



The World Leader in High Performance Signal Processing Solutions



QMI2569 CONDUCTIVE SILVER GLASS ADHESIVE

TECHNICAL DATA

A. Material properties comparison between QMI2419 and QMI2569 Conductive silver adhesive material

Material Properties Comparison

Typical Properties	QMI-2419	QMI-2569	Test Method
Viscosity 10 rpm @ 25°C, cP	27,000	35,800	TM 503
Thixotropic Index (1:20 rpm)	10.7	8	TM 503
Percent Ag (By weight in fired film)	69.6	70	TM 425
Metal to Glass Ratio (By weight in fired film)	4:1	4:1	TM 425 / TM 506
Average Tensile Adhesion, lbs -f Si to Au plated ceramic @ 25°C	> 80 (300 mil ²)	> 100 (500 mil ²)	TM 533
Package cavity headspace moisture Concentration as measured by Residual Gas Analysis (RGA) ppm	≤ 1500	≤ 2000	MIL SPEC 5011
Extractable Ion Content, ppm			TM 402
Na+, K+	≤ 20 ppm	≤ 20 ppm	
Cl-, F -	≤ 10 ppm	≤ 10 ppm	
Glass Transition Temperature (Tg), °C	300	250	TM 433
Coefficient of Thermal Expansion (TMA) α1, ppm/°C	21	16	TM 433
Volume Resistivity, microhm-cm	≤ 15	≤ 15	TM 512
Thermal Conductivity, W/m °K	> 60	> 60	ASTM 1461
DMA Modulus @ 25°C, Gpa	15.1	15.1	TM 458
DMA Modulus @ 25°C, psi	2,190,000	2,190,000	
Shelf life @ 25°C, months	24	12	TM 589
Storage Temp	15°C - 28°C	15°C - 28°C	NA
Roller Requirement	1-4 rpm for 16 hrs	1-4 rpm for 16 hrs	NA

C. Curing requirement comparison between QMI2419 and QMI2569 Conductive silver adhesive material

QMI 2419 Temperature Typical Profile Requirement

Temperature	Ramp rates (°C/min)	Time (min)
40-120°C	8 - 12	6.67 - 10
120-200°C	28 - 32	2.5 - 2.86
200-320°C	30 - 60	2 - 4
> 320°C	not critical	not critical

Peak Temp	450°C
Dwell Time	6 min

QMI 2569 Temperature Typical Profile Requirement

Temperature	Ramp rates (°C/min)	Time (min)
40-120°C	< 30	> 2.67
120-200°C	< 40	> 2
200-280°C	< 65	> 1.23
> 280°C	not critical	not critical

Peak Temp	440°C
Dwell Time	7 min