

POKETONE for E&E Connector

Global Warming Potential

* PA6	6.70	
* PA66	6.40	
* PC	3.40	
* POM	3.20	
* ABS	3.10	
** PK	3.08	(kg CO ₂ eq)

* Other ETP data is based upon the Eco-profiles data from www.plasticseurope.org

** PK Data is based upon Korea LCI database and Ecoinvent database.



Non Toxic High Efficiency

*Acrylate Free
Melamine Free
Bisphenol A Free
Formaldehyde Free
Lead/ Chrome/ Free
Phthalate Free*

POKETONE[™]
HYOSUNG POLYKETONE

POKETONE for E&E Connector

Excellent flame resistance, flexibility and dimensional stability ensure that components made of POKETONE are suitable for electrical & electronics connector markets.

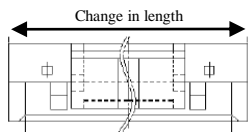


- Dimensional stability and Cycle time reduction
- Material specialized for connectors with excellent snapping characteristics.
- Flame retardant PA66 can be changed without mold modification.
- Eco-friendly and low global warming potential.

※ Test Method

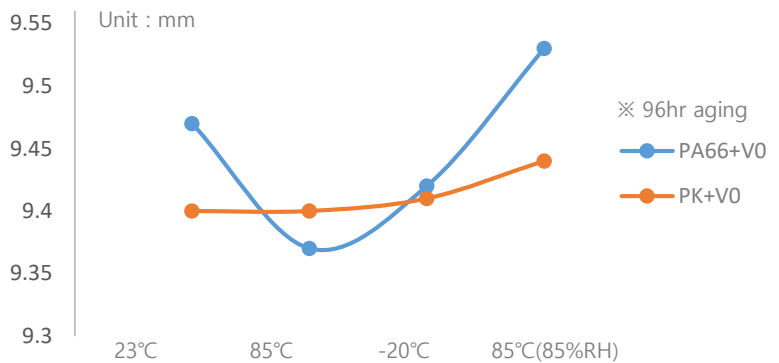
Time : 96hr

Temp. : 23°C, 85°C, -20°C, 85°C

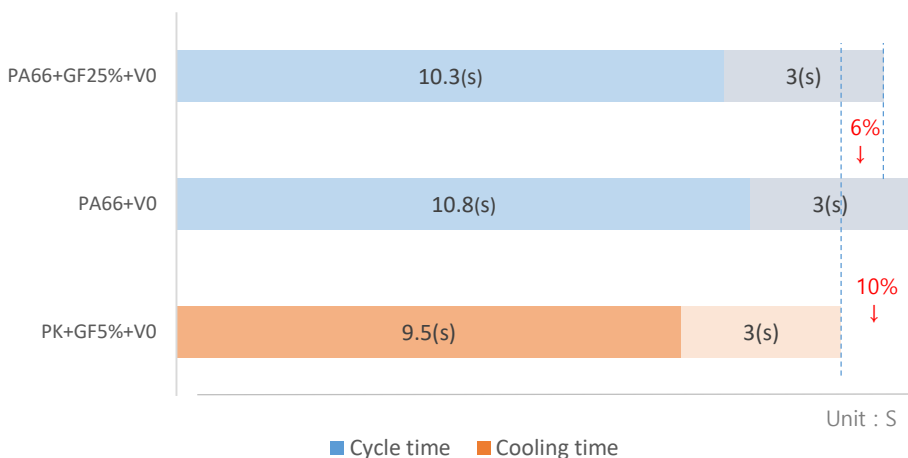


POKETONE has hydrolysis resistance and low moisture absorption so Better dimensional stability compared to PA66+V0 under high humidity and heat condition.

Dimensional stability under high humidity & heat



Short crystallization and good flowability

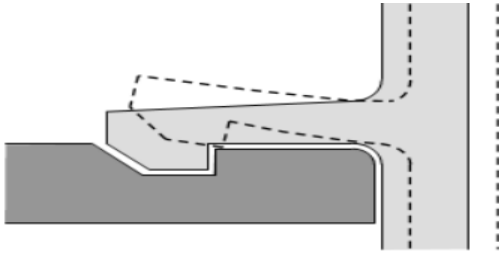


Be effective cycle time reduction as well as good flowability compare to PA66. Therefore, easy to mold thin wall parts.

