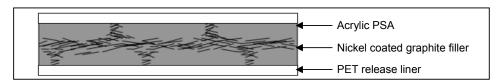
# **3M** Electrically Conductive Acrylic Pad **eCAP 7810**

**Product Description:** 3M<sup>TM</sup> XYZ-Axis Electrically Conductive Acrylic Pad(eCAP) represents a breakthrough in PSA tape and conductive gasket technology. eCAP 7810 conducts electricity through the thickness (Z-axis) and in the plane of the adhesive (X, Y planes) and is ideal for EMI/RFI shield and EMI/RFI gasket to metal surfaces. eCAP 7810, a double sided tape, consists of a high performance 3M adhesive loaded with conductive fillers. XYZ-Axis Electrically Conductive Pad 7810 is ideal for EMI shielding to electronic and electrical devices. eCAP 7810 can be applied as die cut parts or in roll form and has good adhesion to common EMI/RFI substrates such as aluminum, stainless steel, and smooth gasket materials. eCAP 7810 also electrically connects and mechanically bond EMI/RFI shield and gasket to metal frames and enclosures. The low contact resistance and tape construction result in good EMI performance.

Patented Technology: 3M XYZ-Axis Electrically Conductive Acrylic Pad is a self-stick EMI gasket pad which provides good electrical conductivity for EMI shielding and ESD grounding. Made with a proprietary technology, the pad achieves a unique filler distribution in three dimensional structure throughout the adhesive matrix. This makes the tape an excellent choice for use near electronic components and assemblies. The tape is supplied on 50 meter rolls in width 600 mm.

### **Product construction:**

# eCAP 7810



# eCAP 7810

Color	Grey		
Conductive Filler	Nickel Graphite		
Matrix	Acrylic Pressure Sensitive Adhesive	esive	
Pad Thickness*	0.15, 0.20, 0.25, 0.30 mm		

<sup>\*</sup> Contact your local 3M sales representative for additional information on thicknesses and width.

# **Typical Properties:**

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

### • eCAP 7810

Product No.	7810	Test Method
Specific Gravity	1.5 g/cm <sup>3</sup>	3M TM
Hardness (Shore A)	30	3M TM
Surface Resistance	10 Ω/□	3M TM
Z-axis Resistance	0.5 Ω	3M TM
Compression Deflection <sup>1</sup>	12 kg/sqin	3M TM
Compression Set <sup>2</sup>	10 %	3M TM
180° Peel Adhesion	700 gf/inch	3M TM

<sup>&</sup>lt;sup>1</sup> Compression Deflection: Measured at 25% compression (12 mm/min)

# **Important Notice:**

All statements, technical information and recommendations related to the Seller's products are based on information believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Before utilizing the product, the user should determine the suitability of the product for its intended use. The user assumes all risks and liability whatsoever in connection with such use.

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3M Electrical Markets Division **Electrical Markets Division** 6801 River Place Blvd. Austin, TX 78726-9000

<sup>&</sup>lt;sup>2</sup> Compression Set : Compressed 25% for 22 hrs at 70  $^{\circ}$ C, expressed as a percentage of the original thickness, as follows:  $C_d = [(t_o - t_f) / t_o \ x100]$ 

 $C_d$  = compression set expressed as a percent of the original thickness

 $t_{o} = original \ thickness \ of \ test \ specimen$ 

 $t_f$  = final thickness of test specimen