

## Polyimide Film 6052



Standard No. : Q/12Y 4213-2014

6052 polyimide film is made of compound resin of ODA and PMDA and casted, and then stretched by two directions. The product has excellent performance of mechanism and electric. In addition, the product also processes the excellent property dimensional stability, chemistry and radiation resistance as well as high and low temperature resistance. It can be used of at temperature from  $-240^{\circ}\text{C}$  to  $260^{\circ}\text{C}$  at long period.

### I. Technical Requirement:

NO	Index Description		Unit	Index Value (TY6052)				
1	Standard thicks		$\mu\text{m}$	12.5	25.0	35.0	40.0	50.0
2	Allowable tolerance		$\mu\text{m}$	+2 -1	+2 -2	+2 -2	+2 -2	+2 -2
3	Density		$\text{kg}/\text{m}^3$	$1420 \pm 20$				
4	Tensile	Longitudinal Transverse	Mpa	$\geq 150$ $\geq 150$	$\geq 179$ $\geq 179$	$\geq 165$ $\geq 165$		
5	Elongation at break	Longitudinal Transverse	%	$\geq 40$	$\geq 55$			
6	Hot-shrinkage rate	$150^{\circ}\text{C}$ $400^{\circ}\text{C}$	%	$\leq 0.35$				
7	Frequency electrical strength	Average value Individual value	MV/m	$\geq 220$ $\geq 150$	$\geq 235$ $\geq 200$	$\geq 220$ $\geq$		

8	Volume resistivity at 200°C	Ω.m	$\geq 1.0 \times 10^{10}$
9	Surface resistivity at 200°C	Ω	$\geq 1.0 \times 10^{14}$
10	Relative dielectric constant (48~62Hz)	-	$3.5 \pm 0.4$
11	Dielectric dissipation factor	-	$\leq 4.0 \times 10^{-3}$
12	Long term heat resistivity temperature Index	°C	$\geq 180$

## II. Application :

The product is widely used in FPC as coating film as well as insulation as in cables and motors, etc.