Flow length	Unit	PK	PA66
	mm	780	640

POKETONE for E&E Connector

Excellent snap-fit properties



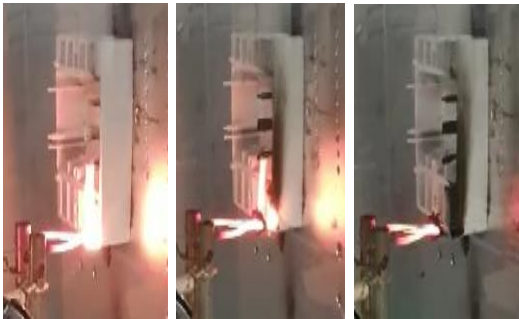
A snap-fit is an assembly method used to attach flexible parts, usually plastic connector, to form the final product by pushing the parts' interlocking components together.

High elongation and flexibility properties ensure that components made of POKETONE are suitable for E&E connector application better than another engineering plastics.

Deflection	PA	POM	PK
2 mm			
6 mm			
12 mm			
20 mm			

IEC 60335-1 Standard Compliance

※ POKETONE
GWFI : 960°C, GWIT : 825°C, GWT : 750°C



※ Passed 750°C GWT on connectors

POKETONE complies with the safety standard for household and similar electrical appliances (IEC 60335-1).

Especially, POKETONE connectors have passed the Glow Wire Tests at 750°C (IEC 60695-2-11) on about 60 types of connectors; all the results are "No Ignition".

Currently RTI is marked as 50°C, but is expected to be 80°C for the base resins and 110 °C for the glass-reinforced ones.

Properties	Unit	POKETONE(V0)	PA66(V0)
GWT @ 750°C (Glow Wire Test)	-	No ignition	Ignition
GWIT (Glow Wire Ignition Temperature)	°C	825	850

POKETONE for E&E Connector

Flame resistance & Electrical properties

Properties	Unit	POKETONE V0 Grade	PA66 V0 Grade
Flammability - 0.8mm	UL94	V0	V0
HWI (Hot Wire Ignition) - 0.8mm (시편이 발화할 때까지 버티는 시간)	PLC* (Ignition Time)	1 (60~120 s)	3 (15~30 s)
HAI (High Current Arc Ignition) - 0.8mm (시편이 발화할 때까지 Arc 횟수)	PLC (The number of Arc)	0 (Over 120)	0 (Over 120)
CTI (Comparative Tracking Index) (전해액 50방울 낙하 시 Short-cut 되는 전압)	PLC (Voltage)	0 (Over 600V)	0 (Over 600V)
Dielectrical Strength (고전압에 대한 절연파괴 강도)	kV/mm	29	22
HVTR (High Voltage Arc Tracking Rate) (고압, 저전류 환경에서 시편 탄화 속도)	PLC (mm/min)	2 (25.4~80mm/min)	2 (25.4~80mm/min)

※ PLC: Performance Level Category (UL)

Grade Portfolio

Properties	Method	Unit	M33AF1Y	M33AF2Y	M33AG2Y	M33AA2Y	M93FA2Y	M93FB5Y	M93FA7Y
Flammability t=0.4mm t=0.8mm t=1.6mm	UL 94	Class	V0						
			V0	V0	V0	V0	V0		
			V0	V0	V0	V0	V0	V0	V2
Density	ASTM D792	g/cm ³	1.25	1.26	1.29	1.48	1.48	1.48	1.46
GF contents	-	%	-	-	5	30	30	30	30
Tensile Strength at Yield	ASTM D638	MPa	46	50	53	112	120	115	135
Elongation at Break	ASTM D638	%	35	40	18	4.3	3.5	3.5	3
Flexural Strength	ASTM D790	MPa	65	58	79	176	190	180	192
Flexural Modulus	ASTM D790	MPa	1,900	1,700	2,550	7,300	8,200	7,700	7,800
Notched Impact strength	ISO 79/1eA	kJ/m ²	4.5	8	6	10.3	9.3	9.5	12
Melting Temperature	ASTM D3418	°C	222	222	222	222	222	222	222
Melt Flow Index (240°C, 2.16kg)	ASTM D1238	g/10mi n	35	34	25	8	40	33	40

• POKETONE commercial Plant in South Korea, Ul-san City, Production capacity : 50,000 MT/Year



CONTACT US

Republic of Korea

+82 2 2146 5583, jdm@hyosung.com / +82 2 2146 5589(or 5575), issooho@hyosung.com / sej@hyosung.com

China

+86 021 62250312 (ext.8030), yjkim77@hyosung.com / +82 2 2146 5573(or 5349), ropopchem@hyosung.com / kibeom.kang@hyosung.com

Europe

+49 6172 8553222, jakelee@hyosung.com / +82 2 2146 5591 (or 5574), lovetoken@hyosung.com / hjkim13@hyosung.com

America

+82 2 2146 5572, mkjung@hyosung.com

R.O.W (Rest of world)

+82 2 2146 5551, jaejung@hyosung.com

Further Information

www.poketone.com

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