

MPD

MICROPOWER DIRECT

TECH NOTE

Acronyms, Abbreviations & Symbols

— A —



MicroPower Direct

MPD, a leading worldwide provider of power conversion products, was founded by a group of industry veterans in 1999. Located in Easton, MA, we are committed to delivering innovative, high quality power converters at the lowest possible prices.

We currently offer over 5,000 low cost standard "off-the-shelf" high performance power converters. Our product lines include DC/DC converters, AC/DC power supplies, high brightness LED drivers, IGBT drivers & controllers, and switching POL regulators.

Component selection and layout are carefully considered at the design stage to optimize product reliability. All manufacturing is in ISO9000 registered factories under strict quality control system guidelines. All products are supported worldwide, and carry a standard three year warranty.

MPD power products have been designed into a wide variety of products and systems by a very diverse customer base. End products range from computer peripherals to test instrumentation to telecommunications equipment to process/industrial controls to medical devices and more.

A

- Symbol for:
 - ampere
 - amplitude
 - anode
 - area (m²)
 - current density (linear A/m)

a

- Symbol for:
 - atto (quintillionth), 10⁻¹⁸
 - acceleration (m/s²)

a

- Subscript for:
 - alternating
 - axial
 - absolute
 - anode

AC (ac)

- Abbreviation of:
 - alternating current
 - activated carbon

AEA

- Abbreviation of:
 - American Engineering Association
 - American Electronic Association

AF

- Abbreviation of:
 - audio frequency

AFE

- Abbreviation of:
 - analog front end

AFC

- Abbreviation of:
 - automatic frequency control

AGC

- Abbreviation of:
 - automatic gain control

Ah

- Abbreviation of:
 - ampere hour (amp hr also used)

AI

- Abbreviation of:
 - artificial intelligence

AIEE

- Abbreviation of:
 - American Institute of Electrical Engineers

ALVT

- Abbreviation of:
 - advanced low voltage technology

AM

- Abbreviation of:
 - amplitude modulation

amb

- Subscript for:
 - ambient

amp

- Abbreviation of:
 - ampere

AMT

- Abbreviation of:
 - advanced manufacturing technology

ANSI

- Abbreviation of:
 - American National Standards Institute

APEC

- Abbreviation of:
 - advanced process equipment control

APM

- Abbreviation of:
 - advanced power management

AQL

- Abbreviation of:
 - acceptable quality level

as

- Subscript for:
 - asynchronous

ASCII

- Abbreviation of:
 - American Standard Code for Information Interchange

ASIC

- Abbreviation of:
 - all purpose symbolic instruction code application specific integrated circuit

ASME

- Abbreviation of:
 - American Society of Mechanical Engineers

ASQ

- Abbreviation of:
 - American Society for Quality

ASSP

- Abbreviation of:
 - application specific standard product

ASTM

- Abbreviation of:
 - American Society for Testing and Materials

AT

- Abbreviation of:
 - ampere turn

ATC

- Abbreviation of:
 - automatic temperature control

ATE

- Abbreviation of:
 - automatic test equipment

ATG

- Abbreviation of:
 - automatic test generation

atm

- Symbol for:
 - Atmosphere (1 atm = 101.325 kPa)

av

- Subscript for:
 - average

AWG

- Abbreviation of:
 - American wire gauge
 - arbitrary waveform generator

— B —

B

- Symbol For:
 - susceptance (Siemens)
 - magnetic field (Tesla's)
 - bel (10 dB)
 - base (of a transistor)
 - byte
 - bandwidth

B

- Symbol For:
 - susceptance (Siemens)

b

- Symbol For:
 - bit

b

- Subscript for:
 - base

BABT

- Abbreviation of:
 - British Approvals Board for Telecommunications

BBM

- Abbreviation of:
 - break-before-make

BCD

- Abbreviation of:
 - binary coded decimal

BCI

- Abbreviation of:
 - Battery Council International

Bd

- Symbol for:
 - baud

BGA

- Abbreviation of:
 - ball grid array

BI

- Abbreviation of:
 - backplane interconnect
 - bus interconnect
 - burn in

BIPM

- Abbreviation of:
 - Bureau International des Poids et Mesures (International Bureau of Weights and Measures)

br

- Subscript for:
 - breakdown

BSI

- Abbreviation of:
 - British Standards Institute

BTU

- Abbreviation of:
 - British thermal unit

BV

- Abbreviation of:
 - breakdown voltage

BW

- Abbreviation of:
 - bandwidth

— C —

C

- Symbol for:
 - coulomb
 - capacitance (Farads)
 - collector (of a transistor)
 - Celsius
 - heat capacity (J°C⁻¹)

c

- Symbol for:
 - centi (hundreth), 10⁻²

c

- Symbol for:
 - speed of light in a vacuum (m/s)
 - speed of sound (m/s)

