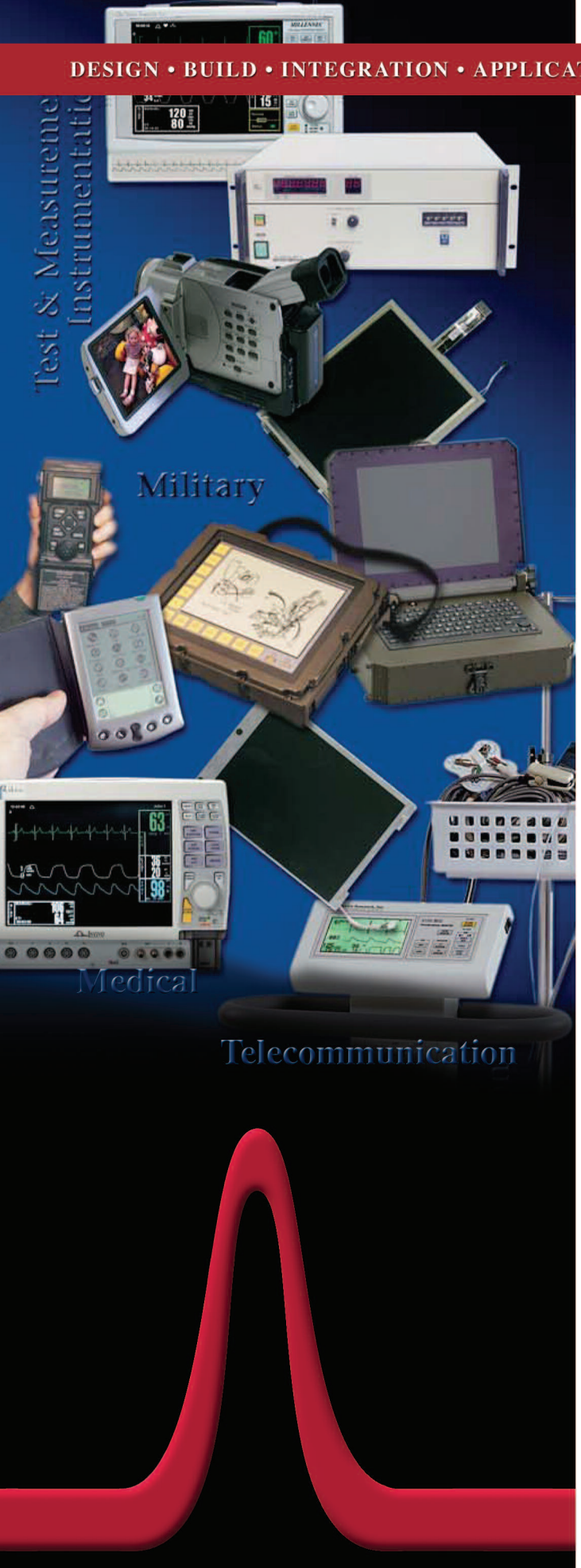

Dontech's VCF Series™
Transparent Conductive Films

Dontech manufactures a variety of transparent conductive coatings for EMI shielding, optical scanners, and transparent heater applications. Transparent conductive oxides such as indium tin oxide (ITO) and metals such as gold or silver are deposited via DC magnetron sputtering or ion enhanced e-beam evaporation on to rigid optical substrates such as glass, acrylic, polycarbonate and ADC.

Those coatings are also available on flexible films such as PET (polyethylene terephthalate) under Dontech's VCF Series Transparent Conductive Films product family. Dontech VCF Series films are made in a wide range of resistivities and are ideal for low cost solutions, including optical EMI/RFI shielding of electronic displays and enclosures used in medical, military and industrial applications.

VCF Series product features are as follows:

- Transparent conductive coatings (single or multi-layer) on PET (polyester) based films; high visible light transmission (> 80%) with low photopic reflection
- Effective EMI/RFI shielding for electronic displays, touch screens, enclosures
- Reduced IR transmission for solar loading protection of displays
- Variety of product configurations available including rolls, sheets, and cut-to-size
- Optical pressure-sensitive adhesive (PSA) can be applied to the uncoated film surface
- Conductive coatings can be deposited over hard coatings (e.g., antiglare or gloss) or directly on PET
- Protective maskings can be applied to front and/or rear surfaces

DONTECH
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VCF Series™ Transparent Conductive Films

VCF is Dontech's designation for vacuum deposited visually transparent conductive coatings on flexible optical film. The conductive film coatings are constructed in two formats: transparent conductive oxides (TCO), and multi-layer coatings of TCO and metallic layers. The product designations include the VCF prefix followed by the maximum resistance, measured in ohms per square. For example, a VCF-27 is a transparent conductive oxide (TCO) which has a maximum resistance of 27 ohms per square. Dontech's VCF Series coatings are available for complete product solutions.

EMI Attenuation Data

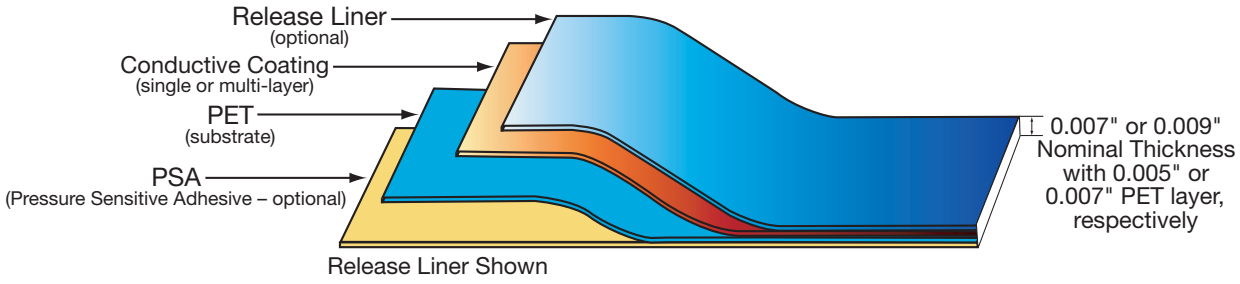
Frequency	VCF-12	VCF-30
1 MHz (E field)	–	–
50 MHz (E field)	44 dB	40 dB
100 MHz (E field)	34 dB	29 dB
1 GHz (Plane Wave)	–	–

Product Configurations

Material	Available Thickness	Configuration	Nominal %T	Materials	Nominal Resistance, Ω/sq.	IR Blocking Performance
VCF-3	0.007"	R, S, C	65%	TCO & Metals	2.5	Excellent
VCF-12	0.005" to 0.007"	R, S, C	80%	TCO & Metals	10	Very Good
VCF-30	0.005" to 0.007"	R, S, C	85%	TCO & Metals	20	Average
VCF-60	0.007"	R, S, C	85%	TCO	50	Average
VCF-80	0.007"	R, S, C	80%	TCO	70	Low
VCF-100	0.007"	R, S, C	78%	TCO	100	Low

Configuration Key:
R = Roll (24", 48" and custom widths) and sold by square foot
S = sheets (24" x 24")
C = cut to size

VCF Series Films Cross Section



Company Profile:

Dontech Incorporated is an ISO-9001:2000 designer and manufacturer of optical filters, coatings and enhanced display products for military, medical and industrial applications. For more than 35 years Dontech has provided innovative optical solutions worldwide.

***Visit us at* www.dontech.com**

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