

General Characteristics of Dicing Die Bonding Film

Item				FH-9011	FH-9021	HR-9004	HR-9070G -1	HR-900 -N50	HR-900 -N45	HR-900 -N47	HR-300 -S34	HR-310 -N45	FH-4013	HR-400 -S41	HR-400 -N45	HR-420 -N45	FH-SC13	HR-5104	
Application				Die/sub.,die/die Blade Expansion		Die/sub.,die/die Blade		Die/sub., die/die Blade Anti-ESD	Die/sub., die/die Expansion	Die/sub., die/die Expansion Anti-ESD	Die/sub., die/die Blade	Die/sub., die/die Expansion	FOD Blade		FOW Expansion	FOW Expansion	Small die Blade		
Adhesive Thickness				10,20,25 (12inch) 20,25 (8inch)	20,25 (12inch) 25 (8inch)	10,20,25 (12inch) 20,25 (8inch)	10, 20, 25 (12inch) 20, 25 (8inch)	10,15,20 (12inch)	7,10,15,2 0 (12inch)	7,10,15,2 0 (12inch)	10, 20, 25 (12inch)	10,20 (12inch)	120 (12inch)	50, 60 (12inch)	50,60 (12inch)	50 (12inch)	10,25 (8inch)	10,25 (12inch) 10,25 (8inch)	
DC tape properties	Peel strength between DAF and DCT	Before UV	N/25mm	1.37	1.01	0.20	0.69	0.68	0.90	1.03	0.23	0.82	0.93	0.68	0.75	0.77	1.02	0.25	
		After UV	N/25mm	0.04	0.04		0.07	0.10	0.05	0.05		0.05	0.07	0.10	0.06	0.06	0.04		
DAF type				900-series							300-series	310-series	400-series			420-series	510-series		
DAF properties	Glass transition temperature		°C	177							171	170	130			143	157		
	Elastic modulus	- 55 °C	MPa	3000							3700	4400	4800			6000	8000		
		0 °C	MPa	2300							2900	3500	4100			5100	6800		
		25 °C	MPa	600							840	910	2700			3200	4500		
		50 °C	MPa	13							6	9	1300			1200	2100		
		100 °C	MPa	4							1	2	980			780	1200		
		150 °C	MPa	3							1	2	47			38	730		
		200 °C	MPa	2							1	1	25			27	96		
	250 °C	MPa	2							1	2	29			30	110			
	CTE	α1	ppm/°C	144							185	161	96			109	84		
		α2	ppm/°C	186							217	191	176			172	155		
	Dissipation factor	1kHz	-	0.06							0.06	0.06	0.02			0.02	0.02		
		1MHz	-	0.03							0.03	0.03	0.02			0.02	0.02		
Dielectric constant	1kHz	-	4.4							4.6	4.5	4.4			4.1	4.3			
	1MHz	-	3.7							3.9	3.9	4			3.8	3.9			
Ionic impurity	Cl-	ppm	0.00							0.00	0.00	0.00			0.00	0.00			
Thermal conductivity		W/mK	0.2							0.2	0.2	0.3			0.4	0.5			

※ The data in this table are typical values and are not guaranteed.

The values are changed without prior notice due to optimization of measurement conditions or other reasons.