

## Garnets, Temperature Compensated

Material Type	Material Composition	Saturation Magnetization		Curie Temp.	Dielectric Constant	Dielectric Loss Tangent	Resonance Line Width		Spinwave Line Width		Landé Factor
		$4\pi M_s^*$	$M_s$	$T_c$	$\epsilon_r$	$\tan \delta$	$\Delta H_{-3dB}$		$\Delta H_k$		$g_{eff}$
RG TC		±5%		±5%	±5%	[10 <sup>-4</sup> ]	±20%		±15%		±5%
		[Gauss]	[kA/m]	[°C]			[Oe]	[kA/m]	[Oe]	[kA/m]	
<b>RG14</b>	Y-Gd-In	510	40.6	175	14.5	≤ 3	80	6.37	9	0.76	2.04
<b>RG9</b>	Y-Gd-Al-In	650	51.7	200	14.6	≤ 3	94	7.38	14	1.11	2.02
<b>RG81</b>	Y-Gd-Al-In	900	72.0	200	14.8	≤ 3	60	4.80	>10	>0.8	2.02
<b>RG8</b>	Y-Gd-Al-In	1100	87.5	210	14.9	≤ 3	38	3.02	8	0.64	2.01
<b>RG10</b>	Y-Gd-In	1330	106	210	14.6	≤ 3	35	2.79	7	0.56	2.01

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

- Low loss garnets modified to enhance temperature stability and power handling capabilities.
- High spin wave linewidth  $\Delta H_k$  to provide superior high peak power performance.
- High Curie temperature  $T_c$  for applications that work in a wide temperature range.



