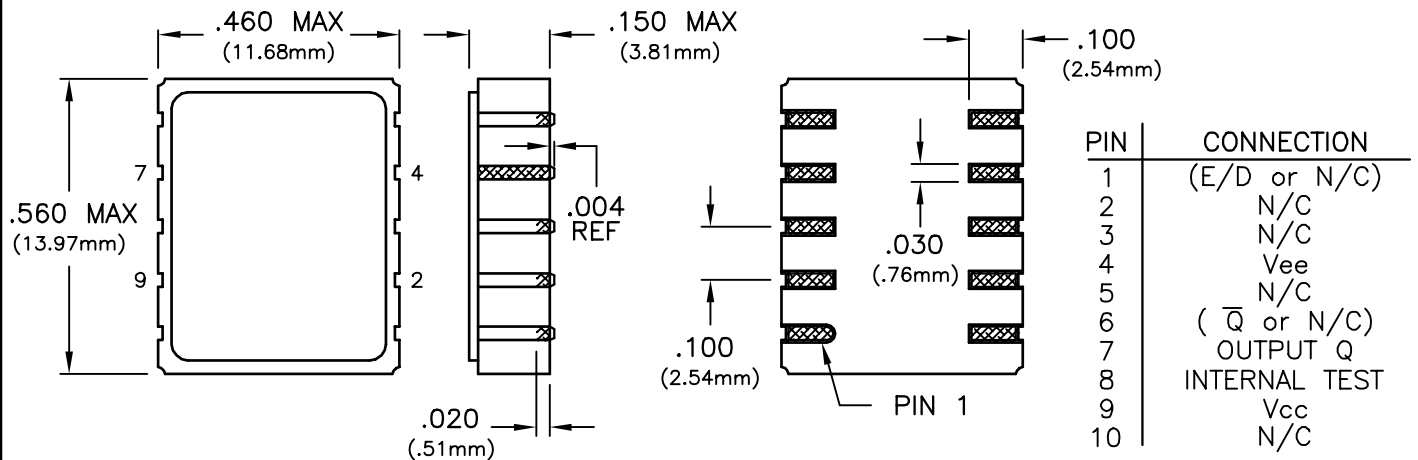
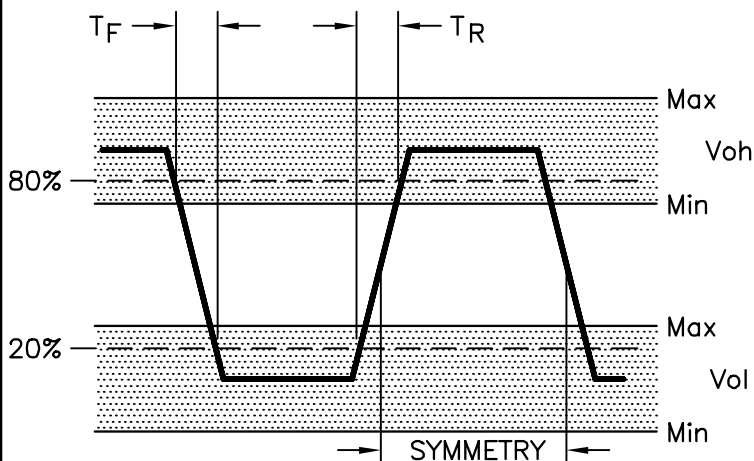


SM ECL PLL FREQUENCY MULTIPLIER

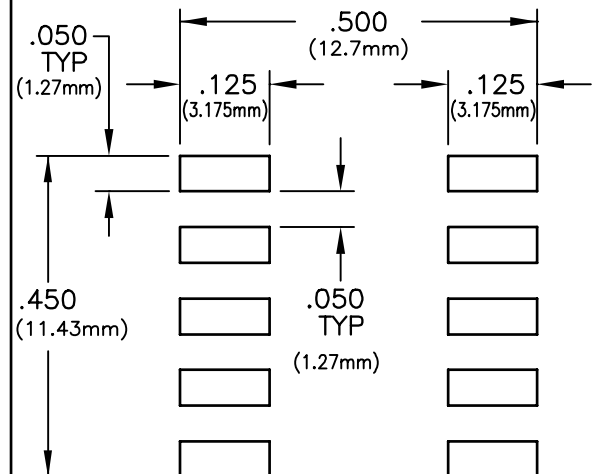
SPECIFICATIONS	GA91-52*	GA91-53*	GA91-54*	GA91-62*	GA91-63*	GA91-64*
Available Frequency Ranges	120 to 135 MHz 144 to 168 MHz 174 to 205 MHz 232 to 270 MHz 288 to 336 MHz 348 to 410 MHz 464 to 540 MHz 576 to 672 MHz			144 to 168 MHz 174 to 205 MHz 288 to 336 MHz 348 to 410 MHz 576 to 672 MHz		
Frequency Stability	±50ppm	±100ppm	±20ppm	±50ppm	±100ppm	±20ppm
	Inclusive of calibration tolerance at 25°, operating temperature range, supply voltage change, load change, aging, shock and vibration.					
Operating Temp Range	0°C to +70°C			-40°C to +85°C		
Storage Temp Range	-55°C to +125°C					
Output	Waveform	ECL Squarewave , 100K Compatible				
	Load	Output must be terminated into 50 Ohms to -2Vdc.				
	Voltage	Voh -1.0V Minimum , -0.5V Maximum				
		Vol -2.1V Minimum , -1.6V Maximum				
	Symmetry	45/55 Maximum measured at 50% level				
	Rise/Fall Time	750pS Maximum				
	Jitter	10pS rms Maximum				
	SSB Phase Noise	-100dBc/Hz typical @ 10KHz offset				
Enable/Disable Option (Pin 1):	Enable (Vil)	-4.5Vdc Maximum				
	Disable (Vih)	-3.5Vdc Minimum Q (Pin 7) disables to low state, Option Q̄ (Pin 6) disables to high state. When Pin 1 is floating, output is in disabled state.				
Supply Voltage (Vee)	-5.2Vdc ±5%					
Supply Current	100mA Maximum					
Package	Hermetically sealed, leadless ceramic package					
Options * - add suffix to model number	0	No Connection on Pin 1 and Pin 6				
	1	Complementary Output on Pin 6 , N/C on Pin 1				
	2	Enable/Disable on Pin 1 , N/C on Pin 6				
	3	Enable/Disable on Pin 1 , Complementary Output on Pin 6				



OUTPUT WAVEFORM



SUGGESTED PAD LAYOUT



TEST CIRCUIT

