

ACME Magnetic Foils

Technical Data For LM12-300

General Characteristics

Base film material	Polyester
Magnetic layer material	Iron Oxide
Color	Black
Film/Coating adhesion	> 4N

Thickness Characteristics

Base film Thickness	$11.5 \pm 0.5 \mu\text{m}$
Magnetic layer thickness	$10 \pm \begin{matrix} 0 \mu\text{m} \\ 3 \mu\text{m} \end{matrix}$

Magnetic Characteristics

Coercivity Hc	27.5kA/m (345 Oe)
Retentivity Mr	$\geq 90\text{mT}$
Squareness	≥ 0.8
Switching field SFD	≥ 0.35
Orientation factor	> 2.0

Signal Amplitude Characteristics

Signal amplitude UA1	$110/120 \pm 10\% U_R$
Signal amplitude Ui1	$\leq 136\% U_R$
Signal amplitude UA2	$\geq 80\% U_R$
Signal amplitude Ui2	$\geq 65\% U_R$
Resolution UA3	$\geq 72\% U_{A2}$
Erasure UA4	$\leq 3\%$
Extra pulse Ui4	$\leq 5\%$

Wear Resistance Characteristics

According to ISO/IEC7811-2/10373-1

Average signal amplitude UA after	$\geq 60\% U_A \text{ before}$
Individual signal amplitude Ui after	$\geq 80\% U_A \text{ after}$

Chemical Resistance Characteristics

According to ISO/IEC 7811-2/10373-1

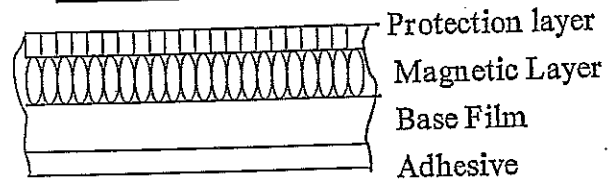
Average signal amplitude UA after	$\geq 90\% U_A \text{ before}$
Individual signal amplitude Ui after	$\geq 90\% U_A \text{ after}$

Storage Conditions

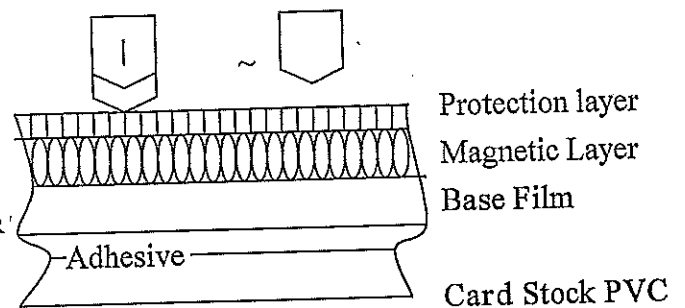
For tape with adhesive:

The allowed storage period for the reel is 3 years at	
temperature	10 °C – 35°C
humidity	40% - 60 % RH

Film – Coating Composite



Tape Laying Process



Saturation Curve
Readback Voltage – Calibration in %

