

103.4 - Semiconductor Thin Film for the Composition of Thin Films

Standard Reference Material SRMs 2841 and 2842 are intended for use as a reference standard for analytical methods that measure the composition of thin films, such as electron microprobe analysis (EMPA), photoluminescence (PL), auger electron spectroscopy (AES) and X-ray photoelectron spectroscopy (XPS). The SRM consists of an epitaxial layer of $\text{Al}_x\text{Ga}_{1-x}\text{As}$, 3 μm thick, on a 1 cm x 1 cm square of GaAs substrate. The semiconductor chip is attached with carbon tape to a 2.5 cm diameter stainless steel disk for labeling and handling.

[For further information see SP 260-163](#)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

| SRM | Description | Unit of Issue | Al (x in $\text{Al}_x\text{Ga}_{1-x}\text{As}$) |
|----------------------|--|---------------|---|
| 2841 | Semiconductor Thin Film: $\text{Al}_x\text{Ga}_{1-x}$ As Epitaxial Layers (Al mole fraction x near 0.20) | disk | 0.20 |
| 2842 | Semiconductor Thin Film: $\text{Al}_x\text{Ga}_{1-x}\text{As}$ Epitaxial Layers (Al mole fraction x near 0.30) | disk | 0.30 |

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- Certified values are normal font
 - Non-certified or reference values are italicized
 - Non-certified values in parentheses are for information only