

C-PAK TYPE BC-1051 (CL) EMBOSSED CARRIER TAPE

General Information:

C-Pak type BC1051 (CL) black static dissipative carrier tape utilizes specially formulated **Modified Styrenic Alloy** film material giving low and stable surface resistivity and consistent sealing strength with its smooth and flat flange surface. There's a high level of static protection of the devices inside the pockets which is achieved through incorporation of an exclusive and special polymer additive. This is a three-layer material which has exceptional tensile strength which gives excellent toughness to prevent pocket crushing.

Embossing of carrier tape is done on high end machines and with C-pak's specially developed processes to ensure precise dimensions and well defined pockets suitable for high-speed automated taping and surface mount equipment.

C-Pak's embossed carrier tape configurations are designed to meet industry standard EIA-481. It is constructed to provide shield and protection from physical impairment necessary for delicate devices such as BGAs, QFP's, Chip Carriers and SOICs.

By far, carrier tape is the most popular configuration and excellent for shipping components from active semiconductor integrated circuits to large PCB connectors.

C-Pak material is approved by most multi-national companies who are users of carrier tapes.

Configurations:

C-Pak carrier tape design is defined primarily by component length, width and thickness. It is manufactured to conform according to accepted industry norms (8,12,16,24,32,44,56, up to 200mm).Dimensions of the components are the basis for the industry dimensional variables for carrier tape.

GENERAL PROPERTIES* (TYPICAL VALUE ONLY)

		<u>METHOD</u>	<u>VALUE</u>
SPECIFIC GRAVITY		ASTM D-792	1.07 g/cm ³
TENSILE STRENGTH @ YIELD	MD	ASTM D-882	4.2 (+0.8 /- 1.5) kg/mm ²
	TD		3.6 (+0.4/- 1.5) kg/mm ²
ELONGATION @ BREAK	MD	ASTM D-882	>40%
	TD		>20%
SURFACE RESISTIVITY (Note 1)		ASTM D-257	10 ⁵ ohms/ sq
FLEXURAL STRENGTH		ASTM D-790M-93	600 kgf/cm ²
FLEXURAL MODULUS			21160 kgf/cm ²
HEAT DEFLECTION TEMPERATURE @0.45 MPa		ASTM D-648	89.8 Deg C
@1.81 MPa			75.4 Deg C

***APPLICABLE ON RAW MATERIAL**

Material Ionic Data**

<u>Four Heavy Metals</u>	<u>PPM</u>
Cadmium (Cd)	< 2
Lead (Pb)	< 2
Mercury (Hg)	< 2
Hexavalent Chromium (Cr ⁶)	< 2

** Measured by an Independent Laboratory.

Notes:

- 1. Surface Resistivity of formed tape :** Surface Resistivity tests are conducted at 23°C, 50% RH under controlled conditions. Surface resistivity is measured on top of the pocket of carrier tape by using the defined test method and the equipment used is Monroe 262A. Specification tolerance of formed tape is $\leq 10^9$ ohms per square.
- 2. Aging test :** Tested without component and without cover tape at 60°C/80% RH for 1000 hrs without problem.
- 3. Carrier tape shelf life**
It is recommended to be used within 5 years from the date of manufacture. It should be stored indoors with its original packing in a climate environment typically at temperature 45°C or lower. The product must be protected from exposure to direct sunlight.