- Subscript for:

- case
- collector
- cathode

CAD

- Abbreviation of:
 - computer aided design

Cal

- Symbol for:
 - calorie (large - kilogram calorie)

cal

- Symbol for:
 - calorie (small - gram calorie)

CAM

- Abbreviation of:
 - computer aided manufacturing

CAT

- Abbreviation of:
 - computer aided test

CB

- Abbreviation of:
 - circuit breaker

CC

- Abbreviation of:
 - constant current

cd

- Symbol For:
 - candela (luminous intensity)

CE

- Abbreviation of:
 - Certified Europe

CEI

- Abbreviation of:
 - conducted electromagnetic interference

CEN

- Abbreviation of:
 - Comité Européen de Normalisation (European Committee for Standardization)

CFA

- Abbreviation of:
 - component failure analysis

CID

- Abbreviation of:
 - computer integrated design

CIE

- Abbreviation of:
 - computer integrated engineering

CIM

- Abbreviation of:
 - computer integrated manufacturing

CIP

- Abbreviation of:
 - continuous improvement program

CIPM

- Abbreviation of:
 - Comité International des Poids et Mesures (International Bureau of Weights and Measures)

CISPR

- Abbreviation of:
 - Comité International Spécial des Perturbations Radioélectriques (International special committee on Radio Interference)

CISTI

- Abbreviation of:
 - Canadian Institute for Scientific and Technical Information

Cm

- Abbreviation of:
 - centimeter

CMOS

- Abbreviation of:
 - complementary metal-oxide semiconductor

CMRR

- Abbreviation of:
 - common-mode rejection ratio

CMV

- Abbreviation of:
 - common mode voltage

cos

- Abbreviation of:
 - cosine

cot(A)

- Symbol for:
 - cotangent

COTS

- Abbreviation of:
 - commercial off the shelf

CP

- Abbreviation of:
- clock pulse

CPS

- Abbreviation of:
- cycles per second
- characters per second

CQI

- Abbreviation of:
- continuous quality improvement

CRT

- Abbreviation of:
- cathode ray tube

CSA

- Abbreviation of:
- Canadian Standards Association

csc(A)

- Symbol for:
- cosecant (also cosec(A))

CSIC

- Abbreviation of:
- customer specific integrated circuit

CT

- Abbreviation of:
- cycle time

CTE

- Abbreviation of:
- coefficient of thermal expansion

CW

- Abbreviation of:
- continuous wave

— D —**D**

- Symbol for:
- electric displacement field (c/m²)

D

- Symbol for:
- density (m/V)

d

- Symbol for:
- deci (tenth), 10⁻¹
- differential

d

- Subscript for:
- delay
- diameter
- deviation

dA

- Abbreviation of:
- differential of area

da

- Symbol for:
- deca (10) Sometimes spelled deka.

dB

- Symbol for:
- decibel

DC

- Abbreviation of:
- direct current
- direct coupled

DC/DC

- Abbreviation of:
- DC/DC converter

DCL

- Abbreviation of:
- dynamic load characteristic

dE

- Abbreviation of:
- differential of voltage

Dec

- Abbreviation of:
- decimal

Deg

- Abbreviation of:
- degree

Dem

- Abbreviation of:
- demodulation

DF

- Symbol for:
- dissipation factor

DFM

- Abbreviation of:
- design for manufacturability

DFR

- Abbreviation of:
- design for reliability

DFT

- Abbreviation of:
- design for test

di

- Abbreviation of:
- differential of current

DIA

- Abbreviation of:
- diameter

DIL

- Abbreviation of:
- dual in line (see DIP below)

DIN

- Abbreviation of:
- Deutsches Institut für Normung e. V. (German Institute for Standardization)

