



## Type U, G, N and Q Polycarbonate Carrier Tape

The Polycarbonate material provides superior performance, especially in small to micro-form factors requiring very sharp pocket features. ESD-safe polycarbonate maintains its flexibility, stability and strength through time and temperature variations. Type U, G, N and Q carrier tapes are available for standard and clean room compatible applications.

- All our carrier tape is manufactured in accordance with EIA standards to ensure compatibility with tape and reel equipment.
- Suitable for bare die applications.

### SHELF LIFE AND STORAGE

We recommend that Polycarbonate carrier tapes be used within 5 years of the date of manufacture. Store this product in its original packaging in a climate controlled environment where temperature ranges from 21°C +/- 17°C (70°F +/- 30°F). This product is not affected by humidity. Allow the product to stabilize at room temperature prior to use.

### CAMBER

The Polycarbonate carrier tape meets the EIA-481-D standard for camber that is not greater than 1mm in 250 linear millimeters. For 8mm to 24mm carrier tape in the level wind format, the camber will not be greater than 2mm in 250 linear millimeters.

### Polycarbonate Carrier Tape Material Properties

The values presented for this product are typical laboratory data and may be changed without notice.

	Type U	Type G	Type N	Type Q	Test Method
Standard Thickness	0.20mm	0.25mm	0.30mm	0.33mm	-
Specific Gravity	1.27 g/cc	1.27 g/cc	1.27 g/cc	1.27 g/cc	ASTM D-792
Tear Strength	LD 0.38 lb TD 0.44 lb	LD 0.38 lb TD 0.44 lb	LD 0.38 lb TD 0.44 lb	LD 0.38 lb TD 0.44 lb	ASTM D-1938 [4]
Elongation	LD 10% TD 8%	LD 10% TD 8%	LD 10% TD 8%	LD 10% TD 8%	ASTM D-882 [5]
Tensile Strength	LD 3210 psi TD 2765 psi	LD 3210 psi TD 2765 psi	LD 3210 psi TD 2765 psi	LD 3210 psi TD 2765 psi	ASTM D-882 [5]
Vicat Softening	148°C (298°F)	148°C (298°F)	148°C (298°F)	148°C (298°F)	ASTM D-1525
Surface Resistivity	$<10^{12} \geq 10^4$ ohms/square	$<10^{12} \geq 10^4$ ohms/square	$<10^{12} \geq 10^4$ ohms/square	$<10^{12} \geq 10^4$ ohms/square	ASTM D-257

The below is typical data and should not be used for any specification purposes.

Material Ionics Data										
Fluoride	Chloride	Bromide	Nitrate	Phosphate	Sulfate	Sodium	Ammonium	Potassium	Magnesium	Calcium
ND	0.0190	ND	0.0040	0.0040	0.0056	0.0672	0.0048	0.0074	0.0065	0.0188

Cover Tape Compatibility							
Material	AA	AHP	ABX	ATA	PS3	APC	AHPC
U, G, N, & Q (Polycarbonate)				X		X	X