

## EESU Layer Detailed Information

Sample ID# 253D (2)

Date of Manufacture: February 2012

\*Capacitance =  $0.35 \times 10^{-9}$  F

Relative permittivity (K) = 20.6

\*Dissipation Factor = 0.024

Resistance =  $580 \times 10^9 \Omega$

Fill-Factor of Composition-Modified Barium Titanate Powders = 35%

Applied Voltage = 1250 V

Leakage current at 1250 V =  $2.16 \times 10^{-9}$  A

THE FOLLOWING DATA IS ONLY FOR THE DIELECTRIC LAYER

Area = 0.25 in x 0.25 in = 0.635 cm x 0.635 cm = 0.403 cm<sup>2</sup>

Volume = A x Thickness = 0.403 cm<sup>2</sup> x 21 x 10<sup>-4</sup> cm = 0.846 x 10<sup>-3</sup> cm<sup>3</sup> = 0.846 x 10<sup>-6</sup> L

E = (C x V<sup>2</sup>)/7200 W·h

E = 75.96 x 10<sup>-9</sup> W·h

ED = 89.79 x 10<sup>-3</sup> W·h/L

\*These parameters were measured on a calibrated LCR unit

*(Reader is cautioned that this tested sample was manufactured with a previous dielectric formulation)*