

8 T807/808 PCB Information

This section provides parts lists, exploded views of the mechanical assemblies, grid reference indices, PCB layouts and circuit diagrams for three distinct issues (-03, -05 and -07) of the T807/808 Switching Power Supplies. There is also a parts list, PCB layout and circuit diagram for the Noise Modulator PCB which solders onto TP4 of the issue -03 Power Supply PCB. The noise modulation circuit was incorporated into all Power Supply PCBs from issue -05 onwards.

The T807 and T808 are built on a common main PCB, though certain components have different values. While we have provided individual parts lists for each product, all other information provided in this section pertains to both products, with the different value components clearly indicated with an asterisk.

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8.1 Introduction

PCB Identification

All PCBs are identified by a unique 10 digit number, the last 2 digits of which define the issue status. The issue status starts at 00 and increments through 01, 02, 03, etc. as the PCB is updated. Some issue PCBs never reach full production status and are therefore not included in this manual. A letter following the 10 digit IPN has no relevance in identifying the PCB for service purposes.

Parts Lists

The 10 digit numbers (000-00000-00) in this Parts List are “internal part numbers” (IPNs). Your spare parts orders can be handled more efficiently if you quote the IPN and provide a brief description of the part.

The components listed in this parts list are divided into two main types: those with a circuit reference (e.g. C2, D1, R121, etc.) and those without (miscellaneous and mechanical).

Those with a circuit reference are grouped in alphabetical order and then in numerical order within each group. Each component entry comprises three or four columns, as shown below:

Ref	Var	IPN	Description
C126		015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
C127		020-09220-01	CAP ELECT RADL 220M 16V 10X12.5MM
C128		015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
C129		015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
&C130	10	015-25100-08	CAP CER 0805 CHIP 10N 10% X7R 50V
&C130	15	015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V
&C130	20	015-25100-08	CAP CER 0805 CHIP 10N 10% X7R 50V
&C130	25	015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V
C131		015-24100-08	CAP CER 0805 CHIP 1N 10% X7R 50V
C132		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V
C133		015-05470-08	CAP CER 1206 CHIP 47N 10% X7R 50V

circuit reference - lists components in numerical order
 variant column - indicates that this component is fitted only to this variant
 description - gives a brief description of the component
 Internal Part Number - order the component by this number

The miscellaneous and mechanical section lists the variant and common parts in IPN order.

Grid Reference Index

To assist in locating components and labelled pads on the PCB layouts and circuit diagrams, a component grid reference index has been provided. This index lists the components and pads in alphabetical order, along with the appropriate alphanumeric grid references, as shown below:

Device	PCB	Circuit
C126	2:A6	2-R7
C127	1:A8	2-P4
C128	2:B7	2-P2
C129	2:C12	2-E3
&C130	2:D8	2-B8
C131	2:C9	2-H6
C132	2:D8	2-B8
C133	2:D6	2-E1

components listed in alphanumeric order

PCB layout reference
circuit diagram reference

component location on the sheet

sheet number

component location on the layer

layer number -
1 = top side layer
2 = bottom side layer

Using CAD Circuit Diagrams

Reading a CAD circuit diagram is similar to reading a road map, in that both have an alphanumeric border. The circuit diagrams in this manual use letters to represent the horizontal axis, and numbers for the vertical axis. These circuit diagram “grid references” are useful in following a circuit that is spread over two or more sheets.

When a line representing part of the circuitry is discontinued, a reference will be given at the end of the line to indicate where the rest of the circuitry is located. The first digit refers to the sheet number (printed on the bottom right hand corner of the CAD diagram) and the last two characters refer to the location on that sheet of the continuation of the circuit (e.g. 1-D4).

If more than one line is represented (indicated by a double thickness line), a dot with a reference label will follow the route each individual line represents.