

DENKA ALSINK / MMC Wafer

Thermal Parts of LED

MMC (Metal Matrix Composite) Wafer

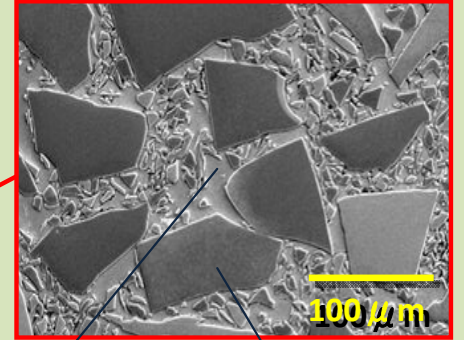
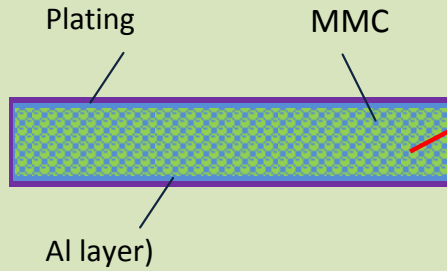
Structure

Appearance



MMC Wafer (Ni+Au plating)

Cross section



Al alloy SiC

Main Grade

(Typical data)

	Standard type AS-SC65	Development type			
		AS-SC70	AS-SC70H	AS-SC80	AS-SC80H
Ceramics	SiC	SiC	SiC	SiC	SiC
Al-alloy	Al-Si	Al-Si	Al-Si	Al-Si	Al-Si
Ceramics content (%)	65	70	70	80	80
Density (g/cm ³)	2.95	3.00	3.00	3.05	3.05
Thermal expansion (ppm/K)	7.5	6.5	6.5	5.0	5.0
Thermal conductivity (W/mK)	200	220	250	250	280
Flexural strength (MPa)	400	400	400	350	350

Application example

~High Power LED process (LLO process)~



GaN Growth

Wafer Bonding

Sapphire Lift off

Electrode Forming

Dicing