Power Surface Mount Packages - SMD

The power surface mount package, originally designed and patented by Aegis, is a very low thermal resistant, high efficiency, small hermetic package. These packages are ideally suited to house power MOSFETs, single and center-tap Schottky rectifiers, as well as adjustable and fixed voltage regulators.

The unique design brings together highly efficient thermal management materials in a very low weight, low profile, resistance weldable package. Available in standard and custom configurations. Plating is Electrolytic Nickel and Gold in accordance with MIL-PRF-19500. SMD Packages meet the general package qualification requirements of Appendix E of MIL-PRF-19500.

Package Type	Thermal Conductivity
Glass-to-Metal sealed with ASTM F-15 Alloy Base	14 W/m°K
Cold-Rolled Steel Base	42 W/m°K
Ceramic Surface Mount with Metallized Vias	62 W/m°K
AMETEK Aegis' Surface Mount Package	185 W/m°K



Comparison of SMD Package Technology to TO-25X Series Power Packages						
Feature	SMD 0.5	SMD 1	SMD 2	TO-257	TO-254	TO-259
Overall size (in)	.296 x .400	.450 x .625	.525 x .690	.415 x .650	.540 x .795	.535 x 1.190
Overall Height (in)	.117/.107	.137/.125	.137/.125	.190	.250	.255
Die Mount Area (in)	.170 x .206	.340 x .340	.405 x .405	.290 x .290	.396 x .396	.394 x 530
Weight (gr)	.889	2.55	2.89	4.35	9.15	10.84
Heat Spreader Materials	W/Cu	W/Cu	W/Cu	W/Cu/BeO	W/Cu/BeO	W/Cu/BeO

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