

ACME Magnetic Foils

Technical Data For TM18-2750

General Characteristics

Base film material	Polyester
Magnetic layer material	Ferrite
Color	Black
Film/Coating adhesion	< 5 cN

Thickness Characteristics

Base film Thickness	$18 \pm 1 \mu\text{m}$
Magnetic layer thickness	$10 \pm \begin{matrix} 0 \\ 3 \end{matrix} \mu\text{m}$
Protection layer thickness	$2.5 \pm 0.5 \mu\text{m}$
Adhesive thickness	$2.5 \pm 0.5 \mu\text{m}$
Adhesive activation temperature	80°C

Magnetic Characteristics

Coercivity H_c	219kA/m (2750 Oe)
Retentivity M_r	$\geq 110\text{mT}$
Squareness	≥ 0.8
Switching field SFD	≤ 0.35
Orientation factor	≥ 2.5

Signal Amplitude Characteristics

Signal amplitude U_{A1}	$100 \pm 15 \% U_r$
Signal amplitude U_{A1}	$\leq 126 \% U_r$
Signal amplitude U_{A2}	$\geq 80 \% U_r$
Signal amplitude U_{A2}	$\geq 65 \% U_r$
Resolution U_{A3}	$\geq 72 \% U_{A2}$
Erasure U_{A4}	$\leq 3 \% U_r$
Extra pulse U_{A4}	$\leq 5 \% U_r$
Waveform U_{A6}	$\leq 5 \% U_{A6}$

Wear Resistance Characteristics

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

Average signal amplitude $U_{A \text{ after}}$	$\geq 60 \% U_{A \text{ before}}$
Individual signal amplitude $U_{I \text{ after}}$	$\geq 80 \% U_{A \text{ after}}$

Chemical Resistance Characteristics

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

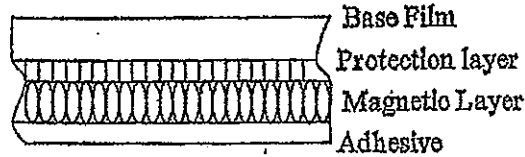
Average signal amplitude $U_{A \text{ after}}$	$\geq 90 \% U_{A \text{ before}}$
Individual signal amplitude $U_{I \text{ after}}$	$\geq 90 \% U_{A \text{ after}}$

Storage Conditions

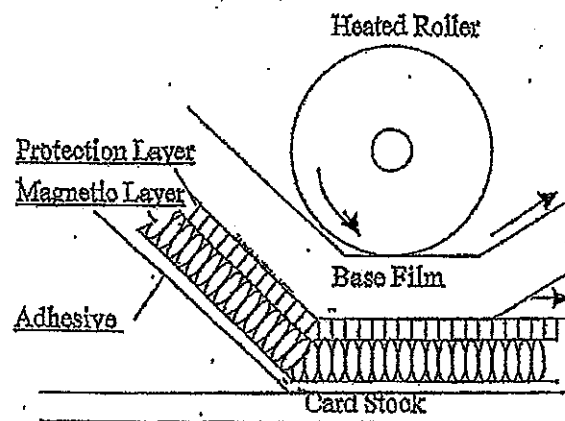
For tape with adhesive:

The allowed storage period for the reel is 3 years at
 temperature $10^\circ\text{C} - 35^\circ\text{C}$
 humidity 40% - 60% RH.
 Additional pressure on the windings shall be avoided

Film - Coating Composite



Transfer Process



Saturation Curve

Readback Voltage - Calibration in %

