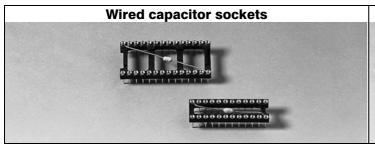
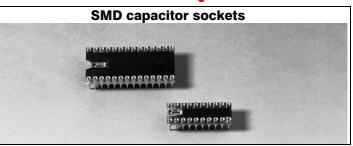
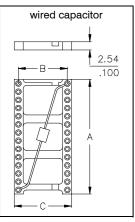
# QIT Series - IC Sockets with Capacitors 2,54mm pitch

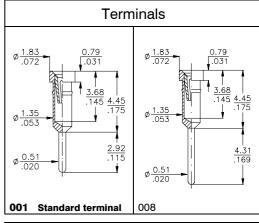


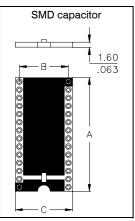




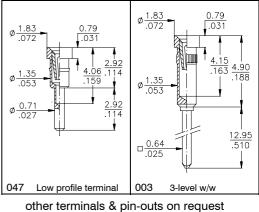


Pin	"A"	"B"	"C"	Ordering code
8	10,16/.400	<u>7,62</u> .300	<u>10.16</u> .400	QIT-308-W001-01
14	17,78/.700			QIT-314-W001-01
16	20,32/.800			QIT-316-W001-01
18	22,86/.900			QIT-318-W001-01
20	25,40/1.00			QIT-320-W001-01
24	30,48/1.20			QIT-324-W001-01
28	35,56/1.40			QIT-328-W001-01
24	30,48/1.20	<u>15,24</u> .600	<u>17.78</u> .700	QIT-624-W001-01
28	35,56/1.40			QIT-628-W001-01
32	40,64/1.60			QIT-632-W001-01
40	50,80/2.00			QIT-640-W001-01





Pin	"A"	"B"	"C"	Ordering code
8	10,16/.400	7,62 .300	<u>10.16</u> .400	QIT-308-S001-01
14	17,78/.700			QIT-314-S001-01
16	20,32/.800			QIT-316-S001-01
18	22,86/.900			QIT-318-S001-01
20	25,40/1.00			QIT-320-S001-01
24	30,48/1.20			QIT-324-S001-01
28	35,56/1.40			QIT-328-S001-01
24	30,48/1.20	<u>15,24</u> .600	<u>17,78</u> .700	QIT-624-S001-01
28	35,56/1.40			QIT-628-S001-01
32	40,64/1.60			QIT-632-S001-01
40	50,80/2.00			QIT-640-S001-01



## **Socket Specifications**

## **Mechanical data** Insertion force

Extraction force (standard)

Contact life

Solder ability

Water absorption during 24hrs at 20°C

Contact security:
-Vibration (MIL-STD-202 Method 204 B)

-Shock (MIL-STD-202 Method 202 C)

Material

Insulator Terminal Contact

Voltage

**General data** Ceramic material

20g 150g

BeCu

50 V

0.05%

1,80 N (avg)

0,90 N (avg)

> 100 cycles

PBT UL 94 V-O (wired version); FR 4 for SMD CuZn

exceeds MIL-STD-202 Methode 208

**Electrical data** 

Contact resistance at 1A Current rating

Contact capacitance at 1MHz Insulation resistance at 500V DC

(MIL-STD-1344 Methode 3003)

Breakdown voltage at 60 Hz (MIL-STD-1344 Methode 3001.1)

Contact resistance after 1000 ins./ext. cycles

Operating temperature

Pitch

≤7 mΩ

4,3 mΩ typ.

1A max.

2 pF max.

1 KV min.

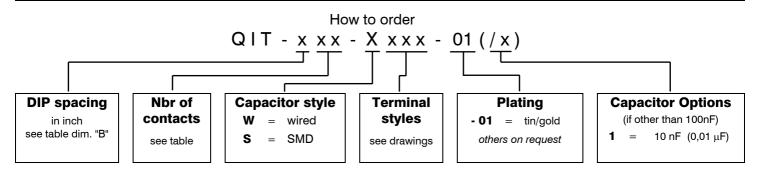
 $5 \times 10^9 \Omega$  min.

