

AeroWave 360/AeroBond 360

Modified Epoxy in Microwave Application

FEATURES

- Dk/Df (10GHz) by 2.5.5.5 3.5/0.0055
- Higher heat resistance Td>355 °C, T288>60min.
- Lower Z-axis CTE, available for multilayer process. Low moisture absorption with excellent resistance against moisture and heat.
- Compatible with lead-free process.

APPLICATIONS

Telecommunications
Commercial RF Applications
LNB for Satellite TV
Hybrid RF Multilayer applications

GENERAL PROPERTIES

PROPERTY	TYPICAL VALUE	UNITS	CONDITION	TEST METHOD
Dielectric Constant, εr	3.47±0.1	-	1GHz/23℃	IPC-TM-650 2.5.5.5
	3.57±0.05	-	10GHz/23℃	SPDR
Dissipation Factor tan, δ	0.0055	-	1GHz/23℃	IPC-TM-650 2.5.5.5
	0.0075	-	10GHz/23 ℃	SPDR
Thermal Conductivity	0.4	W/m·k	-	IPC-TM-650 2.4.45
Volume Resistivity	6.5×10 ⁸	MΩ.cm	C-96/35/90	IPC-TM-650 2.5.17.1
Surface Resistivity	6.56×10 ⁵	MΩ	C-96/35/90	IPC-TM-650 2.5.17.1
Electrical Strength	55.2	kV/mm	-	IPC-TM-650 2.5.6.2
Coefficient of Thermal	48	ppm/℃	Before Tg	IPC-TM-650 2.4.41
Expansion	210		After Tg	
Tg	170	$^{\circ}$	DSC	IPC-TM-650 2.4.24
Td	360	$^{\circ}$	TGA	IPC-TM-650 2.4.24.6
T288	>60	Min	TMA	IPC-TM-650 2.4.24.1
Moisture Absorption	0.13	%	85℃/85%RH, 168hr	IPC-TM-650 2.6.2.1
Peel Strength	1.01	N/mm	after solder float 1 oz. EDC Foil	IPC-TM-650 2.4.8
Flammability	V-0	Rating	-	UL 94

PRODUCT SPECIFICATION

PRODUCT	STANDARD THICKNESS	STANDARD PANEL SIZE	
AeroWave 360 AeroBond 360	0.010"(0.254mm), 0.020" (0.508mm), 0.030"(0.762mm) 0.060"(1.524mm) 1080 RC65% 0.032" (0.081mm) Other type of prepreg and core thickness is available upon design.	36"×48", 42"×48", Additional panel sizes would be available upon request. For most applications HTE copper foil would be used. When PIM and insertion loss is critical, RTF or lower profile copper foil should be considered.	

Remark: All the data in the datasheet is provided to assist you in designing with PTFE material, just for your reference, not have the effect of warranty. If you have any further question, please freely contact with the technical service team of Shengyi.