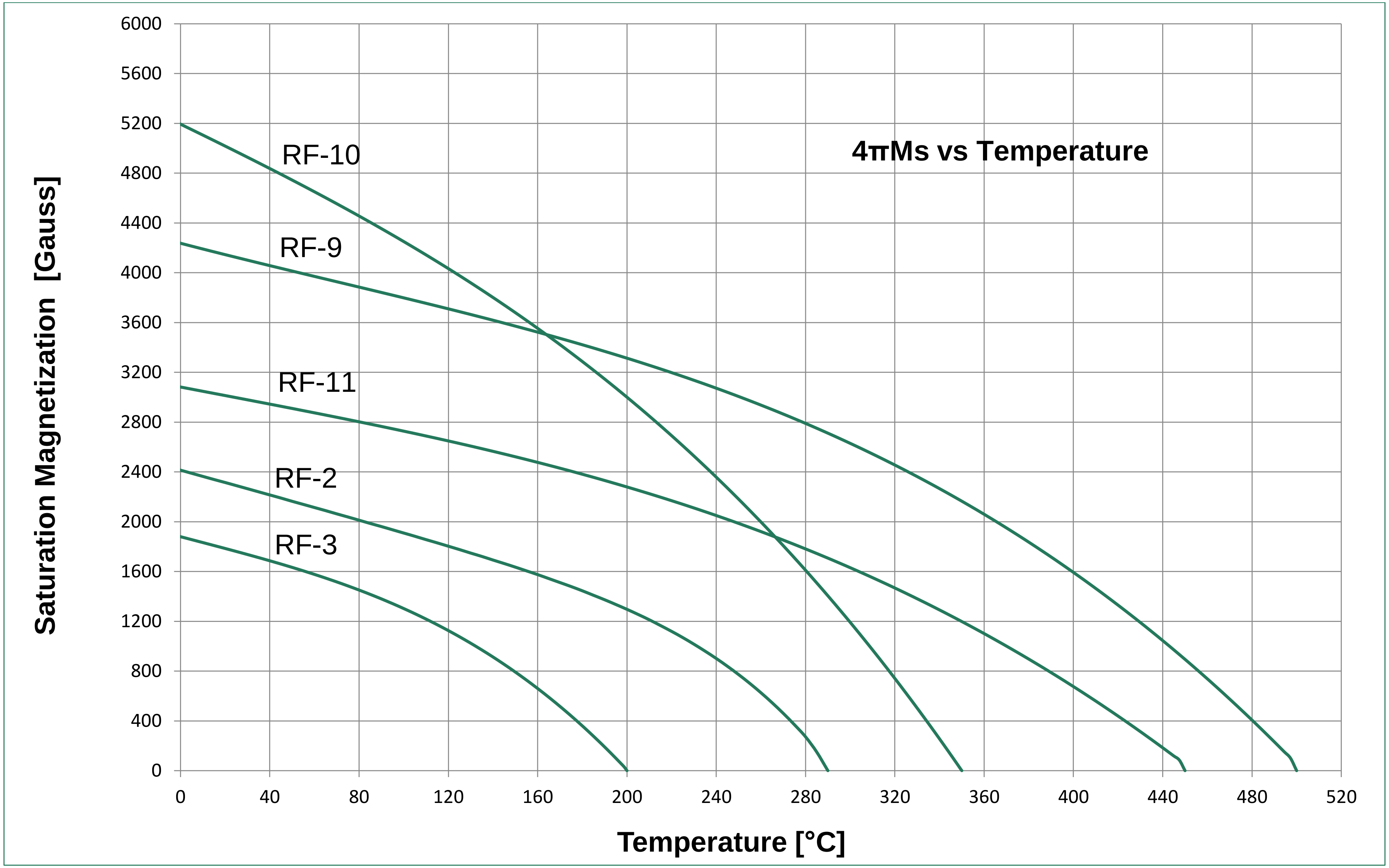
Ferrite Data Sheet

Spinel Microwave Ferrites

Material Type	Material Composition	Saturation Magnetization		Curie Temp.	Dielectric Constant	Dielectric Loss Tangent	Resonance Line Width		Spinwave Line Width		Lande Factor
RF		4πMs	Ms	T_c	ε'	tan δ	ΔH_{-3dB}		ΔH_k		g_{eff}
		±5%		±5%	±5%	[10^{-4}]	±20%		±15%		±5%
		[Gauss]	[kA/m]	[°C]			[Oe]	[kA/m]	[Oe]	[kA/m]	
RF3	Mg-Al	1760	140	200	12.1	≤ 4	180	14.3	4.4	0.35	2.01
RF2.5	Mg-Al	2025	161		12.6	≤ 3.5			4.7	0.37	
RF2	Mg-Al	2290	182	290	13.1	≤ 3	250	19.9	3.7	0.29	2.03
RF11	Li	3000	239	450	16.0	≤ 4	310	24.7	7.8	0.62	2.04
RF9	Ni-Zn	4130	329	500	13.5	≤ 4	180	14.3	8	0.64	2.20
RF10	Ni-Zn	5000	398	350	14.4	≤ 4	70	5.6	5.3	0.42	2.13

* $4\pi M_S$ vs. temperature see viewgraph page 2

- Broad range of saturation magnetization to cover frequency bands from X band to Ka band.
- High Curie temperature for good temperature stability.
- Low losses given by low resonance line width and low dielectric loss tangent.


4πMs vs Temperature
RF-10
RF-9
RF-11
RF-2
RF-3
Saturation Magnetization [Gauss]
Temperature [°C]
6000
5600
5200
4800
4400
4000
3600
3200
2800
2400
2000
1600
1200
800
400
0
0
40
80
120
160
200
240
280
320
360
400
440
480
520