DIP

- Abbreviation of:
- dual-inline-package

DK

- Abbreviation of:
- dielectric constant

DMM

- Abbreviation of:
- digital multimeter

dP

- Abbreviation of:
- differential of power

DPM

- Abbreviation of:
- digital panel meter

DT

- Abbreviation of:
- dynamic test

dT

- Abbreviation of:
- differential of temperature

DUT

- Abbreviation of:
- device under test

dV

- Abbreviation of:
- differential of voltage

DVM

- Abbreviation of:
- digital voltmeter

dZ

- Abbreviation of:
- differential of impedance

— E —**E**

- Symbol for:
- voltage
- emitter (of transistor)
- exa (quintillion), 10¹⁸

E

- Symbol for:
- Energy (Joule)
- Electromotive Force (Volt)
- Electric Field Strength (Volt per coulomb)

e

- Symbol for:
- electron charge
- Napier's constant

e

- Subscript for:
- error
- effective
- emitter
- equivalent

ECO

- Abbreviation of:
- engineering change order

EIA

- Abbreviation of:
- Electronic Industries Alliance

EDI

- Abbreviation of:
- electronic data interchange

EDP

- Abbreviation of:
- electronic data processing

EFI

- Abbreviation of:
- electromechanical frequency interference

EHF

- Abbreviation of:
- extremely high frequency

EHV

- Abbreviation of:
- extra high voltage

ELF

- Abbreviation of:
- extremely low frequency

EMC

- Abbreviation of:
- electromagnetic compatibility

EMF

- Abbreviation of:
- electromotive force

EMI

- Abbreviation of:
- electromagnetic interference

EMP

- Abbreviation of:
 - electromagnetic power

EMU

- Abbreviation of:
 - electromagnetic unit

EN

- Abbreviation of:
 - enable

EOL

- Abbreviation of:
 - end of life

ESD

- Abbreviation of:
 - electrostatic discharge

ESI

- Abbreviation of:
 - electrostatic interference

ESL

- Abbreviation of:
 - equivalent series inductance

ESR

- Abbreviation of:
 - equivalent series resistance

ESS

- Abbreviation of:
 - environmental stress screening
 - electronic switched systems

eV

- Abbreviation of:
 - electron volt

— F —

F

- Symbol for:
 - Fahrenheit
 - Farad
 - Faraday Constant (C/mol)
- Abbreviation of:
 - fan
 - Fuse
 - Function

F

- Symbol for:
 - Force (in Newtons)

f

- Symbol for:
 - femto (quadrillionth), 10^{-15}
- Subscript for:
 - field
 - forward
 - filament

f

- Symbol for:
 - frequency

FA

- Abbreviation of:
 - failure analysis

fc

- Abbreviation of:
 - foot candle

FCS

- Abbreviation of:
 - factory control system

FCC

- Abbreviation of:
 - Federal Communications Commission

FE

- Abbreviation of:
 - ferroelectric

FET

- Abbreviation of:
 - field effect transistor

FIFO

- Abbreviation of:
 - first in first out

FI

- Abbreviation of:
 - filter

Fp

- Abbreviation of:
 - freezing point

FPM

- Abbreviation of:
 - feet per minute

FPS

- Abbreviation of:
 - feet per second
 - foot-pound-second (British)

FRACA

- Abbreviation of:
 - failure reporting, analysis and corrective action

FS

- Abbreviation of:
 - full scale

Ft

- Abbreviation of:
 - foot

FW

- Abbreviation of:
 - full wave
 - field winding

— G —

G

- Symbol for:
 - giga (Billion), 10^9
 - gauss (magnetic flux density)
 - conductance
 - ground
 - gate (of a semiconductor)

G

- Symbol for:
 - gravitational constant
 - gain (dB)

g

- Symbol for:
 - gram
 - gravitational acceleration
- Subscript for:
 - gate

g

- Symbol for:
 - gravitational field strength
 - gravitational acceleration

gen

- Abbreviation of:
 - generator (sometimes G)
 - generate

GFI

- Abbreviation of:
 - ground fault interrupter

Gnd

- Abbreviation of:
 - ground

Gm

- Abbreviation of:
 - gram

Gr

- Abbreviation of:
 - grain

GPIB

- Abbreviation of:
 - general purpose interface bus

GUI

- Abbreviation of:
 - graphical user interface

— H —

H

- Symbol for:
 - henry
 - magnetic field strength (A/m)
 - hydrogen
 - transfer function
- Abbreviation of:
 - Heater

