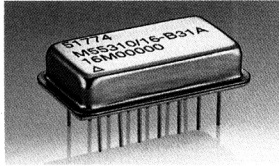


CROSS REFERENCE TO Q-TECH PRODUCT

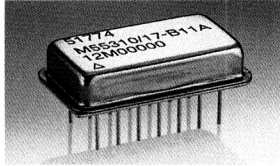
PIN CONNECTIONS

| MIL# | QT#* | OUT | VCC | CASE | GATE | GND |
|------|------|-----|-----|------|------|-----|
| /16 | QT6T | 8 | 14 | 7 | N/A | 7 |
| /17 | QT6T | 8 | 14 | 7 | 9 | 7 |

* For Q-TECH's equivalent part type and outline drawings, please refer to pages 14 and 15.



TTL/16



TTL/17

QPL
DIP: TTL

QPL PRODUCTS

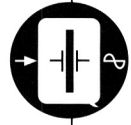
MIL-PRF-55310
Crystal Clock
Oscillators

TTL /16
TTL /17

For Q-TECH's
equivalent part
type and outline
drawings, please
refer to pages
14 and 15

Q-Tech
Corporation

tel (310) 836-7900
fax (310) 836-2157
www.q-tech.com



TTL /16

sample part number

M55310/16 - B31A 16M00000

PRODUCT ASSURANCE LEVEL

LEVEL B

M55310/16 - B 3 1A 16M00000

| ELECTRICAL SPECIFICATIONS: ** | | | | |
|-------------------------------|-------------------|---------------------|----------------|------------|
| CODE | FREQUENCY RANGE | MAX. INPUT CURRENT* | RISE/FALL TIME | DUTY CYCLE |
| 0 | 0.1 Hz to 250 Hz | 158 mA | 15 ns (max) | 45 to 55% |
| 1 | 250 Hz to 150 kHz | 94 mA | | |
| 2 | 150 kHz to 5 MHz | 70 mA | | |
| 3 | 4 MHz to 20 MHz | 30 mA | 5 ns (max) | 40 to 60% |
| 4 | 20 MHz to 80 MHz | 65 mA | | |

* Maximum Input Current at 5.25 V ±1% Vdc.

** Output Voltage:
Logic "1" (min) = 2.4 Vdc with 10 TTL Loads.
Logic "0" (max) = 0.5 Vdc with 10 TTL Loads.
(Maximum Load = 10 TTL Loads; > 20 MHz = 6 TTL Loads.)

| STABILITY OPTIONS: | | | | |
|--------------------|---------------|---------------------------------------|----------------|------------------|
| CODE | TEMP. RANGE | FREQ. STABILITY VS. TEMP @ +23°C ±1°C | FREQ. ACCURACY | AGING (per year) |
| 1A | -55 to +125°C | ±50 ppm | ±15 ppm | ±5 ppm |
| 1B | -55 to +105°C | ±40 ppm | | (max) |
| 1C | -20 to +70°C | ±25 ppm | | |
| 4A | -55 to +125°C | ±100 ppm | ±25 ppm | ±10 ppm |
| 4B | -55 to +105°C | ±80 ppm | | (max) |
| 4C | -20 to +70°C | ±50 ppm | | |

TTL /17

sample part number

M55310/17 - B11A 16M00000

PRODUCT ASSURANCE LEVEL

LEVEL B

M55310/17 - B 11 A 16M00000

Gated Output

| ELECTRICAL SPECIFICATIONS: ** | | | | |
|-------------------------------|------------------|---------------------|----------------|------------|
| CODE | FREQUENCY RANGE | MAX. INPUT CURRENT* | RISE/FALL TIME | DUTY CYCLE |
| 0 | 250 kHz to 5 MHz | 65 mA | 15 ns (max) | 45 to 55% |
| 1 | 4 MHz to 20 MHz | 55 mA | | |
| 2 | 20 MHz to 50 MHz | | | 5 ns (max) |

* Maximum Input Current at 5.25 V ±1% Vdc.

** Output Voltage:
Logic "1" (min) = 2.4 Vdc with 10 TTL Loads.
Logic "0" (max) = 0.5 Vdc with 10 TTL Loads.
(Maximum Load = 10 TTL Loads.)

| STABILITY OPTIONS: | | | | |
|--------------------|---------------|---------------------------------------|----------------|------------------|
| CODE | TEMP. RANGE | FREQ. STABILITY VS. TEMP @ +23°C ±1°C | FREQ. ACCURACY | AGING (per year) |
| 1A | -55 to +125°C | ±50 ppm | ±15 ppm | ±5 ppm |
| 1B | -55 to +105°C | ±40 ppm | (max) | (max) |
| 1C | -20 to +70°C | ±25 ppm | | |
| 4A | -55 to +125°C | ±100 ppm | ±25 ppm | ±10 ppm |
| 4B | -55 to +105°C | ±40 ppm | (max) | (max) |
| 4C | -20 to +70°C | ±25 ppm | | |