

Crystal Oscillators

Solder Seal TCXO—Small Package

Package = P2 on page 75						
Output Code	Type	Typical Current mA	Frequency Range MHz pages 70 and 71			
			Group 1	Group 2	Group 3	Group 4
TC	TTL LS	15	.030-16	.02-24	.015-30	.015-30
HC	CMOS HC	12	.001-16	.0003-24	.00025-32	.00025-40
AC	CMOS AC	15	.001-16	.0003-24	.00025-32	.00025-40
CS	CMOS 12V	9	.001-15	.0003-24	.00025-15	.00025-15
EH	ECL 10KH	60	na	5-24	4-32	4-40
SC	0.5V/1K Ω	10	8-16	5-24	4-32	4-40
SD	1.0V/1K Ω	12	8-16	5-24	4-32	4-40
RB	+4 dbm/50 Ω	12	8-16	5-24	4-32	4-40
RC	+7 dbm/50 Ω	15	8-16	5-24	4-32	4-40

Package = P1, P3, P4, P5 on page 75						
Output Code	Type	Typical Current mA	Frequency Range MHz pages 70 and 71			
			Group 1	Group 2	Group 3	Group 4
TC	TTL LS	15	.0300-16	.0200-24	.01500-30	.01500-30
HC	CMOS HC	12	.0005-16	.0003-24	.00025-32	.00025-40
AC	CMOS AC	15	.0005-16	.0003-24	.00025-32	.00025-40
CS	CMOS 12V	9	.0005-15	.0003-15	.00025-15	.00025-15
EH	ECL 10KH	60	na	1.25-24	1.0-32	1.0-40
SC	0.5V/1K Ω	10	0.1-16	0.10-24	0.1-32	0.1-40
SD	1.0V/1K Ω	12	0.1-16	0.10-24	0.1-32	0.1-40
RB	+ 4 dbm/50 Ω	12	0.1-16	0.10-24	0.1-32	0.1-40
RC	+ 7 dbm/50 Ω	15	0.1-16	0.10-24	0.1-32	0.1-40
RD	+10 dbm/50 Ω	20	0.1-16	0.10-24	0.1-32	0.1-40

See page 67 for further information.

Crystal Oscillators

Solder Seal TCXO—Mid-Size Package

Package = R1 to RC on pages 76 to 78						
Output Code	Type	Typical Current mA	Frequency Range MHz			
			pages 70 and 71			
			Group 1	Group 2	Group 3	Group 4
TC	TTL LS	15	.0002-16	.0002-30	.0002-30	.0002-30
TD	TTL STD	25	.0002-16	.0002-30	.0002-50	.0002-50
TF	TTL F	20	.0002-16	.0002-30	.0002-75	.0002-110
TA	TTL	12	.0002-16	DC-30	.DC-60	DC-60
HC	CMOS HC	12	.0002-16	DC-30	DC-60	DC-60
AC	CMOS AC	15	.0002-16	DC-30	DC-100	DC-100
LB	CMOS 3V	8	.0002-16	.0002-30	.0002-50	.0002-50
LD	CMOS 3V	6	.0002-16	.0002-30	.0002-50	.0002-50
CS	CMOS 12V	9	.0002-15	DC-15	DC-15	DC-15
CT	CMOS 15V	10	.0002-15	DC-15	DC-15	DC-15
CY	CMOS 8-16V	12	.0002-10	DC-10	DC-10	DC-10
EH	ECL 10KH	60	na	.0002-60	.0002-150	.0002-220
EK	ECL 100K	90	na	.0002-60	.0002-150	.0002-220
SA	0.1V/1K Ω	7	.1-16	.01-30	.01-30	.01-30
SB	0.3V/1K Ω	8	.1-16	.01-30	.01-30	.01-30
SC	0.5V/1K Ω	10	.1-16	.01-30	.01-30	.01-30
SD	1.0V/1K Ω	12	.1-16	.01-30	.01-30	.01-30
SE	1.0V 10%/1K Ω	12	.1-16	.01-30	.01-30	.01-30
RA	-3 dbm/50 Ω	7	.1-16	.01-30	.01-75	.01-110
RB	+4 dbm/50 Ω	12	.1-16	.01-30	.01-75	.01-110
RC	+7 dbm/50 Ω	15	.1-16	.01-30	.01-75	.01-110
RD	+10 dbm/50 Ω	20	.1-16	.01-30	.01-75	.01-110
RE	+13 dbm/50 Ω	25	.1-16	.01-30	.01-75	.01-110

See page 67 for part number information.

www.DataSheet4U.com Supply current listed is for 10 MHz oscillators.

See pages 6 through 10 for definitions of output formats and supply voltages.

