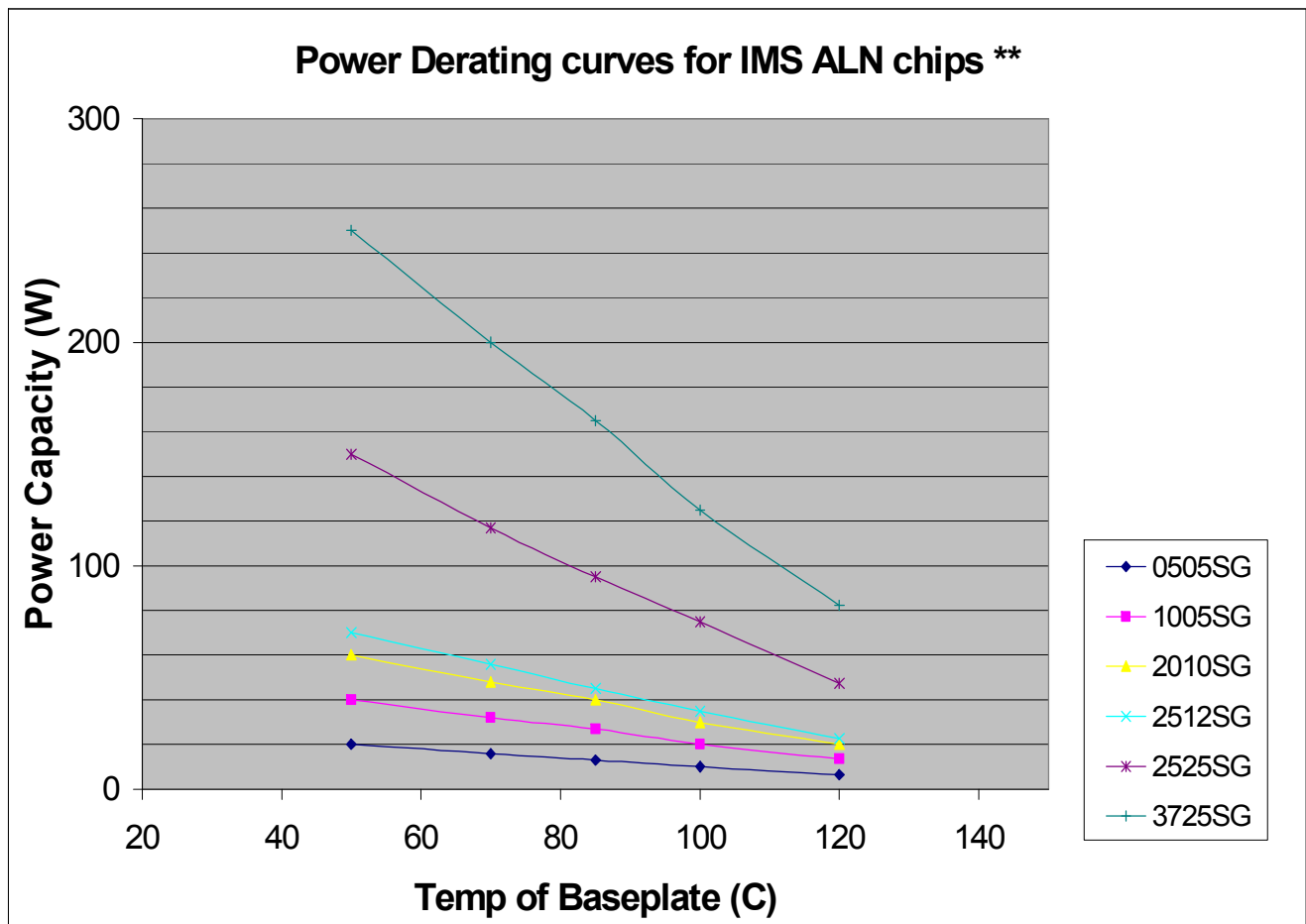




Below are curves showing power data for IMS Aluminum Nitride (ALN) chip resistors of SG style. Data points were taken on N-Series chips\* at baseplate temperatures (maintained via a heated solid copper block) of 50, 70, 85, 100 and 120 degrees (C). Heat conduction through the substrate [rather than radiation into the ambient air] was the primary mode of cooling in these tests.

Under free air conditions, IMS sets the operating temperature ceiling of its products at 150 (C). For the purposes of this data, when the temperature of the baseplate approaches 150 (C), conductive cooling is assumed to end, and the power rating of the chip approaches that of a chip mounted in a condition where the primary mode of cooling is radiative.



\* Chips 1206 and smaller are 25 mil thick nominal, chips 2512 and larger are 40 mil thick nominal

\*\* for Alumina substrate ( $Al_2O_3$ ) chips, simply divide elements in graph by six.  
e.g.: a 2512 sized alumina chip at 85C would be rated at about 7W under the same conditions.