- 25°C to +85°C 2,54 mm (.100")

## **Capacitor Specifications**

Available capacitor values

Standard type 100nF (0.1 μF) 10nF (0.01 μF) Alternatives



# General Specification and Information



UI 94 V-0

# **General Specifications for Precision Pin Sockets**

#### Mechanical data

Average forces for available clip types:

Standard type 1.80N insertion / 0.90N extraction
Low force type 0.70N insertion / 0.25N extraction
Super low force type 0.40N insertion / 0.15N extraction
High force type 4.00N insertion / 2.50N extraction
"Jumbo" contact 1.40N insertion / 0.25N extraction

Other clips and forces available on request

Contact life min. 100 cycles

Solder ability exceeds MIL-STD-202 Method 208
Water absorption during 24brs at 20°C PRT / PPS 0.05%

Water absorption during 24hrs at 20°C PBT / PPS 0,05% FR4 Epoxy 0.15%

Operating temperature (standard) -65°C to +150°C

Soldering temperature

 Standard PBT
 +175°C min. for 10 sec.

 Hi-temp PPS , LCP
 +260°C min. for 10 sec.

 Epoxy FR4
 +220°C min. for 10 sec.

Electrical data

Contact resistance at 1A  $4.3 \text{ m}\Omega \text{ typ.}$ Current rating (except "Jumbo" contact) 1A max. 3A max "Jumbo" contact Contact capacitance at 1MHz 2pF max. Insulation resistance at 500V DC for std & hi-temp 5 ×109 O min. Insulation resistance at 500V DC for FR4 Epoxy  $>10^4 \,\mathrm{M}\Omega$ Breakdown voltage at 60 Hz 500 V AC min. Contact resistance after 1000 ins./ext. cycles  $\leq$  7 m $\Omega$ 

#### Material

Standard insulator Glass filled polyester
UL 94 V-O

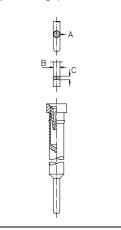
Hi-temp insulator PPS, UL 94 V-0
Epoxy insulator Glass Epoxy FR 4,

Terminal CuZn Contact BeCu

# Male pin dimensions for standard clip (except "Jumbo Contact")

( DIN 41 870, IEC 191 for square IC-legs )

min.	max.
<u>0,42</u>	<u>0,56</u>
.016"	.022"
<u>0,36</u>	<u>0,55</u>
.014"	.023"
<u>0,20</u>	<u>0,30</u>
.008"	.014"
	0,42 .016" 0,36 .014"



# General information concerning the E-tec interconnect products

## Plating:

Standard tin plating:

Min. 4,00μm SnPb (90/10) over min. 1,30μm Ni

Standard gold plating:

flash, max.  $0,10\mu m$  Au over min.  $1,30\mu m$  Ni Higher gold platings are offered on request

### Specifications:

The data contained in this catalog is of general nature and refers to standard products. For example a "Current rating" at an ambient temperature of 25° C reflects the value per individual contact. Should you require any further data or test reports, you can obtain this information from your nearest E-tec sales office.

The E-tec connectors conform with signal integrity requirements at high data and frequency rates. However we cannot offer a general information about the max. frequency or data transmission rate. For such a statement, it would require more information about the chosen configuration and pin-out, the length of the cable and/or any other specific requirements regarding the application itself and its related signal integrity.

E-tec SMT connectors, male or female, are offered with a coplanarity of max. 0,10mm

They are adapted to all modern SMT soldering processes and they can be handled easily with all currently existing placing techniques. Customers may choose between various packaging options, such as tray, tube and tape & reel.

## **GENERAL POLICY**

All information contained in this catalog, including illustrations, specifications and dimensions are accurate to the best of our knowledge, and reflect the status as at the date of publication. Due to technical progress, it is subject to change without notice. Application information is informational in nature and shall not be construed to warrant suitability of products for any particular purpose as performance may vary with the conditions encoured. Unless otherwise confirmed at the time of order. All E-tec products are non cancellable - non returnable items (NCNR). E-tec's products are warranted for 30 days and the warranty is limited strictly to replacement of products with defective workmanship.