Electronic Terms Glossary

AC
Current that flows in alternating directions between two points. See also AMP, Current and DC.

AC/DC Adapter
Adapter that has an AC voltage input and an DC voltage output.

AMP
Ampere...which is a measure of current. Can be abbreviated by either "Amps", "A", or expressed as milliamps (mA). See MilliAmps below.

CE
The European mark signifying compliance to low voltage and electromagnetic requirements.

Creepage
Creepage is the shortest distance between two conducting parts measured along the surface of the insulating material between them.

Current
The measure of current is expressed in AMPs.

DC (Direct Current)
Current that flows in one direction between two points.

Frequency
Measures the number of times that a flow of current changes direction in one second. Expressed as Hertz (Hz). Most North and South American locations operate on an input of 60Hz while most of Europe has a 50Hz input.

Hertz
Measure of frequency. Usually expressed as Hz.

Impedance
Ratio of voltage to current expressed in ohms. This measurement shows the resistance to the AC current flow. Impedance between circuits must be matched in certain design situations. See also OHM.

Leakage Current
The AC or DC current going from the input to output (and/or chassis) of an isolated power supply at a specified voltage.

MilliAmps
Measure of AMPs expressed as 1000 times Amps. For example .5Amps would be 500mA (.5 x 1000).

MTBF
Mean Time Between Failure.

Nominal
Objective for a specified parameter...may not be the actual value measured.
NRTL
Acronym for "Nationally Recognized Testing Laboratory."

OHM
The ratio of voltage to current is expressed in ohms. This measurement shows the resistance to the AC current flow. Impedance (or the number of measured ohms) between circuits must be matched in certain design situations. See also Impedance and Resistance.

Open Circuit
When a circuit has been broken so that conducting components do not allow for the flow of current, the circuit is said to be open. This condition can either be intentional (to provide protection), or unintentional (such as when a wire breaks).

Overload Protection
Function of a power supply that automatically shuts down the supply in the event of reaching a predetermined excessive output current.

Overvoltage Protection
Function of a power supply that automatically shuts down the supply in the event of reaching a predetermined excessive voltage.

Parallel Circuit
Two or more parallel paths for current flow. See also Series Circuit.

Primary
A winding to which the input voltage is applied. This winding then powers the secondary winding to generate an output voltage.

Rectification
Conversion of AC currents and voltages into DC currents and voltages. Typical rectifications are: half-wave, full-wave and bridge.

Regulation (Line)
The percentage change in the output voltage due to a change in input voltage level. This is usually a measurement of the output deviation as the input voltage is varied from low line to high line.

Regulation (Load)
The percentage change in output voltage due to a change in output loading. This is usually a measurement of the output deviation as the loading is changed from no load to full load.

Resistance
This measurement shows the resistance to the AC current flow measured in ohms. See also Impedance and OHM.

Secondary
Generates an output voltage and current when voltage is applied to the primary winding.

Series Circuit
A single, continuous path for current flow. See also Parallel Circuit.
**Short Circuit Protection**
Function of a unit that limits the output current under short-circuit conditions so that the unit can avoid being damaged.

**VA**
*Volt Amperes* (power). Is the output voltage multiplied by the output current. For instance, an output of 12V @ .5A = 6VA.

**VAC**
Statement of the voltage requirement. For example an input of 120VAC is 120Volts at AC current.

**VDC**
Statement of the voltage requirement. For example an output of 4VDC is 4Volts at DC current.

**Volt**
Measurement of voltage which is required to move a certain number of electrons from one point to another.

**Watt**
Measurement of power determined by multiplying the output current by the output voltage.