

Pel-Urethane®

Product Name	MU-107A/MU-107B
Product Category	Polyurethane Resin for Electronics
Usage	Substrates
Function	Flexible, Low Stress, Moisture Resistant, Stress Release, Shock Absorption

As supplied

(Typical Value)

Item	Condition	Unit	MU-107A	MU-107B
Appearance	visual	–	Colorless, Black	Brown
Specific Gravity	25°C	–	0.92	1.21
Viscosity	25°C	mPa·s	900	130
Mixing Ratio	parts by weight		100/30	
Mixed Viscosity	25°C	mPa·s	700	
	40°C	mPa·s	350	
Gel Time	60°C, 25g	min	40~45	
Pot Life	25°C, time up to 10Pa.s	min	60	
	40°C, time up to 10Pa.s	min	45	

Standard Curing Condition 60°C-2hour or 80°C-1hour

As cured

Item	Condition	Unit	Typical Value
Hardness	JIS K 7215 25°C	shore A	30
Specific Gravity	JIS C 2105	g/cm ³	1
Glass Transition Temp.	TMA	°C	-70
Coefficient of Thermal Expansion	above Tg	/°C	18.5×10 ⁻⁵
	below Tg	/°C	6.61×10 ⁻⁵
Tensile Strength	JIS K 7312 25°C dumbbell No.2	MPa	2.6
Elongation	JIS K 7312 25°C dumbbell No.2	%	300
Young's Modulus	JIS K 7312 25°C dumbbell No.2	MPa	0.66
Tear Strength	JIS K 7312 25°C	N/mm	8.2
Shear Adhesive Strength	JIS K 6850 -40°C	MPa	12.2
	JIS K 6850 25°C	MPa	2.1
	JIS K 6850 150°C	MPa	0.6
	JIS K 6911 25°C	Ω·cm	3.3×10 ¹⁵
Volume Resistivity	JIS K 6911 25°C boil for 2hrs	Ω·cm	3.4×10 ¹⁴
	JIS K 6911 1kHz 100kHz 1MHz	-	4.6 3.7 3.3
dielectric constant	JIS K 6911 1kHz 100kHz 1MHz	%	6.8 7.6 7.1
Water Absorption	JIS K 6911 boil for 2hrs	wt%	0.52
	JIS K 6911 boil for 2hrs	wt%	0.68※
shrinkage	ASTM D2566-68	%	0.6
Breakdown Voltage	ASTM D149 23°C,50%RH	kV/mm	23.6

Curing Condition : 60°C×2hrs+25°C×48hrs

※Curing Condition : 80°C×1hr+25°C×192hrs

The above values are typical and not specification



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