	50	50	See remark (2)

Remark:

(1) PBBs and PBDEs method detection limit only for one substance;

(2) MDL for polymer and Composites is 8 mg/kg, MDL for coating on metals is 0.10  $\mu\text{g}/\text{cm}^2$ .

## 3. RoHS Requirement (mg/kg):

Restricted substances	Cd	Pb	Hg	Cr(VI)	PBBs	PBDEs	DEHP	BBP	DBP	DIBP
RoHS limit	100	1000	1000	1000	1000	1000	1000	1000	1000	1000



# RoHS Test Report

## 4. Test Result(s):

Part No.	Part Description	Restricted Substances	Results (mg/kg)		Conclusion (P/F)
			EDXRF	Chemical testing	
01	Plastic shell	Cd	BL	/	P
		Pb	BL	/	P
		Hg	BL	/	P
		Cr(VI)	BL	/	P
		PBBs	BL	/	P
		PBDEs	BL	/	P
		DEHP	/	N.D.	P
		DBP	/	N.D.	P
		BBP	/	N.D.	P
		DIBP	/	N.D.	P
02	Screw rod	Cd	BL	/	P
		Pb	BL	/	P
		Hg	BL	/	P
		Cr(VI)	BL	/	P
		PBBs	BL	/	P
		PBDEs	BL	/	P
		DEHP	/	N.D.	P
		DBP	/	N.D.	P
		BBP	/	N.D.	P
		DIBP	/	N.D.	P
03	Metal terminal	Cd	BL	/	P
		Pb	BL	/	P
		Hg	BL	/	P
		Cr(VI)	BL	/	P
		PBBs	BL	/	P
		PBDEs	BL	/	P
		DEHP	/	N.D.	P
		DBP	/	N.D.	P
		BBP	/	N.D.	P
		DIBP	/	N.D.	P
04	Nut	Cd	BL	/	P
		Pb	BL	/	P
		Hg	BL	/	P
		Cr(VI)	BL	/	P
		PBBs	BL	/	P
		PBDEs	BL	/	P
		DEHP	/	N.D.	P
		DBP	/	N.D.	P
		BBP	/	N.D.	P
		DIBP	/	N.D.	P



# RoHS Test Report

Part No.	Part Description	Restricted Substances	Results (mg/kg)		Conclusion (P/F)
			EDXRF	Chemical testing	
05	Metal washer	Cd	BL	/	P
		Pb	BL	/	P
		Hg	BL	/	P
		Cr(VI)	BL	/	P
		PBBs	BL	/	P
		PBDEs	BL	/	P
		DEHP	/	N.D.	P
		DBP	/	N.D.	P
		BBP	/	N.D.	P
		DIBP	/	N.D.	P
06	Connect line	Cd	BL	/	P
		Pb	BL	/	P
		Hg	BL	/	P
		Cr(VI)	BL	/	P
		PBBs	BL	/	P
		PBDEs	BL	/	P
		DEHP	/	N.D.	P
		DBP	/	N.D.	P
		BBP	/	N.D.	P
		DIBP	/	N.D.	P
07	Glue	Cd	BL	/	P
		Pb	BL	/	P
		Hg	BL	/	P
		Cr(VI)	BL	/	P
		PBBs	BL	/	P
		PBDEs	BL	/	P
		DEHP	/	N.D.	P
		DBP	/	N.D.	P
		BBP	/	N.D.	P
		DIBP	/	N.D.	P
08	Capacitor	Cd	BL	/	P
		Pb	BL	/	P
		Hg	BL	/	P
		Cr(VI)	BL	/	P
		PBBs	BL	/	P
		PBDEs	BL	/	P
		DEHP	/	N.D.	P
		DBP	/	N.D.	P
		BBP	/	N.D.	P
		DIBP	/	N.D.	P



Report No. HTT202507599CH

# RoHS Test Report

Note:

mg/kg = milligram per kilogram = ppm

N.D. = Not detected (<MDL)

BL=Less than screening limits of XRF

D = DETECTED = Inconclusive

P = PASS

F = FAIL

/ = Not available

# RoHS Test Report

Photo(s) of the sample(s)





# RoHS Test Report



This test document cannot be reproduced in any way, except in full context, without the prior approval in writing of the laboratory. The result of this test report is based on our received samples only.

\*\*\* End of report \*\*\*