h

- Symbol for:
 - hecto (hundred), 10^2
- Abbreviation of:
 - hour
 - hybrid
- Subscript for:
 - height
 - hysteresis

h

- Symbol for:
 - Planck's constant
 - height

HALT

- Abbreviation of:
 - highly accelerated life testing

HASS

- Abbreviation of:
 - highly accelerated stress screening

HAST

- Abbreviation of:
 - highly accelerated stress testing

Hex

- Abbreviation of:
 - hexadecimal

HC

- Abbreviation of:
 - heat coil

HF

- Abbreviation of:
 - high frequency

hipot

- Abbreviation of:
 - high potential test

Hr

- Abbreviation of:
 - hour

HV

- Abbreviation of:
 - high voltage

Hz

- Abbreviation of:
 - Hertz

**I**

- Symbol for:
 - current
 - Input

i

- Symbol for:
 - instantaneous value
- Abbreviation of:
 - ideal
 - induced
- Subscript for:
 - induced
 - internal
 - input
 - intrinsic

IC

- Abbreviation of:
 - integrated circuit
 - internal connection

ICE

- Abbreviation of:
 - in circuit Emulator

ICT

- Abbreviation of:
 - in circuit test

ID

- Abbreviation of:
 - inside diameter

IEC

- Abbreviation of:
 - International Electrotechnical Commission

IEEE

- Abbreviation of:
 - Institute of Electrical and Electronic Engineers

IF

- Abbreviation of:
 - intermediate frequency

In

- Abbreviation of:
 - input
 - inches

Ind

- Abbreviation of:
 - indirect

INH

- Abbreviation of:
 - Inhibit

INT

- Abbreviation of:
 - Interrupt

INV

- Abbreviation of:
 - inverter

I/O

- Abbreviation of:
 - input/output

MicroPower Direct

IPMC

- Abbreviation of:
 - industrial process measurement and control

IR

- Abbreviation of:
 - insulation resistance
 - induction regulator

ISL

- Abbreviation of:
 - isolator

ISO

- Abbreviation of:
 - International Organization for Standards

Iv

- Symbol for:
 - luminous intensity (in candelas)

**J**

- Symbol for:
 - joule
 - emissive power
 - jack

j

- Subscript for:
 - junction

JEDEC

- Abbreviation of:
 - Joint Electron Device Engineering Council

JIT

- Abbreviation of:
 - just in time

**K**

- Symbol for:
 - kelvin
 - general symbol for constant

K

- Symbol for:
 - kinetic energy

k

- Symbol for:
 - dielectric constant
- Abbreviation of:
 - kilo (thousand), 10³
 - key

k

- Symbol for:
 - Boltzmann constant
 - wavenumber

**L**

- Symbol for:
 - Inductance (Henries)
 - Lambert
 - Load

- Abbreviation of:
 - Load
 - inductor

- Subscript for:
 - Inductance
 - Line
 - Load
 - Leakage

l

- Symbol for:
 - length

lb

- Symbol for:
 - pound

LCD

- Abbreviation of:
 - liquid-crystal display

LED

- Abbreviation of:
 - light-emitting diode

LFM

- Abbreviation of:
 - linear feet per minute

LIF

- Abbreviation of:
 - low insertion force

lm

- Symbol for:
 - lumen

log

- Abbreviation of:
 - logarithm

LSI

- Abbreviation of:
 - large scale integration

Lv

- Symbol for:
 - luminosity (Joules per Second)

**M**

- Abbreviation of:
 - Mega (Million), 10⁶
 - motor

M

- Symbol for:
 - Moment of force (torque)
 - Mutual inductance

m

- Symbol for:
 - mass
 - modulation coefficient
- Abbreviation of:
 - milli (thousandth), 10⁻³
 - meter
 - mile (mi also used)
 - minute

MA

- Abbreviation of:
 - magnetic amplifier

Max

- Abbreviation of:
 - maximum

Med

- Abbreviation of:
 - median
 - medical

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min

- Abbreviation of:
- minimum

ML

- Abbreviation of:
- module

MLB

- Abbreviation of:
- multi layer board

mol

- Symbol for:
- mole

MOS

- Abbreviation of:
- metal-oxide semiconductor

MSB

- Abbreviation of:
- most significant bit

MTBF

- Abbreviation of:
- mean time between failure

MTTF

- Abbreviation of:
- mean time to failure

MTTR

- Abbreviation of:
- mean time to repair

— N —**N**

- Symbol for:
- Newton
- Nitrogen
- Normal Distribution
- Negative

- Abbreviation of:
- number

- Subscript for:
- noise
- nominal
- refractive index

N

- Symbol for:
- normal

n

- Symbol for:
- neutron
- nano (billionth), 10⁻⁹

NA (N/A)

