

Pelnox®

Product Name	ME-276/HV-138
Product Category	Potting Resin for Seiconductors, Resin for Car Electro Devices & Sensors
Usage	Semiconductor Modules, Car Electro Devices, Sensors
Function	Heat Resistant, Flame Resistant, Low Cure Shrinkage, Low Warpage, Heat Cycle Resistant, Humidity Resistant

As supplied

(Typical Value)

Item	Condition	Unit	ME-276	HV-138
Appearance	visual	–	Black liquid	Grey white liquid
Specific Gravity	25°C	–	1.91	1.85
Viscosity	25°C	mPa·s	50,000	15,000
Mixing Ratio	parts by weight		100/100	
Pot Life	25°C, time up to double viscosity	hour	4	
Gel Time	100°C 40g	minute	20	
Mixed Viscosity	25°C	mPa·s	38,000	

Standard Curing Condition **100°C x 1 hour + 140°C x 1 hour + 180°C x 1 hour**

As cured

Item	Condition	Unit	Typical Value
Specific Gravity	Buoyancy method 25°C		1.88
Hardness	JIS K-7215 25°C	Shore D	93
Glass Transition Temperature	TMA	°C	186
Coefficient of Thermal Expansion	below Tg	10 ⁻⁵ /°C	1.5
	above Tg	10 ⁻⁵ /°C	6.2
Flexural Strength	JIS K-6911	MPa	100
Flexural Modulus	JIS K-6911	MPa	10,000
Shear Adhesive Strength	JIS K-6850 Al-Al	MPa	9
	JIS K-6850 Cu-Cu	MPa	10
Shrinkage		%	0.04
Thermal Conductivity	Rapid thermal conductivity meter	W/mk	0.60
Specific Heat	JIS K-7123 25°C	J/g·deg	0.620
	100°C		0.730
	200°C		0.860
Breakdown Voltage	JIS K-2110 25°C	kV/mm	19
	150°C		20
Volume Resistivity	JIS K 6911 25°C	Ω-cm	6.8 x 10 ¹⁵
	JIS K 6911 boil for 2hrs	Ω-cm	2.4 x 10 ¹⁵
Water Absorption	JIS K 6911 boil for 2hrs	wt%	0.1
Flame Resistance	UL-94		equivalent to V-0

The above values are typical and not specification.



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