



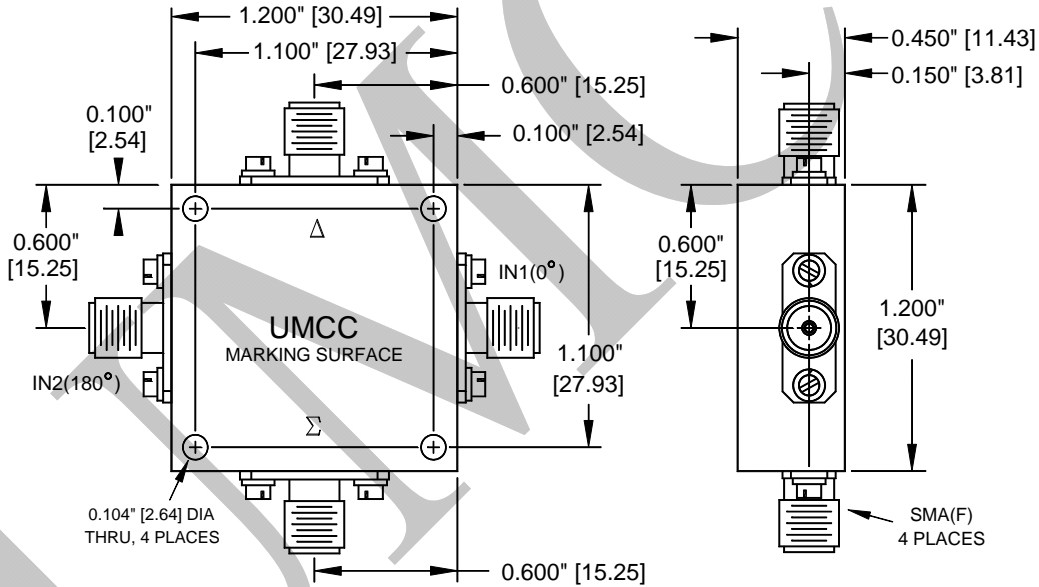
**Model: HC-W20S-MS**

Description:..... 180° / 3dB Hybrid Coupler  
 Operating Frequency:..... 1 – 200 MHz  
 Insertion Loss:..... 0.8 dB Max  
 Amplitude Balance:..... ± 0.3 dB Max  
 Isolation ..... 28 dB Min  
 VSWR:..... 1.30:1 Max  
 Phase Error:..... ±2° Max  
 Power Handling: ..... 4W 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/180°
	0°	-3dB/0°	-3dB/0°	X	Iso.
	180°	-3dB/180°	-3dB/0°	Iso.	X