Crystal Oscillators

Solder Seal TCXO—Large Package

Package = S4 to S9 on pages 78 and 79						
Output Code	Type	Typical Current mA	Frequency Range MHz			
			pages 70 and 71			
			Group 1	Group 2	Group 3	Group 4
TC	TTL LS	15	DC-30	DC-30	DC-30	DC-30
TD	TTL STD	25	DC-48	DC-50	DC-50	DC-50
TF	TTL F	20	.0002-48	.0002-60	.0002-125	.0002-125
TA	TTL	12	DC-48	DC-60	DC-60	DC-60
HC	CMOS HC	12	DC-48	DC-60	DC-60	DC-60
AC	CMOS AC	15	DC-48	DC-60	DC-125	DC-125
LB	CMOS 3V	8	DC-48	DC-50	DC-50	DC-50
LD	CMOS 3V	6	DC-48	DC-50	DC-50	DC-50
CR	CMOS 10V	8	DC-12	DC-12	DC-12	DC-12
CS	CMOS 12V	9	DC-15	DC-15	DC-15	DC-15
CT	CMOS 15V	10	DC-15	DC-15	DC-15	DC-15
CY	CMOS 8-16V	12	DC-10	DC-10	DC-10	DC-10
EH	ECL 10KH	60	.0002-48	.0002-90	.0002-225	.0002-225
EK	ECL 100K	90	.0002-48	.0002-90	.0002-225	.0002-450
SA	0.1V/1K Ω	7	.1-30	.1-30	.1-30	.1-30
SB	0.3V/1K Ω	8	.1-30	.1-30	.1-30	.1-30
SC	0.5V/1K Ω	10	.1-30	.1-30	.1-30	.1-30
SD	1.0V/1K Ω	12	.1-30	.1-30	.1-30	.1-30
SE	1.0V 10%/1K	12	.1-30	.1-30	.1-30	.1-30
RA	- 3 dbm/50 Ω	7	.1-48	.1-48	.1-150	.1-225
RB	+ 4 dbm/50 Ω	12	.1-48	.1-48	.1-150	.1-225
RC	+ 7 dbm/50 Ω	15	.1-48	.1-48	.1-150	.1-225
RD	+10 dbm/50 Ω	20	.1-48	.1-48	.1-150	.1-225
RE	+13 dbm/50 Ω	25	.1-48	.1-48	.1-150	.1-225

See page 67 for part number information.

See pages 6 through 10 for definitions of output formats and supply voltages.

Supply current listed is for 10 MHz oscillators.

Crystal Oscillators

Solder Seal TCXO-VHF

Option	ECL TCXO		TTL/CMOS TCXO		Sine Wave TCXO			
	0	1	0	1	2*	3*	4*	5*
Supply	default	default	default	default	+12.0	+5.0	+12.0	+5.0
VCO	none	0 to -5V	none	0 to 5V	none	none	0 to 5V	0 to 5V

*These options are standard on Sinewave and optional on TTL/CMOS. Supply voltage tolerance is ±5%

VCO Option:

Range > 1.0 ppm
 Lowest freq. at 0 volts
 Input Impedance > 10 KΩ
 Bandwidth > 500 Hz

Voltage Stability <2x10⁻⁸ per percent change
 Trim Range adequate for 10 yrs.
 Typical Aging <1 ppm per year at ≤15MHz
 <2 ppm per year at >15MHz

Other options are available on a custom basis.

See page 96 for a description of the basic part number structure.

See page 97 for information about typical environmental values.

Package = S1, S2, S3 on page 78					
Output Code	Type	Typical Current mA	Frequency Range MHz		
			Group 7	Group 8	Group 9
EH	ECL 10KH	85	.01- 225	.01- 300	.01- 400
EK	ECL 100K	95	.01- 225	.01- 300	.01- 451
EE	ECL 10KE	95	.01- 225	.01- 300	.01- 750
EF	ECL 100KE	95	.01- 225	.01- 300	.01- 750
RA	- 3 dbm/50Ω	60	.01- 300	.01- 300	.01->800
RB	+ 4 dbm/50Ω	70	.01- 270	.01- 300	.01->800
RC	+ 7 dbm/50Ω	78	.01- 250	.01- 300	.01->800
RD	+10 dbm/50Ω	89	.01- 225	.01- 300	.01->800
RE	+13 dbm/50Ω	100	.01- 225	.01- 300	.01->800

Part Numbering Example

HC S1 H 0 B16 C - Frequency
Screening—see page 13 for details
Stability—see pages 70 and 71 for details
Supply—see table above
Package—see headers of preceding tables
Output Code—see tables on pages 64 to 67

Note: Not all supply options are available on all packages at all frequencies.