

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 70x70mm Square ground Plane
Bandwidth	9.0 min	MHz	Return Loss \leq -10dB
Gain at Zenith	+4.5 typical	dBi	@1580.0 MHz*
Gain at 10° elevation	-3.0 typical	dBi	@1580.0 MHz*
Impedance	50	Ω	
Axial ratio	3 max	dB	@1580.0MHz

※MCV standard spec

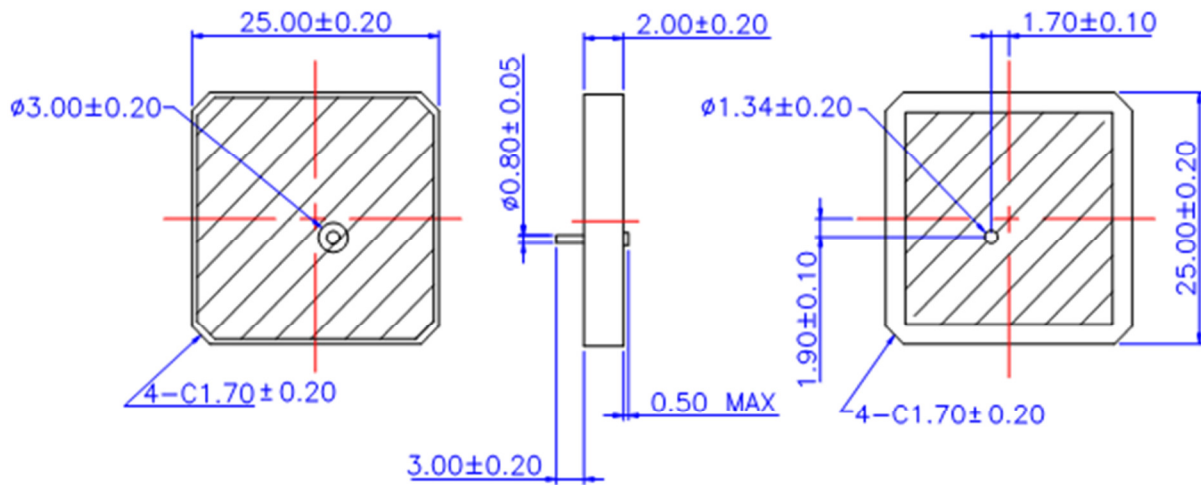
*: MA2502XXP: XX=80 MA250280P $f_0 = 1580$ MHz

MCV Part No.	XX	f0(MHz)	MCV Part No.	XX	f0(MHz)
MA250276P	76	1576	MA250286P	86	1586
MA250277P	77	1577	MA250287P	87	1587
MA250278P	78	1578	MA250288P	88	1588
MA250279P	79	1579	MA250289P	89	1589
MA250280P	80	1580	MA250290P	90	1590
MA250281P	81	1581	MA250291P	91	1591
MA250282P	82	1582	MA250292P	92	1592
MA250283P	83	1583	MA250293P	93	1593
MA250284P	84	1584	MA250294P	94	1594
MA250285P	85	1585	MA250295P	95	1595

Material Properties

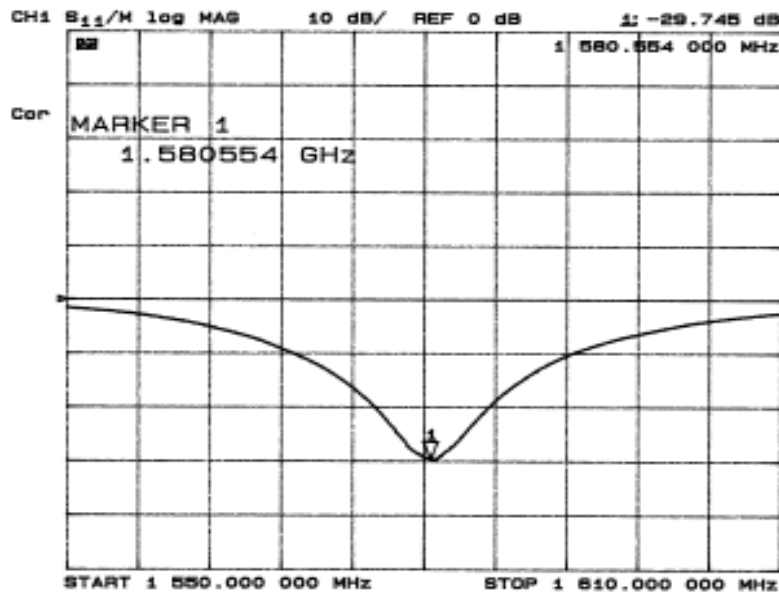
Properties	Specification	Conditions
Dielectric Constant, K	20 \pm 2.5	
Quality Factor, Q (=1/tan δ)	\geq 5000@9GHz	
Temperature Coefficient of Resonant Frequency, τf	0 \pm 20 ppm/°C	-40°C to +85°C

Product Dimensions

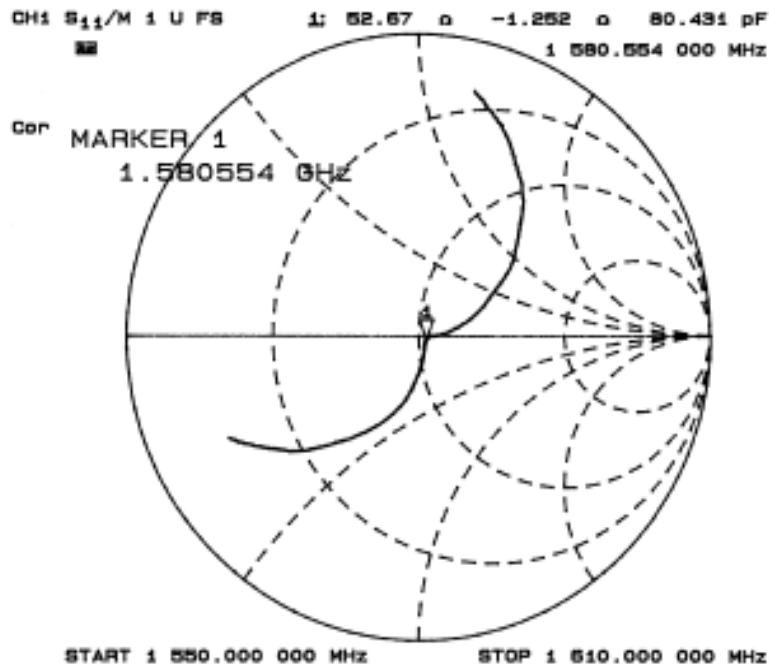


Units: mm

Reflection Coefficient



Input Impedance on a Smith Chart



Center Frequency vs. Ground plane

