

PART NUMBERING GUIDE

Environmental/Mechanical Specifications on page F5

Package _____ **OAE 100 27 AA C - 30.000MHz**

OAE = 14 Pin Dip / ±5.2Vdc / ECL
 OAP = 14 Pin Dip / +5.0Vdc / PECL
 OAP3 = 14 Pin Dip / +3.3Vdc / PECL

Inclusive Stability _____
 100= +/-100ppm, 50= +/-50ppm, 25= +/-25ppm,
 10= +/-10ppm @ 25°C / +/-20ppm @ 0-70°C

Operating Temperature Range _____
 Blank = 0°C to 70°C
 27 = -20°C to 70°C (50ppm and 100ppm Only)
 48 = -40°C to 85°C (50ppm and 100ppm Only)

Pin One Connection
 Blank = No Connect
 C = Complimentary Output

Pin Configuration
 See Table Below
 ECL = AA, AB, AC, AB
 PECL = A, B, C, E

ELECTRICAL SPECIFICATIONS

Revision: 1994-B

Frequency Range	20.000MHz to 250.000MHz	
Operating Temperature Range	0°C to 70°C / -20°C to 70°C / -40°C to 85°C	
Storage Temperature Range	-55°C to 125°C	
Supply Voltage	ECL = ±5.2Vdc ±5% PECL = +5.0Vdc ±5% / +3.3Vdc ±5%	
Input Current	140mA Maximum	
Frequency Tolerance / Stability	Inclusive of Operating Temperature Range, Supply Voltage and Load	±100ppm, ±50ppm, ±25ppm, ±10ppm/±20ppm (0°C to 70°C)
Output Voltage Logic High (Voh)	ECL Output	-1.0Vdc Minimum / -0.7Vdc Maximum
	PECL Output	4.0Vdc Minimum / 4.5Vdc Maximum
Output Voltage Logic Low (Vol)	ECL Output	-1.95Vdc Minimum / -1.6Vdc Maximum
	PECL Output	3.0Vdc Minimum / 3.42Vdc Maximum
Rise Time / Fall Time	20% to 80% of Waveform	2nSeconds Maximum
Duty Cycle	@ 1.4Vdc w/TTL Load	50 ±10% (Standard), 50±5% (Optional)
Load Drive Capability	ECL Output / AA, AB, AM / AC PECL Output	50 Ohms into -2.0Vdc / 50 Ohms into +3.0Vdc 50 Ohms into +3.0Vdc
Aging (@ 25°C)	±5ppm / year Maximum	
Start Up Time	20mSeconds Maximum	

ECL

PIN CONFIGURATIONS

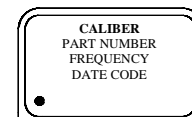
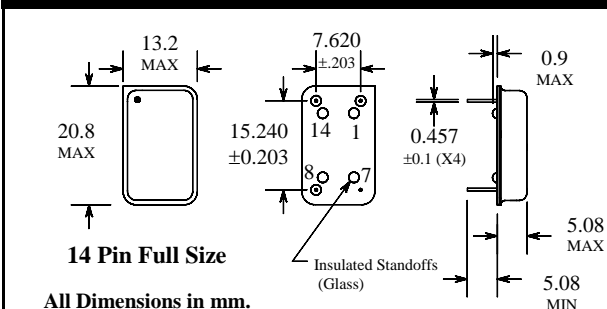
PECL

	AA	AB	AM
Pin 1	Ground/ Case	No Connect or Comp. Output	No Connect or Comp. Output
Pin 7	-5.2V	-5.2V	Case Ground
Pin 8	ECL Output	ECL Output	ECL Output
Pin 14	Ground	Case Ground	-5.2Vdc

	A	C	D	E
Pin 1	No Connect	No Connect	PECL Comp. Out	PECL Comp. Out
Pin 7	Vee (Case Ground)	Vee	Vee	Vee (Case Ground)
Pin 8	PECL Output	PECL Output	PECL Output	PECL Output
Pin 14	Vcc	Vcc (Case Ground)	Vcc	Vcc

MECHANICAL DIMENSIONS

Marking Guide



Marking Guide
 Line 1: Caliber
 Line 2: Complete Part Number
 Line 3: Frequency in MHz
 Line 4: Date Code (Year/Week)

PART NUMBERING GUIDE	Environmental/Mechanical Specifications on page F5
<p>CPO - D P 5 A E T - 125.000MHz</p>	
<p>Package Style:</p> <ul style="list-style-type: none"> A = Full Size, 14 Pin Dip B = Half Size, 8 Pin Dip C1 = Ceramic SMD, 5X7X1.6mm (4 pad) C2 = Ceramic SMD, 5X7X1.6mm (6 pad/PECL) P = Plastic SMD, 10X13X5mm <p>Output Type:</p> <ul style="list-style-type: none"> C = HCMOS P = PECL S = HCMOS (with Tristate) <p>Pin One Connection:</p> <ul style="list-style-type: none"> 5 = +5.0V 3 = +3.3V 	<p>Pin 1 Connection:</p> <ul style="list-style-type: none"> T = Tristate Enable High P = Power Down <p>Operating Temperature Range:</p> <ul style="list-style-type: none"> Blank = -20°C to 70°C E = -40°C to 85°C (50ppm / 100ppm) <p>Inclusive Stability:</p> <ul style="list-style-type: none"> A = +/-100ppm B = +/-50ppm C = +/-30ppm (0°C-70°C) D = +/-25ppm (0°C-70°C)

ELECTRICAL SPECIFICATIONS		Revision: 2000-B
Frequency Range	340.000kHz to 250.000MHz	
Operating Temperature Range	-20°C to 70°C / -40°C to 85°C	
Storage Temperature Range	-55°C to 125°C	
Supply Voltage	5.0Vdc ±10%, 3.3Vdc ±10%	
Input Current	70mA Maximum	
Frequency Tolerance / Stability	Inclusive of Operating Temperature Range, Supply Voltage and Load	±100ppm, ±50ppm, ±30ppm (-20°C to 70°C), ±25ppm (-20° to 70°C)
Output Voltage Logic High (Voh) / PECL Output Voltage Logic High (Voh) / HCMOS	-1.0V Min. Vdd: -0.8V Max. -.04Vdc Min.	
Output Voltage Logic Low (Vol) / PECL Output Voltage Logic Low (Vol) / HCMOS	-2.0V Min. Vdd: -1.6V Max. 0.4Vdc Max.	
Rise Time / Fall Time	2nS Max. 20% to 80% / 80% to 20% (PECL) 5nS Max. 10% to 90% / 90% to 10% (HCMOS)	
Duty Cycle	PECL HCMOS	50 ±10% 50 ±5%
Load Drive Capability	5.0V: up to 100.000MHz = 25pF / 100 to 250.000MHz = 10pF 3.3V: up to 100.000MHz = 15pF / 100 to 250.000MHz = 10pF	
Pin 1 Tristate Input Voltage	No Connection VIH VIL	Enables Output +2.2Vdc Minimum to Enable Output +0.8Vdc Maximum to Disable Output
Disable Current (TS Option)	30mA Max. (pin 1 ground)	
Standby Current (PD Option)	50uA Max. (pin 1 ground)	
Aging (@ 25°C)	±5ppm / year Maximum	
Start Up Time	10mSeconds Maximum	
Absolute Clock Jitter	±175pSeconds Maximum	
One Sigma Clock Jitter	±50pSeconds Maximum	