- Abbreviation of:
- not available
- not applicable

NC (N/C)

- Abbreviation of:
- no connection
- normally closed

ND

- Abbreviation of:
- non destructive test

NEC

- Abbreviation of:
- National Electrical Code

NEG

- Abbreviation of:
- negative

NEMA

- Abbreviation of:
- National Electrical Manufacturers Association

NG

- Abbreviation of:
- no good

NO

- Abbreviation of:
- normally open
- number (N also used)

NP (N/P)

- Abbreviation of:
- no pin

Np

- Symbol for:
- neper

NRE

- Abbreviation of:
- nonrecurring engineering

NTC

- Abbreviation of:
- negative temperature coefficient

— O —**O**

- Symbol for:
- oxygen
- output

- Subscript for:
- output

o

- Symbol for:
- origin

OAT

- Abbreviation of:
- operating ambient temperature

OC

- Abbreviation of:
- open circuit

OCV

- Abbreviation of:
- open circuit voltage

OD

- Abbreviation of:
- oven dry

OEM

- Abbreviation of:
- original equipment manufacturer

Od

- Abbreviation of:
- outside diameter

OI

- Abbreviation of:
- opto isolator

Op

- Abbreviation of:
- operation

Opt

- Abbreviation of:
- optical

OTS

- Abbreviation of:
- off the shelf

OV

- Abbreviation of:
- overload

OVP

- Abbreviation of:
- over voltage protection

Oz

- Abbreviation of:
- ounce

— P —**P**

- Symbol for:
- power
- positive
- Abbreviation of:
- pressure
- primary
- peta (quadrillion), 10¹⁵
- pulse
- pole

- Subscript for:
- parasitic
- primary

P

- Symbol for:
- permeance

p

- Symbol for:
- pico (trillionth), 10⁻¹²
- pound

p

- Symbol for:
- momentum (in Columbs)

Pa

- Symbol for:
- Pascal (pressure)

par

- Abbreviation of:
- parallel

PARD

- Abbreviation of:
- periodic and random deviation

PCB

- Abbreviation of:
- printed circuit board

PD

- Abbreviation of:
- pull down

PF

- Abbreviation of:
- power factor

PFC

- Abbreviation of:
- power factor correction

PH

- Abbreviation of:
- phase

PIV

- Abbreviation of:
- peak inverse voltage

Pk

- Abbreviation of:
- peak

Pk - Pk

- Abbreviation of:
 - peak to peak

Pos

- Abbreviation of:
 - positive

Pot

- Abbreviation of:
 - potentiometer
 - potential

ppb

- Abbreviation of:
 - parts per billion

ppm

- Abbreviation of:
 - parts per million
 - pulses per minute

ppt

- Abbreviation of:
 - parts per thousand

Pri

- Abbreviation of:
 - primary

PU

- Abbreviation of:
 - pull up

PS

- Abbreviation of:
 - power supply

PSRR

- Abbreviation of:
 - power supply rejection ratio

PT

- Abbreviation of:
 - punch through

PTC

- Abbreviation of:
 - positive temperature coefficient

PWM

- Abbreviation of:
 - pulse width modulation
 - pulse width modulator

Pwr

- Abbreviation of:
 - power

— Q —

Q

- Symbol for:
 - electrical charge
 - quit (turn off)
 - heat (energy)
 - flow rate
- Subscript for:
 - quiescent

q

- Symbol for:
 - electrical charge
 - deceleration

QA

- Abbreviation of:
 - quality assurance

QC

- Abbreviation of:
 - quality control

QCL

- Abbreviation of:
 - qualified component list

QIS

- Abbreviation of:
 - quality information system

QCL

- Abbreviation of:
 - qualified component list

QoS

- Abbreviation of:
 - quality of service

QPL

- Abbreviation of:
 - qualified product list

QTY

- Abbreviation of:
 - quantity

Qv

- Symbol for:
 - luminous energy

QVL

- Abbreviation of:
 - qualified vendor list

— R —

R

- Symbol for:
 - resistance (in ohms)
- Subscript for:
 - resistance
 - rated
 - reverse
 - residual

