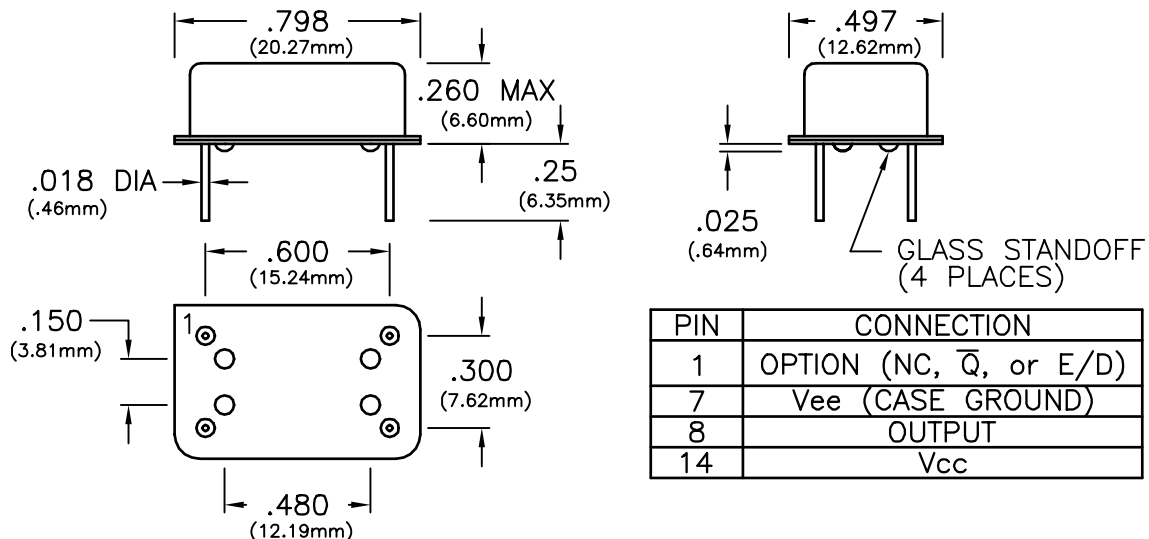
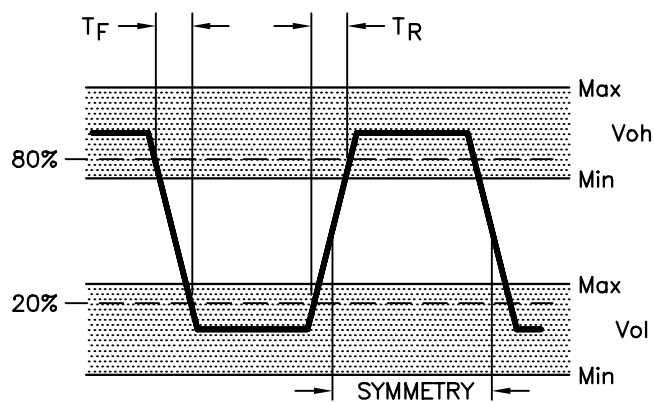


14 PIN DIP ECL PLL FREQUENCY MULTIPLIER

SPECIFICATIONS			GA13-52*	GA13-53*	GA13-54*	GA13-62*	GA13-63*	GA13-64*
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		PECL Squarewave , 100K Compatible					
	Load		Output must be terminated into 50 Ohms to 3Vdc.					
	Voltage	Voh	4.0V Minimum , 4.5V Maximum					
		Vol	2.90V Minimum , 3.4V 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)		0.5Vdc Maximum					
	Disable (Vih)		1.5Vdc Minimum Q (Pin 8) disables to low state. When Pin 1 is floating, output is in disabled state.					
Supply Voltage (Vee)			+5Vdc ±5%					
Supply Current			100mA Maximum					
Package			All metal, hermetically sealed, welded package					
Options * – add suffix to model number			0	Pin 1: No Connection				
			1	Pin 1: Complementary Output				
			2	Pin 1: Enable/Disable				



OUTPUT WAVEFORM



TEST CIRCUIT

