

TERVAKOSKI FILM

ECU

ECU FEATURES

High performance BOEPN capacitor base film manufactured by tenter process with super clean capacitor grade Ultra High Temperature resin. Tervakoski film ECU is a low shrinkage film with controlled smooth surface on both sides and corona treatment on one side. Suitable for metallisation with all metal substances commonly used in the capacitor industry.

GENERAL APPLICATIONS

DC / AC capacitor applications, especially suitable for applications with Ultra High Temperature requirements. Designed to be compatible with the requirements of the systems equipped by new generation of wide bandgap semiconductor technologies (SiC for example).

AVAILABLE THICKNESS RANGE

(THICKNESS BY WEIGHT) 3,9 μm – 14,8 μm

THICKNESS [by weight]	TOLERANCE [+/-]
3,9 μm – 4,9 μm	5 %
5,0 μm – 6,0 μm	4 %
6,1 μm – 14,8 μm	3 %

ROLL DIMENSIONS

CORE (I.D)	152 \pm 1 mm
ROLL (O.D)	Up to 580 mm
ROLL WIDTH	8-1200 mm
WIDTH TOLERANCES:	
Roll width <200 mm	\pm 0,4 mm
Roll width \geq 200 mm	\pm 1,0 mm

SURFACE PROPERTIES

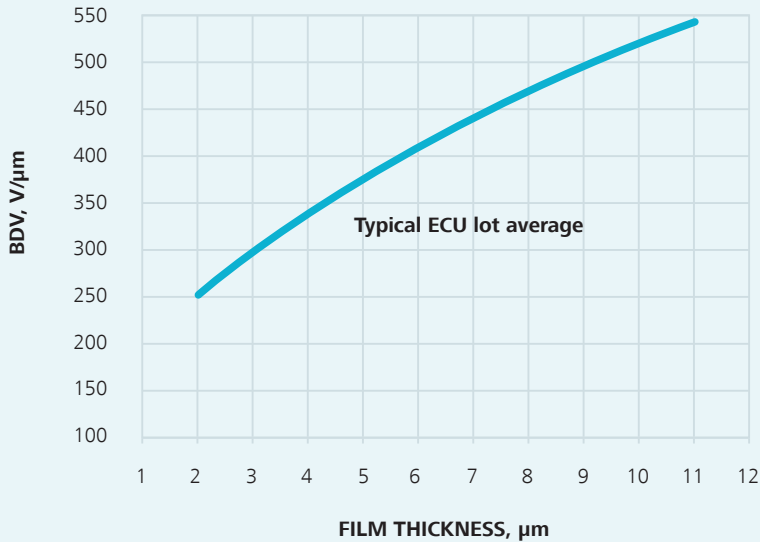
SURFACE TENSION	\geq 34 mN/m	TTM 302
SURFACE ROUGHNESS, R _a	0,05 - 0,14 μm	TTM 215

ELECTRICAL PROPERTIES

DIELECTRIC CONSTANT	2,2	TTM 224
25 °C, 50 Hz-1 MHz		
RESISTIVITY	$>3 \times 10^{15} \Omega\text{m}$	TTM 224
< 100 °C		
DISSIPATION FACTOR	$\leq 2 \times 10^{-4}$	TTM 224

MECHANICAL PROPERTIES

TENSILE STRENGTH			TTM 218
	MD	$\geq 110 \text{ MN/m}^2$	
	CD	$\geq 200 \text{ MN/m}^2$	
MODULUS OF ELASTICITY			TTM 213
	MD	$\geq 2000 \text{ MN/m}^2$	
	CD	$\geq 3500 \text{ MN/m}^2$	
SHRINKAGE (120 °C, 15 MIN)			TTM 213
	MD	$\leq 3,0 \%$	
	CD	$\leq 0,5 \%$	



DC-breakdown strength of dry one-layer film in table top test with electrode area about 2 m²


LABELLING

Each roll is equipped with a label, which is placed either on the outer surface of the roll or inside the core.


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TERVAKOSKI FILM ECU
Polypropylene film

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NOMINAL THICKNESS	6,00 μm 2	ROLL NO	5-0015122520 9
THICKNESS BY WEIGHT	5,97 μm 3	1062682/0015088953/1/01/03 10	
WEIGHT	59,0 kg 4	LENGTH	11800 m 11
TREATED SIDE	39.0/OUT 5	WIDTH	920 mm 12
NO OF JOINTS	6		
CUSTOMER ORDER NO.	C0015122 7		
OPERATOR	141 8	DATE	29.07.2021 13



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5000920000000118000000001062682001508895300103141



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Manufacturing site **17**
EFF1SK

INFORMATION ON THE LABEL:

- | | | |
|---|--|---|
| <p>1. Product name and grade</p> <p>2. Nominal Thickness</p> <p>3. Thickness by weight</p> <p>4. Net Weight</p> <p>5. Corona / Treated side</p> <p>6. Nr. of Joints</p> <p>7. Customer order</p> | <p>8. Operator Nr.</p> <p>9. Roll Nr.</p> <p>10. Internal traceability</p> <p>11. Length of film</p> <p>12. Width of roll</p> <p>13. Date of slitting</p> <p>14. Bar code with traceability</p> | <p>15. QR code (roll Nr and weight)</p> <p>16. Logo Tervakoski film</p> <p>17. Production site</p> |
|---|--|---|

PACKING

Each individual roll is wrapped with polyethylene film to protect against dust and foreign particles during normal conditions of transport and storage. The roll is in horizontal hanging position hold by plastic or wooden supporting plates. Soft plastic discs are inserted between roll edge and plastic/ wooden supporting plate. The roll and supporting plates are bound together with plastic straps.

A set of the rolls on the pallet is bound together and tied to the pallet with plastic straps. The pallet is wrapped with stretch film.

Pallet size is set according to the roll diameter and width.

STORAGE

In the handling of pallets and individual rolls all kinds of shocks should be avoided. The rolls should be stored in the original package and in a dry place. Temperature exceeding 40°C should be avoided during storage. It is also recommended that film is used within one year of receipt. A longer storing time increases the risk of metallization problems.

Tervakoski film 

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