



# SPECIFICATION

DATE: JUN 05 2018 REVISION: 1.0 INTERNAL NO: 4052

CUSTOMER: Active Components

PART NO.: \_\_\_\_\_

PARTNAME: POWER SUPPLY CORD (SAA)

DESCRIPTION: PHP-304 TO PHS-301 GTSA-3

3G1.0mm<sup>2</sup> BLACK 2m

NOTE: LEAD FREE

ISSUED BY	REVIEWED BY	APPROVAL SIGNATURE
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PHINO ELECTRICAL WIRE & CABLE  
CO., LTD



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1. PVC flexible cord

This cord should be in accordance with AS/NZS 3191 standard.

2.1 Cord specification:

Item	Unit	Specification	
Product		GTSA-3	
Conductor	Nominal Area	mm <sup>2</sup>	1.0
	Number		3
	Material		Annealed Soft Bare Copper Wire
	Construction	No/mm	32/0.20
	Diameter	mm	1.5 approx.
Insulation	Material		PVC
	Min. Thickness	mm	0.44
	Avg. Thickness	mm	0.60
	Diameter	mm	2.50±0.10
	Color	mm	Brown, Blue, Yellow/Green
Jacket	Material		PVC
	Min. Thickness	mm	0.62
	Avg. Thickness	mm	0.80
	Diameter	mm	7.00±0.20

2.2 Electrical Property:

Item	Unit	Specification	Standard
Conductor Resistance	Ω/km.	At 20°C	19.5 max
Dielectric Withstand	VAC/15min	2000	No Breakdown
Insulation Resistance	MΩ·km	At 70°C	0.01 min

3.2 Plug

Type No.: PHP-304

Rating:10A 250V

3.3 Connector

Type No.: PHS-301

Rating:10A 250V

3.4 Power supply cord

a. Appearance:

There shall be no damage on the surface of plug, connector and cord.

b. Continuity of conductor:

Open/Short circuit is not allowed.

c. Dielectric voltage withstand:

No breakdown of specimen with application of 2000VAC for 1minute. If the sample didn't fail in the test, a "dot" mark will be dented on the connector of it.

d. Insulation resistance:

Application of 500VDC between of the conductor and the grounding wire, its insulation resistance shall be not less than  $5M\Omega$ .

e. Insertion and withdraw force test:

Fix the connector to an apparatus with a test plug inserted into and withdraw from it for 10 time. The force necessary to withdraw test plug from the connector should be within the range from 10N~50N.

f. Flexing test:

The insulation layer of the flexible cord shall not be damaged after 10000 cycles, while being tested, the cord is hanged vertically with 10N. A cycle: a rotation of the sample from vertical position until  $45^\circ$  to one side, and back past the vertical position until  $45^\circ$  to the other side, and back to the vertical position, the rate of testing shall be 60 cycles per minute. Sample with circular section cables or cords are turned through  $90^\circ$  in the oscillating member after 5000 cycles. After 10000 cycles, the sample shall show no damage.

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g. Resistance heat:

The sample is kept for in a heating cabinet at temperature of  $100\pm 2^{\circ}\text{C}$  for 1 hour. The sample shall show no crack visible with normal, nor shall the material have become stick or greasy.

h. Cord bend:

No crack on the surface of cord sample which is wind round 6 turns on mandrel of 4~5 OD subjected to a temperature of  $-15\pm 2^{\circ}\text{C}$  for 4 hours.

i. Flame resistance:

The sample is self-extinguishing after all burning has ceased.

j. Aging test:

Item		Unit	Spec Value
Insulation	Original	Tensile Strength	$\text{Kgf/mm}^2$ Min. 1.02
		Elongation	% Min. 150
	After Aging $80\pm 2^{\circ}\text{C}$ For 168 hours	Tensile Strength	% Variation from Original Value $\pm 20$
		Elongation	% Variation from Original Value $\pm 20$
Sheath	Original	Tensile Strength	$\text{Kgf/mm}^2$ Min. 1.02
		Elongation	% Min. 150
	After Aging $80\pm 2^{\circ}\text{C}$ For 168 hours	Tensile Strength	% Variation from Original Value $\pm 20$
		Elongation	% Variation from Original Value $\pm 20$