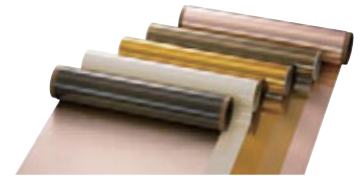


## Excellent dimensional stability and Spring back performance

### Features

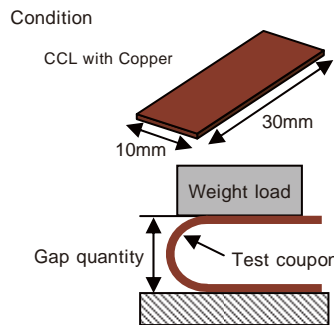
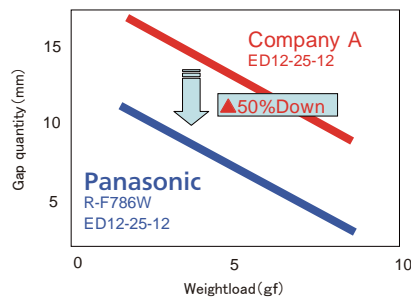
- Thin Flexible Circuit Board Materials with a Low modulus polyimide
- Excellent Spring back performance and High flexibility (R-F786W)
- Excellent dimensional stability (R-F775)
- Halogen-free (Adhesiveless)
- Or thicker copper foil and Polyimide film (R-F775)



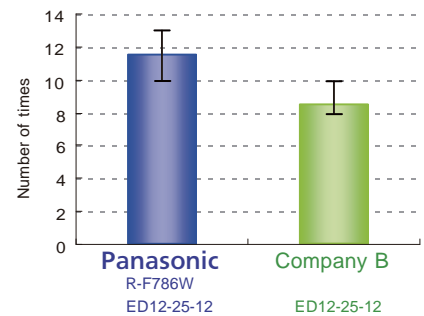
### Applications

Smartphone, Casing edge, Slide keyboard, DSCs, Camera module, LCD module, etc.

#### Spring back performance



#### Weight load flexibility

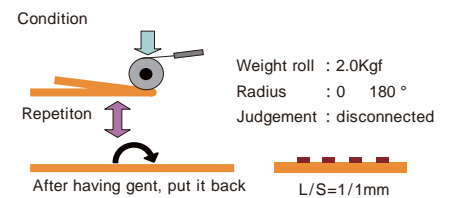


#### General Properties

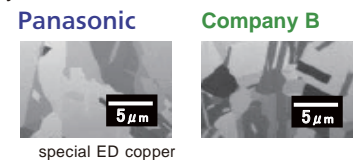
Property	Test condition	Unit	R-F775	R-F786W	Standard Value
Tensile Modulus	A	GPa	7.1	5.1	
Insulation resistance of the surface layer	A		$1 \times 10^{15}$	$1 \times 10^{15}$	$1.0E+11$ or more
Dk	A 1MHz	-	3.2	3.2	4.0(max.)
Df	A 1MHz	-	0.002	0.008	0.07 or less
Flame resistance(UL)	A and E-169/70	-	94V-0	94VTM-0	94V 0
Chemical resistance	HCL2mol/l 23 5 min	-	No abnormality	No abnormality	No abnormality
	NaOH2mol/l 23 5 min				
	IPA 23 5 min				
Peel strength	A	N/mm	1.3	1.1	0.525 or more
	260 solder float for 5sec		1.3	1.2	0.525 or more
Solder heat Resistance	288 solder float for 1min	-	No abnormality	No abnormality	No abnormality
Moisture Absorption	C-96/40/90	-	No abnormality	No abnormality	No abnormality
Solder Heat Resistance	260 solder float for 1min	-	No abnormality	No abnormality	No abnormality
Dimensional stability	After etching MD direction	%	0.030	0.021	0.10 ~ 0.10
	After etching TD direction		0.037	0.015	0.10 ~ 0.10
	After E-0.5/150 MD direction		0.022	0.018	0.10 ~ 0.10
	After E-0.5/150 TD direction		0.027	0.015	0.10 ~ 0.10

RA 18-25-18 RA 18-25-18

The above data is actual values and not guaranteed values.



#### Crystalstructure after lamination



#### Solder heat resistance

	Solder Temp( )	
	Normal state	After absorption 40 90%96Hr
R-F775	330	270
R-F786W	360	300

## Line-up

### Film

Type	Grade	Film thickness										
		12.5 1/2mil	15 3/5mil	20 4/5mil	25 1mil	38	50 2mil	75 3mil	100 4mil	125 5mil	150 6mil	
Standard PI	R-F775 Double side	*										
High Heat resistance PI	R-F786W Double side		-	-		-		-	-	-	-	-

\*:Under development

### Copper Foil

#### R-F775

SPEC.	Copper Foil thickness	Copper Foil thickness								
		2 with Carrier	6 1/6OZ	9 1/4OZ	12 1/3OZ	18 1/2OZ	35 1OZ	70 2OZ	105 3OZ	150 4OZ
ED	Standard		*				-	-	-	-
	Special	-	*					-	-	-
RA	Standard	-	-						*	*
	Special	-	*				-	-	-	-

\*:Under development

#### R-F786W

SPEC.	Copper Foil thickness	Copper Foil thickness	
		12 1/3OZ	18 1/2OZ
ED	Special		
RA	Special		

### Size

Type	TD( Width )
Roll	250mm 500mm 510mm
Sheet	Max.510mm