R

- Symbol for:
 - reluctance

r

- Symbol for:
 - radius
 - rotor
 - location vector

rac

- Abbreviation of:
 - rectified alternating current

rad

- Symbol for:
 - radian

RC

- Abbreviation of:
 - remote control
 - resistance capacitance

R&D

- Abbreviation of:
 - research and development

Rect

- Abbreviation of:
 - rectifier (rectification)

Ref

- Abbreviation of:
 - reference

Res

- Abbreviation of:
 - resistance

REQ

- Abbreviation of:
 - required

RF

- Abbreviation of:
 - radio frequency

RFQ

- Abbreviation of:
 - request for quote

RFI

- Abbreviation of:
 - radio frequency interference

RFQ

- Abbreviation of:
 - request for quote

rh

- Abbreviation of:
 - relative humidity

RMA

- Abbreviation of:
 - returned material authorization

rms

- Abbreviation of:
 - root mean square

RoHS

- Abbreviation of:
 - Restriction of Hazardous Substances

ROW

- Abbreviation of:
 - rest of the world

rpm

- Abbreviation of:
 - revolutions per minute

rps

- Abbreviation of:
 - revolutions per second

RS

- Abbreviation of:
 - recommended standard

RT

- Abbreviation of:
 - room temperature

RY

- Abbreviation of:
 - relay

— S —

S

- Symbol for:
 - switch
 - secondary
 - signal
 - Siemens (conductance)
- Abbreviation of:
 - sine
- Subscript for:
 - signal
 - secondary
 - series

s

- Abbreviation of:
 - second
 - stator

- Symbol for:
 - distance (or displacement)
 - standard deviation

sat

- Abbreviation of:
 - saturate

sc

- Abbreviation of:
 - short circuit

SCR

- Abbreviation of:
 - silicon controlled rectifier

SD

- Abbreviation of:
 - surge diverter

sec

- Abbreviation of:
 - second
 - secondary

SELV

- Abbreviation of:
 - safety extra low voltage

ser

- Abbreviation of:
 - series
 - serial

SHW

- Abbreviation of:
 - shunt winding

SIC

- Abbreviation of:
 - Standard Industrial Classification

sig

- Abbreviation of:
 - signal

sin

- Abbreviation of:
 - sinusoidal

SIP

- Abbreviation of:
 - single inline package

SMC

- Abbreviation of:
 - surface-mount components

SMD

- Abbreviation of:
 - surface-mount devices

SMPS

- Abbreviation of:
 - switch-mode power supply

SMT

- Abbreviation of:
 - surface-mount technology

SNR

- Abbreviation of:
 - signal to noise ratio

SPC

- Abbreviation of:
 - statistical process control

SPS

- Abbreviation of:
 - samples per second

spec

- Abbreviation of:
 - specification

SQC

- Abbreviation of:
 - statistical quality control

std

- Abbreviation of:
 - standard

STP

- Abbreviation of:
 - shielded twisted pair

STR

- Abbreviation of:
 - Storage

STRIFE

- Abbreviation of:
 - stress and life (testing)

SVP

- Abbreviation of:
 - surge voltage protector

SW

- Abbreviation of:
 - series winding

SWR

- Abbreviation of:
 - standing wave ratio

sync

- Abbreviation of:
 - synchronization
 - synchronizing signal

sym

- Abbreviation of:
 - symmetrical

sys

- Abbreviation of:
 - system

— T —

T

- Symbol for:
 - transformer
 - temperature
 - tesla
 - Tera (trillion), 10¹²
 - lumen second (Talbot)
- Abbreviation of:
 - ton (also t and tn)

T

- Symbol for:
 - transmittance
 - time constant
 - torque
 - period

t

- Symbol for:
 - time
 - tension

Ta

- Abbreviation of:
 - tantalum

TCE

- Abbreviation of:
 - temperature coefficient of expansion
 - thermal coefficient of expansion

