

File E170507  
Project 00ME03466

April 12, 2000

REPORT

ON

COMPONENT - POWER SUPPLIES, FOR USE IN  
INFORMATION TECHNOLOGY EQUIPMENT,  
INCLUDING ELECTRICAL BUSINESS EQUIPMENT

USE ON

INFORMATION TECHNOLOGY EQUIPMENT,  
INCLUDING ELECTRICAL BUSINESS EQUIPMENT

GlobTek  
Northvale, NJ

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## DESCRIPTION

## PRODUCT COVERED:

USR, CNR, Component - Switching Power Supply, Models GT-2-1098-1505, GT-2-1098-1005 and GT-2-1098-0505.

## ELECTRICAL RATING:

Model	Input			Output (dc)		
	V	A	Hz	V	A	W
GT-2-1098-1505	100-240	1.0	47-63	5	3	15
GT-2-1098-1005	100-240	1.0	47-63	5	2	10
GT-2-1098-0505	100-240	1.0	47-63	5	1	5

## ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

\* USR, CNR indicates the equipment has been investigated to the U.S. and Canadian (Bi-National) Standard for Information Technology Equipment including Electrical Business Equipment CSA C22.2 No. 60950/UL60950, Third Edition.

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Special Considerations - The following items are considerations that were used when evaluating this product.

The component was submitted by the manufacturer for use in a maximum air ambient of 25°C.

The equipment is for building in Class I (earthed), pluggable Type A or B, intended for use on TN power system.

Conditions of Acceptability - When installed in the end product, consideration shall be given to the following:

1. This component has been judged on the basis of the required spacings in the Standard for Safety of Information Technology Equipment, Including Electrical Business Equipment, UL 1950, Second Edition, Safety of Component Power Supplies, CAN/CSA C22.2, No. 234-M90, which would cover the component itself if submitted for Listing.
2. The products were tested with a 20 A branch circuit. If used on a branch circuit greater than this, additional testing may be necessary.
3. All secondary output circuits are SELV and are not hazardous energy levels.
4. The terminals and connectors are suitable for factory wiring only.
5. The power supply shall be properly bonded to the main protective earthing termination in the end product.
6. Transformers employ Class A 105° C electrical insulation system.
7. The equipment has been evaluated for use in a Pollution Degree 2 environment.
8. A suitable Electrical and Fire enclosure shall be provided.
9. The maximum working voltage present is 373 V Peak. The electric strength tests in the end product shall be based on this value.

## CONSTRUCTION DETAILS:

See Section General for additional details.

Date of Manufacture Marking - For CN Products, the unit shall have a marking, which indicates the month and year of manufacture. Coding or serial numbers are acceptable.

Nameplate Marking - Listee's name or File No. E170507, model designation, and electrical ratings are provided on R/C (PDGQ2), permanently ink-stamped or stenciled on the circuit board.

Insulating Tubing/Sleeving - R/C (YDPU2); or R/C (YDRY2); or R/C (UZFT2), rated minimum 80°C, 300 V.

Power Supply Level Marking - For CN Products, "Level 3" marked adjacent to power supply output rating or in the installation instructions.

Connectors - All connectors are R/C (RTRT2) or R/C (ECBT2).

Printed Wiring Board - See Sec. Gen. for details.

Model Differences - All models are identical to each other, except for secondary components and output rating.

MODELS GT-2-1098-1505, GT-2-1098-1005  
AND GT-2-1098-0505,

FIG. 1 (C97-01904)

General - Shows an overall view of the unit.

1. Connector (CN1) - R/C (RTRT2) or (ECBT2), rated 250 V, minimum 5 A.
2. Fuse (F1) - Listed (JDYX), rated T1 A, 250 V. Mechanically secured to PWB by soldered. Fuse ratings marked adjacent to fuse clips.

Alternate - Same as above except R/C (JDYX2), Bel, Type MRT.

Alternate - Same as above except R/C (JDYX2), Wickmann, Type 19372.

3. X-Capacitors (CX1, CX2) - Optional, R/C (FOKY2) or R/C (FOWX2), for CX1 rated 250 V, maximum 0.47  $\mu$ F, for CX2 rated 250 V, minimum 0.1  $\mu$ F.
4. Bleeder Resistor (R8, R9) - SMD type, rated 470000  $\Omega$ , 1/8 W.
5. Inductor (LF1) - Optional, Open-type construction. Core: Ferrite; overall 15 by 13 by 5 mm. Coil: Copper magnet wire wound on Three flanged phenolic bobbin minimum 0.71 mm thick, rated minimum 94V-2.
6. Bridge Diodes (D3, D6) - Rated minimum 600 V, 1 A.
7. Transistor (U3) - Rated minimum 3 A, 800 A. Secured to heat sink by spring clip.
8. Electrolytic Capacitor (C9) - Integral pressure relief, rated 47  $\mu$ F, 400 V, 105°C.
9. Y-Capacitors (CY1, CY2) - Optional, R/C (FOKY2) or R/C (FOWX2), rated 250 V, maximum 4700 pF.
10. Optical Isolator (U1) - R/C (FPQU2), rated isolation minimum 3000 V ac.

11. Transformer (T1) - Open-type construction. Core: overall 26 by 25 by 3 mm. Coil: Copper magnet wire wound on two flange bobbin. Bobbin: R/C (QMFZ2), phenolic, minimum 0.71 mm thick.

## Insulation -

Location	# Layers / Total Thickness (mm) / Material
Core - Primary	1/0.71/Bobbin
Primary - Secondary	3/0.075/Polyester film tape
Primary - Primary	2/0.050/Polyester Film Tape
Outer wrap	3/0.075/Polyester Film Tape
Margin tape	polyester film, min. 3 mm wide, between windings and bobbin edge

## CONCLUSION

A sample of the product covered by this Report has been found to comply with the requirements covering the class and the product is judged to be eligible for Component Recognition and Follow-Up Service. Under the Service the manufacturer is authorized to use the Recognized Marking described in the Follow-Up Service Procedure on such products which comply with said Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products which properly bear the Recognized Marking are considered as Recognized Components by Underwriters Laboratories Inc.

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