

High Temperature Tag

The iDTONIC High Temperature tag is based on reinforced Polymer (SRP) with crystalline structure. This product is intended for applications asking for a big mechanical resistance, for a high thermal and chemical quality, for a very big dimensional stability and for good quality in fire.



Mechanical characteristics:

- High rigidity of 10000MPa
- Very strong resistance in traction, flexion inflection especially in the way of flow.
- Very good quality at cold flow as well as hot flow (till 200°C)
- Strong resistance in shocks kept even in very low temperature
- Permeability in microwaves.
- Very big dielectric rigidity: 36 - 50 kV / mm

Thermal characteristics:

- High melting point (from 280 to 355°C)
- The mechanical features are kept on a very broad range of temperature: of -50 until 220°C.
The grade uncharged keeps their resistance to shock until - 150°C.
- Very good quality in long continued temperature: 220 in 240°C according to UL746.
- Very good quality in fire: UL94 V0 and ILO from 35-50%.

Chemical characteristics:

- Very low resumption of humidity (0.04 %)
- Very good resistance to solvents, oils and lubricants, even at high temperature.
- Very low discharge of smokes: aircraft capabilities

Technical specification:

FEATURES	NATURAL	+ 30% fv	+ 50% fv	+30% mineral	Unit
Mechanical					
Pressure maxi (E or R):	156	188	165	148	MPa
Lengthening maxi (E or R):	2,6	2,1	1,1	1,6	%
Module of resiliency:	10400	15000	21000	14200	MPa
Resistance in shock:	39	20	12	NC	kJ/m ²
Thermo					
TFC a 0,45 MPa:	222	254	251	235	°C
TFC a 1,85 MPa:	180	230	232	230	°C
Vitreous transition:	-	-	-	-	°C
Coefficient of dilatation:	-5,10	-5,10	-5,10	NC	K
Other					
Transverse resistivity:	10	10	6.10	NC	? .cm
Dielectric rigidity:	7	50	36	NC	kV/mm
Absorption of water:	0,03	0,04	0,04	0,03	%
Density:	1,4	1,6	1,8	NC	g/cm ³

Dimensions:	50 x 5mm and 32 x 4mm
Antenna type:	Round antenna 27mm
Material:	SRP Polymer
Operating frequency:	125 kHz and 13,56 MHz
IC type:	EM4100 / NXP I-CSLI
Order number:	DT-HAT-4100-xx DT-HT-ICSLI-xx

