

SPK Electronic Co., Ltd., is an industry veteran with 30 year experience in manufacturing its own electronic components. We are also the agent of Seiko Epson. SPK was selected by Sarantel Inc (UK) as the only Distributor in Taiwan, China/Hong Kong to represent Sarantel's world-reknonw and patented, GPS Geohelix Antenna.

EPSON TOYOCOM

CRYSTAL UNIT

KHz Range		MHz Range	
2.05x1.2 size FC-12M Size: 2.05x1.2x0.8	1612 size FA-118 Preliminary Size: 1.6x1.2x0.38	3225 size FA-23A Size: 3.2x2.5x0.8	
FC-12S Size: 2.05x1.2x0.7	2016 size FA-12B Size: 1.6x1.6x0.38	FA-238V/FA-238 Size: 3.2x2.5x0.7	
3.2x1.5 size FC-13E Size: 3.2x1.5x0.8	2520 size FA-20H Size: 2.5x2.5x0.88	TSX-3225 Size: 3.2x2.5x0.8	
FC-13F Size: 3.2x1.5x0.88	FA-12B FA-20H TSX-3225	FA-365 MA-306 MA-406	MA-505/508 CA-301
FC-13S Size: 3.2x1.5x0.8		SAW Resonator	
MC-146 MC-156 MC-405/406 FC-145	FC-255 C-TYPE C-2-TYPE C-4-TYPE	2520 size NS-21R Size: 2.5x2.5x0.88	3.8x3.8 size NS-32R FS-33S Size: 3.8x3.8x0.88

SA Type

Size: 10.1x7.4x0.31



TG-3530SA
RX-4045SA
RTC-4543SA
RTC-4574SA
RX-4571SA
RX-4801SA
RX-8025SA
RX-8571SA
RX-8581SA
RX-8801SA
RA-4585SA
RA-4574SA
RA-8581SA
RA-8585SA

CA(7050) Type

Size: 7.0x5.8



SG-710 Series
SG-770SCO
TCO-708x Series
SG-8002CA
SG-9001CA
XG-1000CA
EG-2000 Series
HG-2150CA
VG-4231CA
VG-4502CA
VG-4511CA
VG-1201CA
TCO-5060 Series
TCO-5160 Series

SG-3050BC
SG-210 Series
SG-550 Series
TCO-770/771 Series
TCO-708x Series
SG-636 Series
SG-645 Series
SG-615 Series
SG-531 Series
SG-51 Series
SG-8003 Series
SG-8002
JF/CA/DB/DC Series
SG-9001LB/CA/JC

Low-Jitter SAW

XG-1000CA/CB
EG-2021CA
EG-2001CA
EG-2002CA

EG-2121CA
EG-2102CA
EG-2101CA

High-Stability

HG-2150CA
HG-8002JA Series

Oscillator & Real Time Clock (RTC)

BA Type

SG-150 Series
SG-8003BA
TG-5011BA
Size: 2.1x1.1x0.8

CG(2520) Type

SG-211 Series
TG-5005CG
TG-5010CG
Size: 2.5x2.0

CE(5032) Type

TCO-710x Series
XG-1000CB
VG-4231CB
VG-4531CB
Size: 3.2x2.5

FILTER (MCF/SAW)

2.5x2.0 size HF-232A / HF-233A For Radio Equipment / IF	3.0x3.0 size HF-362A / HF-363A For Radio Equipment / IF	3.8x3.8 size HF-372A / HF-373A MF-372A / MF-373A For Radio Equipment / IF
TQS-949AD-7G For GPS, Car navigation / RF	TF-330A/C For TPMS, RKE / RF	FF-32N For TPMS, RKE / RF
5.0x3.2 size BF-531A For Satellite radio / IF	TQS-570AA-7R / TQS-566AA-7R TQS-557AA-7R For ISM / RF	TQS-471BB-7R For WLAN / IF
	TQS-477AA-7R For Cellular phone / IF	