Term

- Abbreviation of:
 - terminate

THD

- Abbreviation of:
 - total harmonic distortion

THE

- Abbreviation of:
 - Technical Help to Exporters

TP

- Abbreviation of:
 - time pulse

TQ

- Abbreviation of:
 - total quality

TQC

- Abbreviation of:
 - total quality control

TRIG

- Abbreviation of:
 - trigger

TUV

- Abbreviation of:
 - Technischer Überwachungsverein (Technical Inspection Association)

— U —

U

- Symbol for:
 - universal set
- Abbreviation of:
 - unit

UL

- Symbol for:
 - Underwriters Laboratories

UPS

- Abbreviation of:
 - uninterruptible power supply

UTP

- Abbreviation of:
 - unshielded twisted pair

— V —

V

- Symbol for:
 - volt

v

- Abbreviation of:
 - vector

v

- Symbol for:
 - velocity

VA

- Abbreviation of:
 - volt-ampere

VAC

- Abbreviation of:
 - vacuum
 - volts alternating current

VCO

- Abbreviation of:
 - voltage controlled oscillator

VD

- Abbreviation of:
 - voltage drop

VDC

- Abbreviation of:
 - volts direct current

VDE

- Abbreviation of:
 - Verband der Elektrotechnik, Elektronik und Informationstechnik (Association for Electrical, Electronic & Information Technologies)

VFO

- Abbreviation of:
 - variable-frequency oscillator

VHF

- Abbreviation of:
 - very high frequency

VHR

- Abbreviation of:
 - very high resistance

VHSIC

- Abbreviation of:
 - very high speed IC

VLSI

- Abbreviation of:
 - very-large-scale integration

— W —

W

- Symbol for:
 - energy
 - work

- Abbreviation of:

- watt
- width

w

- Abbreviation of:
 - weight (wt also used)

WG

- Abbreviation of:
 - wire gauge

WH

- Abbreviation of:
 - watt-hour

WIP

- Abbreviation of:
 - work in progress

wdg

- Abbreviation of:
 - winding

ww

- Abbreviation of:
 - wirewound

— X —

X

- Symbol for:
 - reactance

- Abbreviation of:

- no connection
- unknown quantity

Xc

- Symbol for:
 - capacitive reactance

Xl

- Symbol for:
 - inductive reactance

— Y —

Y

- Symbol for:
 - admittance

y

- Abbreviation of:
 - year (yr also used)
 - yard (yd also used)

— Z —

Z

- Symbol for:
 - impedance

z

- Abbreviation of:
 - zero
 - zone

SYMBOLS

A alpha (upper case)

- Symbol for:
 - Ampere

a alpha (lower case)

- Symbol for:
 - current gain of a common base bipolar transistor stage

β beta (lower case)

- Symbol for:
 - current gain of a common emitter bipolar transistor stage

Δ delta (upper case)

- Symbol for:
 - A change or differential in measured values

δ delta (lower case)

- Symbol for:
 - deflection

ε epsilon (upper case)

- Symbol for:
 - voltage

ε epsilon (lower case)

- Symbol for:
 - electromotive force

η eta (lower case)

- Symbol for:
 - efficiency

γ gamma (upper case)

- Symbol for:
 - gamma function

γ gamma (lower case)

- Symbol for:
 - angle

I iota (upper case)

- Symbol for:
 - current

Λ lambda (upper case)

- Symbol for:
 - equivalent conductivity

λ lambda (lower case)

- Symbol for:
 - wavelength

ν nu (lower case)

- Symbol for:
 - reluctance

μ mu (lowercase)

- Symbol for:
 - micro

Ω omega (uppercase)

- Symbol for:
 - ohms

ω omega (lowercase)

- Symbol for:
 - angular velocity

Φ phi (uppercase)

- Symbol for:
 - magnetic flux

- Symbol for:
 - phi (lowercase) angle

π Pi (lower case)

- Symbol for:
 - mathematical constant Pi

ψ psi (lower case)

- Symbol for:
 - phase difference

ρ rho (lower case)

- Symbol for:
 - thermal resistivity

(J') sigma (lower case)

- Symbol for:
 - conductivity

T Tau (lower case)

- Symbol for:
 - torque
 - time constant in an RC circuit

Θ theta (upper case)

- Symbol for:
 - phase angle

Θ theta (lower case)

- Symbol for:
 - thermal resistance

W

- Symbol for:
 - watt

χ Chi (lower case)

- Symbol for:
 - electric susceptibility,
 - magnetic susceptibility

Z

- Symbol for:
 - impedance