

# CTS CORPORATION

## KNIGHTS CRYSTALS AND OSCILLATORS

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T-50-23

### JKTO-79 SERIES

True TTL logic outputs  
 "A" MODELS are electrically similar to MXO55GA Models  
 "B" MODELS are electrically similar to MXO55GB Models from 307.2 KHZ to <2.4576 MHZ

TO-8 compatible  
 500 KHz to 70 MHz

#### ENABLE FUNCTION

4 MHz to 12 MHz:

HI: Enables oscillator

LO: Disables oscillator  
 (Q<sub>A</sub> latches LO, Q<sub>B</sub> latches HI)

500 KHz to <4 MHz:

LO: Enables oscillator

HI: Disables oscillator  
 (Q<sub>A</sub> & Q<sub>B</sub> latch LO)

#### CE MODEL

Enable and latch as above except from 12.01 to 25.0 MHz

HI: Enables oscillator

LO: Disables oscillator  
 Q<sub>A</sub> latches HI  
 Q<sub>B</sub> latches LO

### ORDERING INFORMATION



FREQUENCY AND MODEL AND OPTION	CODE
7.0 MHz to 70.0 MHz Basic oscillator No enable	A
500 KHz to 7.0 MHz Oscillator with divider No enable	B
3.5 MHz to 25 MHz Oscillator with Complementary output - No enable	C
Oscillator with dual outputs and no enable Q <sub>A</sub> = 4X Q <sub>B</sub> Q <sub>B</sub> = 1 to 3 MHz	D28
Oscillator with dual outputs and no enable Q <sub>A</sub> = 2X Q <sub>B</sub> Q <sub>B</sub> = 1 to 3 MHz	D48
Any of above (below 12 MHz) with enable For CE MODEL see note at left	AE BE D28E D48E
3.5 MHz to 25 MHz	CE

FREQUENCY TOL. (NOTE 2)	CODE
±.1% (1000 ppm)	1
±.01% (100 ppm)	2
±.005% (50 ppm)	3
±.05% (500 ppm)	4
±.0025% (25 ppm) (0°C to 70°C only)	5

OPERATING TEMP. RANGE	CODE
0°C to +70°C	C
-40°C to +85°C	I
-55°C to +105°C	P
-55°C to +125°C	M

NOTE 2:  
 Tolerance includes 25°C accuracy, changes in operating temperature, supply voltage, load, environmental conditions, and aging.

PIN	CONNECTION
1	Enable/disable option (otherwise NC)
2	Internal connection
3	Output A (Q <sub>A</sub> ) (otherwise NC)
4	Ground
5	Output B (Q <sub>B</sub> )
6	Internal connection
7	NC (Model A) Internal connection (Model B, C, D) Crystal frequency (Model C, D)
8	V <sub>cc</sub>

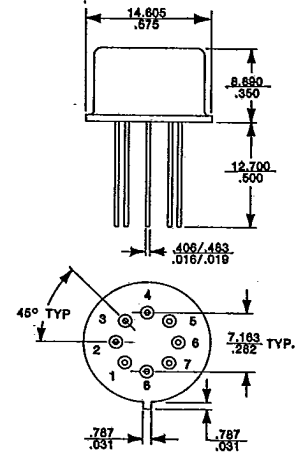


FIG. 11 TO-8 PACKAGE

NOTE: Screening Similar to MIL-0-55310, Class B Available by Adding -MLB to the End of the P/N.

### JKTO-81 SERIES

True TTL logic outputs  
 "A" MODELS are electrically similar to MXO55GA Models

"B" MODELS are electrically similar to MXO55GB Models from 307.2 KHZ to <2.4576 MHZ

TO-5 compatible  
 1 MHz to 25 MHz

#### PIN CONNECTION

- Pin 1: N/C
- Pin 2: Internal connection
- Pin 3: N/C
- Pin 4: Ground/case
- Pin 5: Output
- Pin 6: Internal connection
- Pin 7: N/C
- Pin 8: +5 VDC

### ORDERING INFORMATION



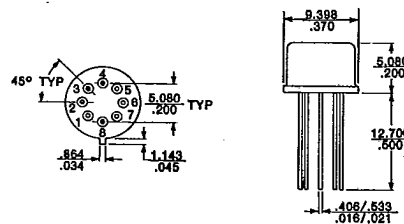
FREQUENCY AND MODEL AND OPTION	CODE
12 to 25MHz Basic oscillator	A
1 to <12 MHz Basic oscillator with dividers	B

FREQUENCY TOL. (NOTE 2)	CODE
±.1% (1000 ppm)	1
±.01% (100 ppm)	2
±.005% (50 ppm)	3
±.05% (500 ppm)	4

OPERATING TEMP. RANGE	CODE
0°C to +70°C	C
-40°C to +85°C	I
-55°C to +105°C	P
-55°C to +125°C	M

See NOTE 2 above.

FIG. 10 TO-5 PACKAGE



NOTE: Screening Similar to MIL-0-55310, Class B Available by Adding -MLB to the End of the P/N.

CTS — QUALITY FREQUENCY CONTROL COMPONENTS FOR RELIABLE ELECTRONICS