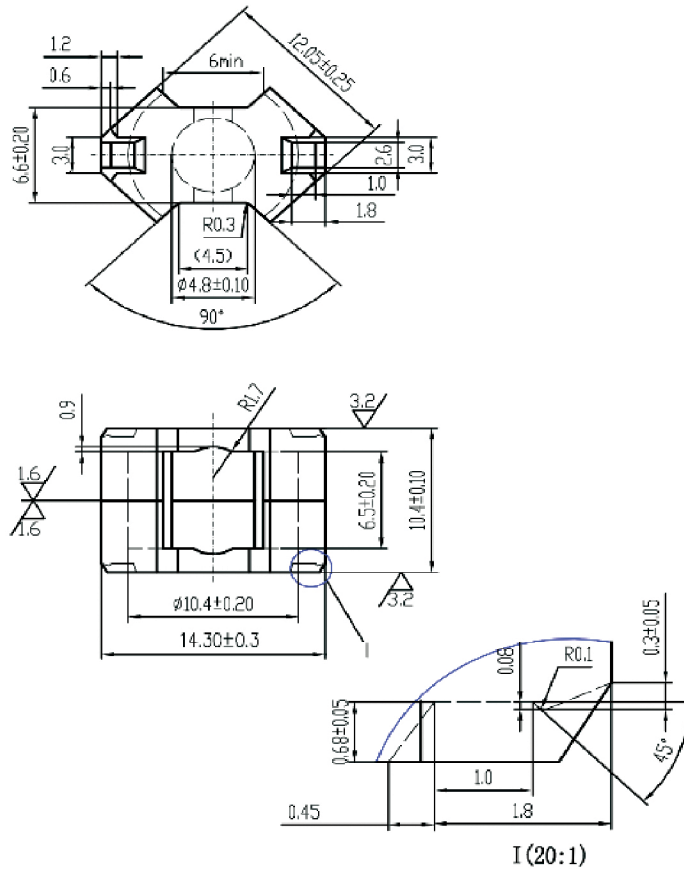


CORE SETS

Effective core parameters

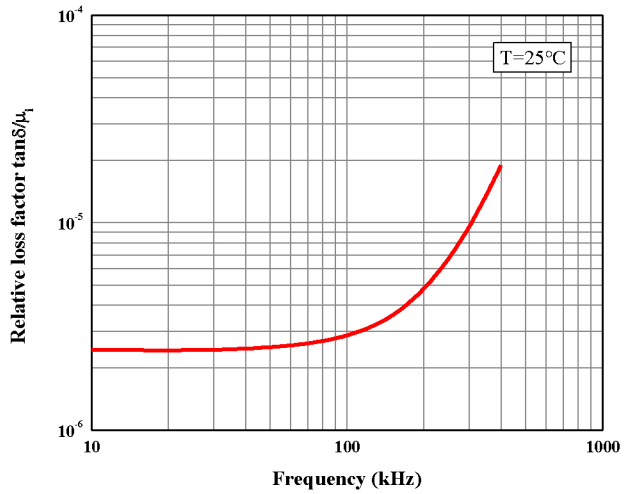
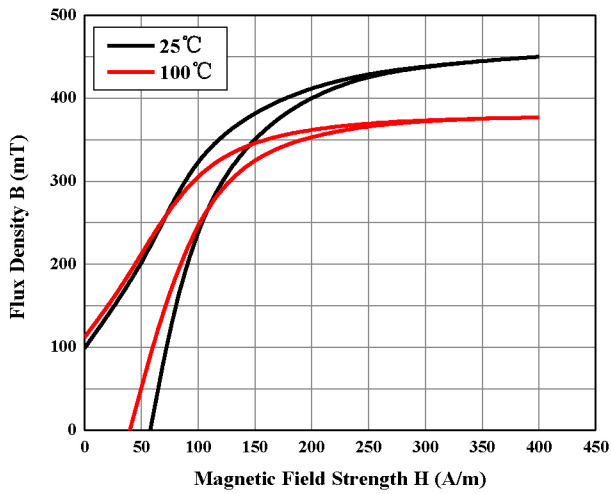
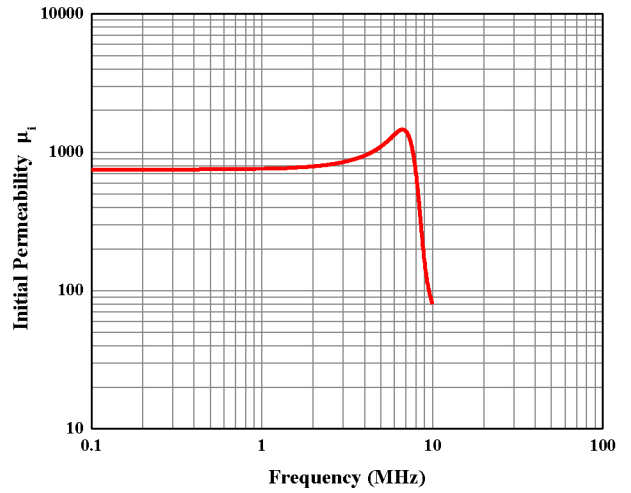
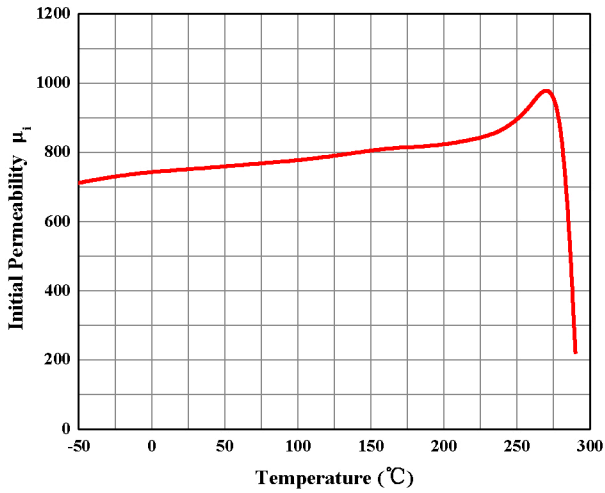
SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma (1/A)$	core factor ( $C_1$ )	0.93	$\text{mm}^{-1}$
$V_e$	effective volume	525.98	$\text{mm}^3$
$l_e$	effective length	22.10	mm
$A_e$	effective area	23.80	$\text{mm}^2$
$W_t$	mass of core set	$\approx 3.0$	g



Characteristic

GRADE	AL (nH/N <sup>2</sup> )	Q
	f=1kHz U=0.25V	U=0.25V f=100kHz
DMR7M	800 ± 25%	Q > 80

# DMR7M Material Characteristics



CHARACTERISTICS	CONDITIONS		VALUE
Initial Permeability $\mu_i$	$f=10\text{kHz}$ , $B<0.25\text{mT}$	25°C	750±25%
Saturation Magnetic Flux Density $B_s$ (mT)	50Hz, 1194A/m	25°C	400
		100°C	310
Relative Loss Factor $\tan\delta/\mu_i (\times 10^{-6})$	200kHz, $B<0.25\text{mT}$	25°C	$\leq 12$
	1MHz, $B<0.25\text{mT}$	25°C	$\leq 20$
Relative Temperature Coefficient $\alpha_{\mu r} (\times 10^{-6}/^\circ\text{C})$	10kHz, $B<0.25\text{mT}$	5°C~25°C	0.25~2.6
		25°C~55°C	0.25~2.6
$\eta_B (\times 10^{-6}/\text{mT})$ Hysteresis Material Constant	10kHz, 1.5~3mT	25°C	< 0.18
$T_c$ (°C) Curie Temperature	$f=10\text{kHz}$ , $B<0.25\text{mT}$		>200