

Packages:

BGA	Ball Grid Array
CUEBGA	Copper via Metallization for Ball Grid Array Devices
DIP	Dual In-line Package
mBGA	Micro Ball Grid Array
MBGA	Metal Ball Grid Array
PGA	Pin Grid Array
PLCC	Plastic Leaded Chip Carrier
QFN	Quad Flat Non-leaded
QFP	Quad Flat Pack
SIP	Single In-line Package
SOIC	Small Outline Integrated Circuit
SOJ	Small Outline J-bend
SOP	Small Outline Package
TSOP	Thin Small Outline Package

Other:

ASIC	Application Specific Integrated Circuit
BPO	Bond Pad Opening
BPP	Bond Pad Pitch
COB	Chip on Board
CSP	Chip Scale Package
EFO	Electronic Flame Off
FAB	Free Air Ball
HDI	High Density Interconnects
I/O	Input/Output
IC	Integrated Circuit
LED	Light Emitting Diode
LTCC	Low-Temperature Co-fired Ceramics
MCM	Multi Chip Module
MCP	Multi Chip Packaging
MEMS	Micro Electro Mechanical Systems
MMS	Micro Module System(s)
PCB	Printed Circuit Board
SEM	Scanning Electron Microscope
SMT	Surface Mount Technology
SOC	System on Chip
Tg	Temperature of Glassification
VLSI	Very Large Scale Integrated Circuit

Common English/Metric Unit Conversions			
Known Units	Factor	Desired Units	Examples
Inches (in.) or (")	Multiply by 25,400	Microns (μ) or (µm)	0.0018 inch x 25,400 = 45.72 microns Therefore: 0.0018 in. = 46µm = 1.8 mil 0.0059 inch x 25,400 = 149.86 microns Therefore: 0.0059 in. = 150µm = 5.9 mil
Inches (in.) or (")	Multiply by 25.4	Millimeters (mm)	0.437 inch x 25.4 = 11.0998 mm Therefore: 0.437 in. = 11.1 mm 0.010 inch x 25.4 = 0.254 mm Therefore: 0.010 in. = 0.25 mm = 10 mil
Microns (μ) or (µm)	Divide by 25,400	Inches (in.) or (")	100 microns ÷ 25,400 = 0.003937 inch Therefore: 100µm = 0.0039 in. = 3.9 mil 25 microns ÷ 25,400 = 0.000984 inch Therefore: 25µm = 0.0010 in. = 1 mil
Millimeters (mm)	Divide by 25.4	Inches (in.) or (")	0.05 mm ÷ 25.4 = 0.001968 inch Therefore: 0.05 mm = 0.002 in. = 2 mil 1 mm ÷ 25.4 = 0.03937 inch Therefore: 1 mm = 0.039 in.

English/Metric Equivalencies & Special Terms	
Equivalencies	Special Terms
1 inch = 25,400 microns	1 mil = 1/1,000 in. = 0.001 in. = 1 thou = 25µm
1 inch = 25.4 millimeters	1 tenth = 1/10,000 in. = 0.0001 in. = 2.5µm
1 inch = 2.54 centimeters	1 thou = 1/1,000 in. = 0.001 in. = 1 mil = 25µm
1 micron = 0.00003937 inch	1 micron = 1μ = 1µm (μ = µm)
1 millimeter = 0.03937 inch	1 inch = 1 in. = 1" (inch = in. = ")
1 centimeter = 0.3937 inch	1.0 mil = 0.001 in. = 0.001" = 25µm = 0.025 mm

Note: Engineering data is representative. Property values vary somewhat with method of manufacture, size, and shape of part. Any suggested applications are not made as a representation or warranty that the material will ultimately be suitable for such applications. The customer is ultimately responsible for all design and material suitability decisions. Data contained herein is not to be construed as absolute and does not constitute a representation or warranty for which CoorsTek assumes legal responsibility. Any warranty or representation for which CoorsTek is responsible shall be subject to a separately negotiated agreement.

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