

# TEST CERTIFICATE

FROM :Semitech Materials Company

18,Tanhyeon-Ro, 1beon-Gil, Pyeongtaek-City, Gyeonggi-Do, Korea

TEL: +82-31-611-9889 FAX: +82-31-611-9866

GRADE : FP-50N

Surface coating			None		
Application			FPCB Coverlay Lamination		
Color			Transparency		
Specification	Units	Spec.	Measured Values	Test Methods	
Average Thickness	$\mu\text{m}$	$50 \pm 3$	49.5	Micrometer	
Max. Temperature	$^{\circ}\text{C}$	-	165.0	ASTM D 3418	
Use Temperature			160.0		
Tensile Strength	MD	$\text{kgf}/\text{cm}^2$	min. 250	ASTM-D882	
	TD				296
Elongation at Break	MD	%	min. 180		217
	TD				232
C.O.F	IN/IN	%	-	0.179 / 0.126	
	IN/OUT			0.228 / 0.15	
	OUT/OUT			0.311 / 0.165	
F-5	MD	$\text{kgf}/\text{cm}^2$	-	ASTM-D882	
	TD				46