LB Type

SG-8002LB
SG-9001LB
Size: 5.0x3.2x1.5

LH Type

TG-5010LH
Size: 3.2x2.5x0.88

JF Type

SG-3030JF
SG-645 Series
SG-8002JF
Size: 7.1x5.1x1.0

LC Type

Size: 3.6x2.8x1.2

SG-3030LC
SG-3040LC
RX-4574LC
RX-4575LC
RX-4571LC
RX-8584LC
RX-8731LC
RX-8571LC

CE(3225) Type

Size: 3.2x2.5

SG-310 Series
SG-8002CE
SG-8003CE
VG-4231CE
TG-5005CE
TCO-5860 Series

GYRO SENSOR

CB(5032) Type Size: 5.0x3.2x1.5 XV-3500CB For detector picture stabilization XV-8000CB For car navigation XV-8100CB For portable GPS/GMS	LK(Inclined) Type Size: 5.0x4.0x2.8 XV-8000LK For Car navigation
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OPTICAL DEVICE

OLPF Size: 8.0x11.3 Pi-out Filter UV / IR-out Filter	Dichroic Prism Size: 5.0x5.0x2.0
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NB Type

Size: 6.3x4.8x1.3

RX-4045NB
RX-4581NB
RTC-4701NB
RTC-4574NB
RX-4571NB
RX-8025NB
RTC-8564NB
RX-8581NB
RX-8571NB

JE Type

Size: 7.0x5.0x1.3

MG-5020JE
RX-9701JE
RTC-4701JE
RTC-4574JE
RTC-8564JE
RX-8581JE

Serial interface:		Parallel interface	
4 wire	3 wire	I ² C	4-bit
RX-8025SA/NB RTC-8564JE/NB RX-8564LC/SA RX-8581SA/JE/NB/SA RX-8731LC	RTC-4701JE/NB RTC-4574SA/JE/NB RX-4574LC RA-4574SA RTC-4543SA /SB RX-4575LC RX-4571LC/NB/SA	RX-8025SA/NB RTC-8564JE /NB RX-8564LC RX-8565SA RX-8571SA/NB/LC RX-8581SA/JE/NB RA-8581SA RX-8731LC RX-8801SA/JE	RTC-7301SF RTC-7301DG RTC-72421 RTC-72423



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CRYSTAL UNITS

● **CYLINDRICAL "KHZ"**

● **DIP TYPE "KHZ"**

1.5X5.0 32KHZ~307.2KHZ
2X6 20KHZ~165KHZ~307.2KHZ
3X8 32.768KHZ,~100KHZ

● **SMD TYPE "KHZ"**

2X6 BEND-LEAD 蛙翻32.768KHZ
SMD 3X8 M28 32.768KHZ
SMD 1.5x7 32.768KHZ

● **DIP TYPE "MHZ"**

HC49US/SMD 3.579545~60MHZ
HC49U 1.8432MHZ~75MHZ
UM-1/UM-5 8MHZ~100MHZ
2x6 12MHZ ~27MHZ
3X9 4MHZ ~66MHZ
3X10 4MHZ(含) 以下

● **SMD TYPE "MHZ"**

3.0X2.5X0.7 16MHZ ~ 40MHZ
4.0X2.5X0.7 12MHZ ~ 40MHZ
5.0X3.2X1.0 12MHZ ~ 40MHZ
5.0X7.0X1.0 10MHZ ~ 40MHZ
6.0X3.5X1.0 6MHZ ~ 40MHZ

CRYSTAL OSCILLATOR

● **OSCILLATOR (DIP)**

1MHZ~135MHZ
20.2X12.8X5.08 FULL SIZE 14PIN
12.8X12.8X7.6 HALF SIZE 8PIN

● **OSCILLATOR (SMD)**

5.0X7.0X1.4 1MHZ ~ 125MHZ
5.0X3.2X1.3 1.54MHZ~125MHZ

CERAMIC RESONATOR (FILTER)

SMD 2.0~50MHZ

7.4X3.4 2.0~50MHZ
4.7X4.1 7.0~50MHZ
3.7X3.1 7.0~50MHZ



● **VCXO-DIP**

1.544~49.9MHZ 20.0X20.0X15.0
1.544~49.9MHZ 20.8X13.2X8.0
1.544~49.9MHZ 20.8X13.2X5.08
1.544~65MHZ 18.5X12.0X8.0
1.544~36MHZ 13.2X13.2X5.08
FULL/HALF SIZE DIP
HALF : 1-45MHZ FULL : 1-160MHZ

