

Genestar™

Your Ideal Choice for SMT Connectors



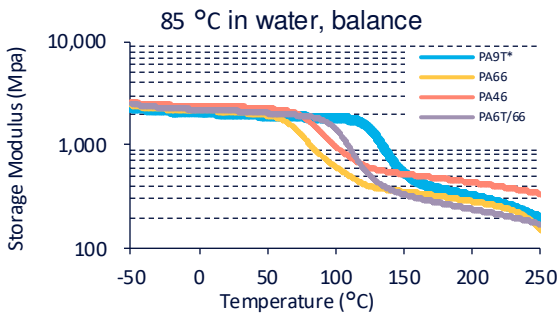
GENESTAR™ is a brand name of heat resistant polyamide developed by Kuraray. GENESTAR™ PA9T series in that brand is a well-balanced long-chain polyphthalamide (PPA) that combines low water absorption and high mechanical properties over a broad temperature range.

Functionalities in electronic applications (smartphones, laptops) increase and therefore the number of chips and connectors is expected to increase. However, as the megatrend to downsize as well as packing more subsystems into the smaller parts, it is challenging for designers to fit all these chips and connectors in.

A similar trend can be applied to automotive applications. Due to electrification and lightweight, the trend is to move to surface mounting technology(SMT) and downsize parts while maintaining safety of the connectors.

GENESTAR™ PA9T offers the following advantages (not limited to), while still maintaining safety requirements for the parts:

- Mechanical integrity over a wide range of temperature and humidity



- Stable orange color after reflow and heat ageing for easy identification of high voltage applications
- Possibility of lightweight due to the reduction of creepage distance to design smaller connectors while maintaining safety



- Material's comparative tracking index (CTI)

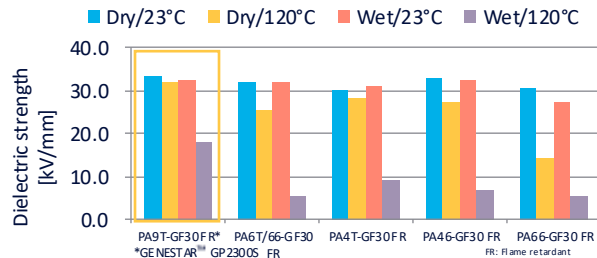
Voltage (V)	Material group	Material
>600	I	PPA
400-599	II	PPS
175-399	IIIa	PPS, LCP
100-174	IIIb	

IEC 60112

(*1) GENESTAR™ GP 245 0NH
 (*2) GENESTAR™ GL13 50A
 FR: Flame retardant

Material	Voltage (V)
PA9T-GF45 FR(*1)	950
PA6T/66-GF30 FR	825
PA4T-GF30 FR	750
PA9T-GF35(*2)	775
PA4T-GF30	600
PA6T/XT-GF35	600

- A more stable dielectric strength, even after water absorption at high temperatures, compared to other P(P)As which provides more safety margin. Data below compares UL94 V0 grades.



- Blister resistance due to low moisture absorption, which reduces rejection rate during SMT process

Reflow Peak temp. (°C)	230	240	250	260	265
PA9T*	OK	OK	OK	OK	OK
PA4T	OK	OK	NG	NG	NG
PA6T/XT	OK	NG	NG	NG	NG
PA46	NG	NG	NG	NG	NG

*GENESTAR™ GN2330

If the information in this article is of interest to you, please find the contact details below to get in touch with us.

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