



Doosan Corporation
Electro-Materials

DS-7106

(ANSI : CEM-1)

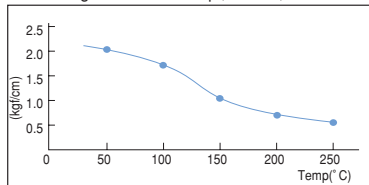
Features

- Excellent punchability
- Significant reduction in dusting
- Long punching tool life
- Low warpage at high temperature

Applications

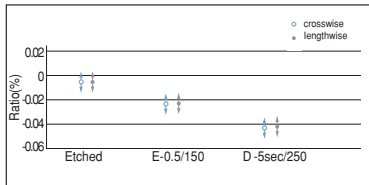
Automotive radio, Television, Smoke alarm,
Power supply, Keyboard, Clock, etc.

■ Peel strength at elevated temp (Cu.Foil 1 oz)



■ Dimensional stability

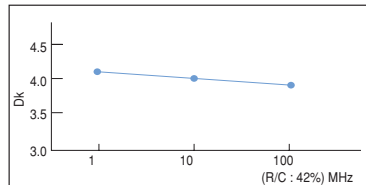
PCB process (size 360 x 310mm span 310 x 254mm)



International Standard Recognition

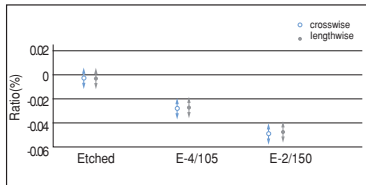
- UL : E103670
- CSA : LS- 93237
- BSI : 6741
- VDE : VDE - Reg - Nr. 4945

■ Dielectric constant

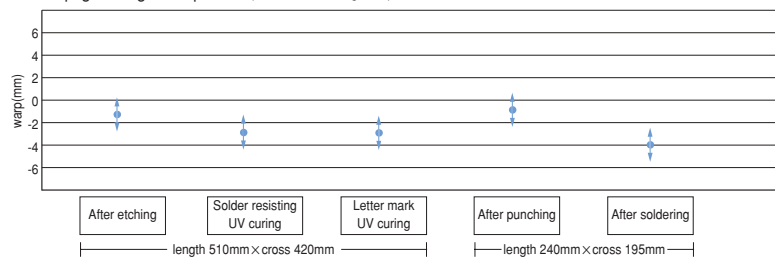


■ Dimensional stability

Test method (IPC-TM-650 2.4.39)



■ Warpage through PCB process (thickness 1.6mm Single side)



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General Properties

Test Item	Unit	Treatment Condition	Designation	DS-7106
			ANSI Grade	CEM-1
			Property Data	
			Standard Value	Guaranteed Value
Flammability	-	UL-94	V-0	V-0
Insulation Resistance	ohm	C-96/20/65	1 x 10 ¹³ - 1 x 10 ¹⁴	above 1 x 10 ¹¹
		C-96/20/65+D-2/100	1 x 10 ¹³ - 1 x 10 ¹¹	above 1 x 10 ⁹
Volume Resistivity	ohm-cm	C-96/20/65	1 x 10 ¹⁴ - 1 x 10 ¹⁵	above 5 x 10 ¹²
		C-96/20/65+C-96/40/90	1 x 10 ¹³ - 1 x 10 ¹⁴	above 5 x 10 ¹¹
Surface Resistance	ohm	C-96/20/65	1 x 10 ¹³ - 1 x 10 ¹⁴	above 1 x 10 ¹²
		C-96/20/65+C-96/40/90	1 x 10 ¹² - 1 x 10 ¹³	above 1 x 10 ¹¹
Arc Resistance	min. sec		100	above 60
Dielectric Constant (1 MHz)	-	C-96/20/65	4.0 - 4.5	less than 4.8
		C-96/20/65+D-48/50	4.2 - 4.8	less than 5.2
Dissipation Factor (1 MHz)	-	C-96/20/65	0.015 - 0.020	less than 0.035
		C-96/20/65+D-48/50	0.018 - 0.023	less than 0.045
Comparative Tracking Index	volt	IEC Method	250	above 250
Solder Float (260°C)	sec	A	above 60	above 20
Peel Strength	Cu.foil 1 oz (0.035mm)	kgf/cm	A	1.6 - 2.2
Flexural Strength	kgf/mm ²	A	30 - 35	above 20.4
Water Absorption	%	E-24/50+D-24/23	0.23 - 0.28	less than 0.50
Punching Temperature	°C	A	Ambient	Ambient

Specimen Thickness : 1.6mm

Purchasing Information

- Copper foil : 0.5 oz/ft²(0.018 mm), 1 oz/ft²(0.035 mm), 2 oz/ft²(0.070 mm) available
- Thickness : 0.8mm to 1.6mm

Standard Size	Tolerance(mm)	
1,020 X 1,220mm (40" X 48")	915 X 1,220mm (36" X 48")	+3
1,070 X 1,220mm (42" X 48")	970 X 1,220mm (38" X 48")	-0
1,020 X 1,020mm (40" X 40")		

※ Other sheet size and thickness could be available upon request.