



**SK-A29C0 Series** Continued  
Differential Positive ECL (DPECL)

**Rev. B**

## Operating Conditions and Output Characteristics

### Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max
Frequency	-----	-----	60.0MHz	-----	350.0MHz
Duty Cycle	-----	@ 50% points	48/52%	-----	52/48%
Logic 0 <sup>(1)</sup>	V <sub>OL</sub>	-----	V <sub>CC</sub> -1.810V	-----	V <sub>CC</sub> -1.620V
Logic 1 <sup>(1)</sup>	V <sub>OH</sub>	-----	V <sub>CC</sub> -1.025V	-----	V <sub>CC</sub> -0.880V
Rise & Fall Time	tr,tf	20-80%V <sub>O</sub> with 50 ohm load to V <sub>CC</sub> -2V	-----	350 psec	600 psec
Jitter, Cycle to Cycle	-----	-----	-----	-----	50 psec
Enable Voltage <sup>(2)</sup>	-----	with V <sub>EE</sub> =0V	2.0V	-----	-----
Disable Voltage	-----	with V <sub>EE</sub> =0V	-----	-----	0.8V
Frequency Stability <sup>(3)</sup>	dF/F	Overall conditions including: voltage, calibration, temp., 10 yr aging, shock, vibration	-100ppm	-----	+100ppm

### General Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max
Supply Voltage	V <sub>CC</sub>	3.3V±5%	3.135V	3.3V	3.465V
Supply Current	I <sub>CC</sub>	50 ohm termination To 2.00V below V <sub>CC</sub>	0.0 mA	-----	50 mA
Output current	I <sub>O</sub>	Low level Output Current	0.0 mA	-----	±50.0 mA
Operating temperature	T <sub>A</sub>	-----	0°C	-----	55°C
Storage temperature	T <sub>S</sub>	-----	-55°C	-----	125°C
Input: Logic High (ECL) - Disables V <sub>EE</sub> or Open - Enables					
Load		50 Ohm to V <sub>CC</sub> -2V or Thevenin Equivalent, Bias Required			
Start-up time	t <sub>S</sub>	-----	-----	2 ms	10 ms

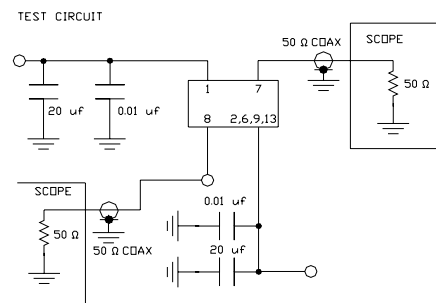
### Environmental and Mechanical Characteristics

Mechanical Shock	Per MIL-STD-202, Method 213, Condition E
Thermal Shock	Per MIL-STD-883, Method 1011, Condition A
Vibration	0.060" double amplitude 10 Hz to 55 Hz, 35g's 55Hz to 2000 Hz
Hermetic Seal	Leak rate less than 1 x 10 <sup>-8</sup> atm.cc/sec of helium

#### Footnotes:

- 1) V<sub>OL</sub>, V<sub>OH</sub>, referenced to ground
- 2) Open to Enable pin also enables the output.
- 3) Standard frequency stability (other available)

Creating a Part Number	
<b>SK - A29CX - FREQ</b>	
<b>Package Code</b>	<b>Tolerance/Performance</b>
HK Leaded 8 pin (14 pin)	0 ±100ppm 0-70°C
SK 8 pin (14 pin) SMD Gull Wing	1 ±50ppm 0-70°C
	7 ±25ppm 0-70°C
<b>Input Voltage</b>	9 Customer Specific
Code Specification	A ±20ppm 0-70°C
A 3.3V	B ±50ppm -40 to +85°C
B 2.5V	C ±100ppm -40 to +85°C



TEST CIRCUIT USES A SPLIT SUPPLY OF +2V AND -1.3V FOR EASE OF TESTING.

SK-A29C0 Series Continued

Max Reflow Profile

