



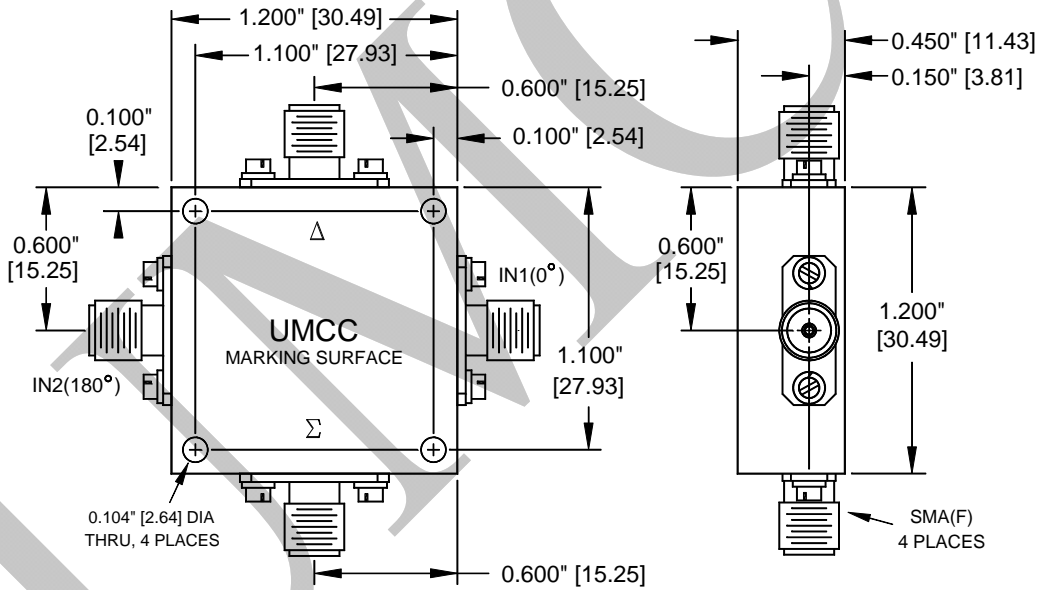
**Model: HC-W50S-MS**

Description:..... 180° / 3dB Hybrid Coupler  
 Operating Frequency:..... 10 – 500 MHz  
 Insertion Loss: ..... 1.0 dB Max  
 Amplitude Balance:..... ± 0.2 dB Max  
 Isolation ..... 0°/180° Ports..... 22 dB Min  
 ..... Sum/Diff Ports ..... 27 dB Min  
 VSWR:..... 1.45:1 Max  
 Phase Error:..... ±4° Max  
 Power Handling: ..... 1W CW/Peak  
 Connectors: ..... SMA (f)  
 Impedance: ..... 50 Ohms Nominal  
 Weight: ..... 1.7 oz [ 48 g]  
 Quality:..... Best-Commercial-Grade

**Environmental Ratings:**

Temperature:..... {Operating: -40°C to +85°C} & {Storage: -50°C to +100°C}  
 Humidity: ..... MIL-STD-202F, Method 103B, Cond. B (96 hours at 95% R.H.)  
 Shock: ..... MIL-STD-202F, Method 213B, Cond. B (75G, 6mSec)  
 Vibration: ..... MIL-STD-202F, Method 204D, Cond. B (.06" double amplitude, or 15G)  
 Altitude: ..... MIL-STD-202F, Method 105C, Cond. B (50,000 Feet)  
 Temp. Shock: ..... MIL-STD-202F, Method 107D, Cond. A (5 cycles)

**Outline**



Phase / Ampl. Function Table		Signal Output			
		$\Delta$	$\Sigma$	0°	180°
Signal Input	$\Delta$	X	Iso.	-3dB∠0°	-3dB∠180°
	$\Sigma$	Iso.	X	-3dB∠0°	-3dB∠0°
	0°	-3dB∠0°	-3dB∠0°	X	Iso.
	180°	-3dB∠180°	-3dB∠0°	Iso.	X