Momentive Performance Materials' silicone encapsulants deliver thermal conductive performance, contributing to the long-term reliability of heat-generating electronic components. These thermal products cure to a soft rubber, gel material, and include low viscosity grades that can be used for potting applications, and higher viscosity grades that exhibit dispensing stability needed for bead formulation. Some products are also candidates as gap fillers or liquid dispensed alternatives to thermal pads.

Product Details

Properties		TIA222G	TIA216G	TIA208R
Features		High thermal conductivity, tacky adhesion, fast head and R/T cure	Low viscosity, tacky adhesion, fast head and R/T cure	Low viscosity, primerless adhesion, fast head and R/T cure
Type		2 part	2 part	2 part
Property (uncured)		Flowable	Flowable	Flowable
Color		Gray	Gray	Black
Mixing Ratio ((A):(B) by weight)		100:100	100:000	100:100
Workable Life (23°C)	h	4	0.5	1.5
Viscosity (23°C)	Pa.s	20	8	4.5
Cure Condition (heat)	°C/h	70/0.5	70/0.5	70/0.5
Cure Condition (room temp)	h	24	6	24
Thermal Conductivity[1]	W/m.K	2.2	1.6	0.7
Specific Gravity (23°C)		2.81	2.69	1.6
Hardness (Type E)		45	45	40 (type A)
Adhesion Strength (AI)	Mpa	-	-	1.2
Adhesion Strength (PC)	Mpa	-	-	0.7
CTE	ppm/K	140	150	-
Volume Resistivity	MΩ.m	$4.8x10^6$	$4.8x10^6$	$2.0x10^6$
Dielectric Strength	kV/mm	20	18	27

Properties		TIA222G	TIA216G	TIA208R
Volatile Siloxane (D4-D10)	ppm	<200	<200	-
Flame Retardancy		UL94 V-0	UL94 V-0	UL94 V-0

[1]Hot wire method *planned Typical property data values should not be used as specifications