● **VCXO-SMD**

1.544~49.9MHZ 20.8X13.2X8.0
1.544~49.9MHZ 20.8X13.2X6.0
1.544~65MHZ 18.5X12.0X8.0
1.544~49.9MHZ 18.5X12.0X 5.0
1.544~36MHZ 13.2X13.2X6.0
1.544~49.152MHZ 11.4X11.4X2.3
1-36MHZ 7.0X5.0X1.7

● **OCXO**

1-160MHZ 38X38X16mm
1-160MHZ 40X25X16mm
1-100MHZ 20.8X13.2X12.7
1-160MHZ 15.24X20.5X10.5
1-160MHZ 19X19X15
1-160MHZ 30X30X22
1-160MHZ 36.1X36.1X16

● **TCXO(VCTCXO) DIP**

1~40MHZ 15.24X11.9X8.7
1~160MHZ 20.8X13.2X6.8
1~40MHZ 20.8X13.2X9.6
1~160MHZ 36.1X7.2X16
1~200 MHZ 20.5x20.5x5.0
1~200 MHZ 25.2x15.1x9.0
1~200 MHZ 25.2x40x10
5~200 MHZ 12.7x12.7x5.5

● **TCXO (VCTCXO)SMD**

9.6~26MHZ 11.7X21.3X6.6
9.6~26MHZ 12.8X20.2X9.3
10~26MHZ 12.8X12.8X9.3
10~26MHZ 11.4X9.6X2.5
10~27MHZ 7.0X5.0X1.9
12~19.2MHZ 5.0X3.2X1.5

● **VCO**

Single-Band : 204~5102MHZ
Dual-Band : GSM : 880~915 MHZ
DSC1800 : 1710~1785MHZ
DCS/PCS TX : 1710~1910MHZ
Tri-Band : GSM : 880~915MHZ
DCS : 1710~1785MHZ
PCB : 1850~1910MHZ

● **CRYSTAL FILTER**

Center Frequency:
10.7mhz/21.4mhz/45.0mhz
Size : 49T/UM-1/UM-5/5X7/6X3.5

SAW FILTER FOR GPS

SMD 1.1x1.4 2x1.4
2.5x2.0 3x3

SAW RESONATOR

SMD 2.5X2.0
2X1.4
3.8X3.8X1.3
3.3X3.3
5x3.2
5.08X5.08X1.55
DIP TO39&F11 PACKAGE 150~1489MHZ



SMD Include Plastic Package. Ceramic Package



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(C) LED Series Product

Visible product series



1. Hi-Power LED
2. SMT LED
3. LED Lamp
4. Super Flux LED
5. LED Bar/LED stripes
6. LED Spotlight
7. Seven Segments Display
8. Light pipe

Infrared product series



1. Ambient light sensor
2. Infrared LED
3. Phototransistor
4. Silicon photodiode
5. InGaAs Photodiode
6. Interrupter

(D) Touch Panel Product



1. 4 Wire Resistive Touch Panel
2. 5 Wire Resistive Touch Panel
3. The newest technology of SR-Touch™ Sunlight Readable: Featuring low reflection rates as less as 2% and high positional resolutions. With this unique technology, SPK's touch panels are viewable in all lighting conditions, even under direct sunlight.
4. Based on surface Acoustic Wave (SAW) touch technology. SonicTouch is composed of a pure glass construction that delivers unsurpassed durability, reliability and clarity. SonicTouch offers over 90% of light transmission.

(E) Touch Panel Controller



1. URTC controller series
2. RKTC controller series
Support PS2 and Serial interface
3. STC controller series
Support USB and Serial interface

(F) Switch



1. Tact Switch
2. Push Switch
3. Micro Switch
4. Rocker Switch
5. Slide Switch
6. Detector Switch
7. Dip Switch
8. Toggle Switch

Switch are widely applied in medical equipment, household appliances, computers and numeral devices.

(G) Buzzer



- (I) Buzzer
ELECTRO MAGNETIC BUZZER
PIEZO BUZZER
- (II) Condenser microphone
OmniDirectional, UniDirectional,
Noise Canceling
- (III) Speaker:
1. Round 10-28mm
2. Round 29-70mm
3. Square Rectangle
4. Speaker-Dip
- (IV) Receiver
1. Dynamic Receiver
2. Telephone Receiver

(H) High-Tachology & ROBOT Kit & Module



Poket Projectors

Paper Robot

Commander Module



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