

## Applications

Automotive, recreational, military, marine, aviation, surveying

## Typical Electrical Properties

Characteristics	Specification	Unit	Conditions
Center Frequency $f_0$	1580.0 $\pm$ 3.0 *	MHz	With 50x50mm Square ground Plane
Bandwidth	7.0 min	MHz	Return Loss $\leq$ -10dB
Gain at Zenith	+3.5 typical	dBi	@1580.0 MHz*
Gain at 10° elevation	-4.0 typical	dBi	@1580.0 MHz*
Impedance	50	$\Omega$	
Axial ratio	3 max	dB	@1580.0MHz

※MCV standard spec

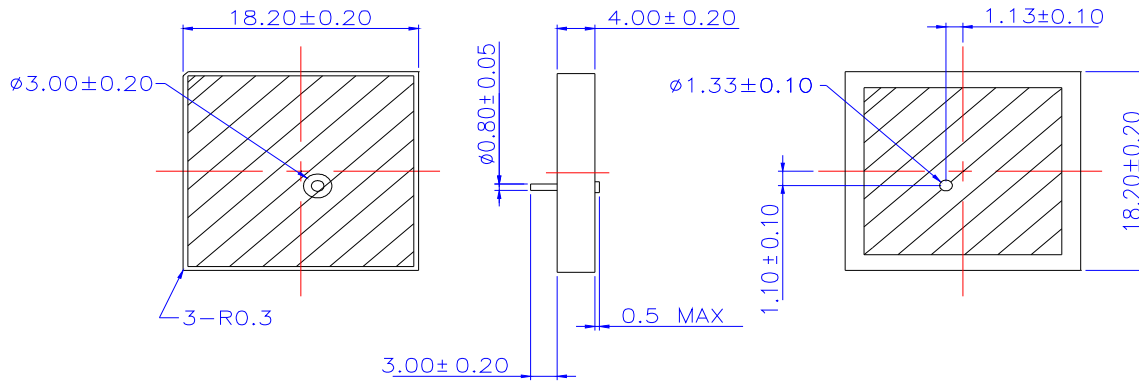
\*: MA1804XXP: XX=80 MA180480P  $f_0 = 1580$  MHz

MCV Part No.	XX	f0(MHz)	MCV Part No.	XX	f0(MHz)
MA180476P	76	1576	MA180486P	86	1586
MA180477P	77	1577	MA180487P	87	1587
MA180478P	78	1578	MA180488P	88	1588
MA180479P	79	1579	MA180489P	89	1589
MA180480P	80	1580	MA180490P	90	1590
MA180481P	81	1581	MA180491P	91	1591
MA180482P	82	1582	MA180492P	92	1592
MA180483P	83	1583	MA180493P	93	1593
MA180484P	84	1584	MA180494P	94	1594
MA180485P	85	1585	MA180495P	95	1595

## Material Properties

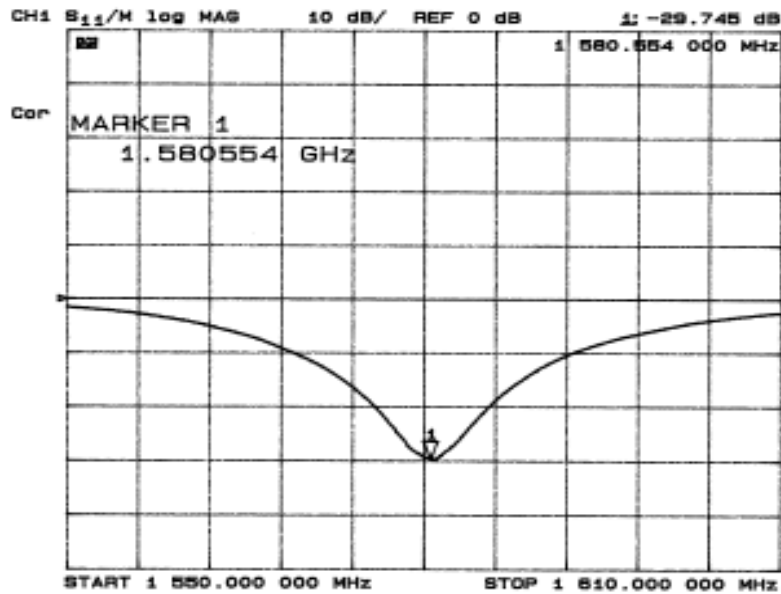
Properties	Specification	Conditions
Dielectric Constant, <b>K</b>	37 $\pm$ 2.5	
Quality Factor, <b>Q</b> (=1/tan $\delta$ )	$\geq$ 5000@9GHz	
Temperature Coefficient of Resonant Frequency, $\tau f$	0 $\pm$ 20 ppm/°C	-40°C to +85°C

## Product Dimensions

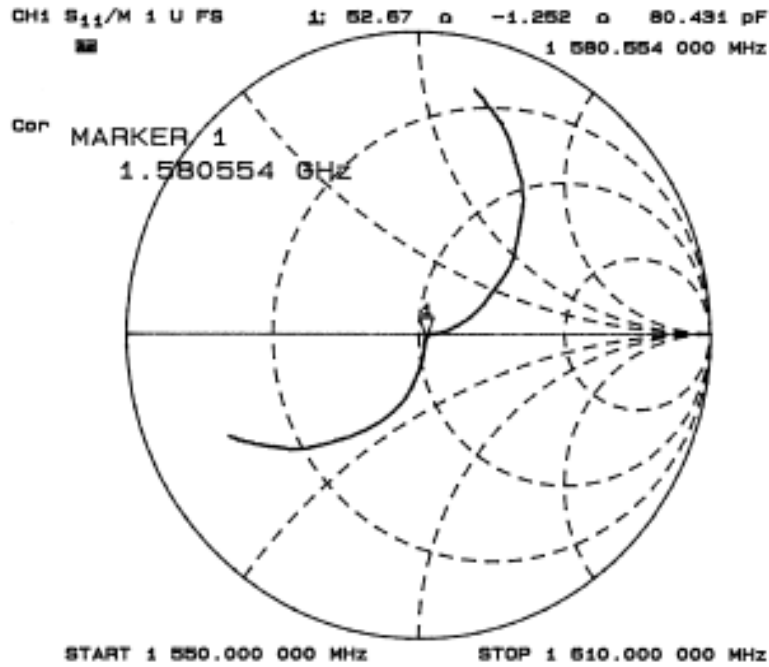


Units: mm

## Reflection Coefficient



## Input Impedance on a Smith Chart



## Center Frequency vs. Ground plane

