# **Denka**

## **Plastic Sheets for Carrier Tape**

- Denka Thermosheet EC / Clearen Sheet

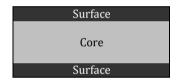


Denka Thermosheet EC and Clearen Sheet have been used and reputed as standard materials for Carrier Tapes.
Various grades available for semiconductors and electronic components.

#### Merits

- \*Suitable for various molding methods and shows good moldability and size accuracy.
- \*Excellent sealing performance with covertapes. (Recommended: Denka Thermofilm ALS)
- \*Stable conductivity to protect contents from static electricity. (EC-R EC-M3 EC-AP2)
- \*Higher strength compared to PS base sheets for thinner carrier tapes. (EC-M3 EC-AP2)
- \*High transparency for easy recognition of contents.(EC-TP2)
- \*Anti-static performance to prevent carrier sheet from dust. (EC-TP2)

#### Structure



EC-R	EC-M3	EC-AP2	Clearen	ECTP2
Cond' PS	Cond' PS	Cond' PC		AS PS
PS	ABS	ABS	Modified PS	Modified PS
Cond' PS	Cond' PS	Cond' PC		AS PS

### **Properties**

\* Sheet properties and applications

Item	Unit	Method	EC-R	EC-M3	EC-AP2	Clearen	EC-TP2
Color	1	_	Black	Black	Black	Clear	Clear
Surface Resistivity	$\Omega / \square$	JIS K 7194	$10^4 - 10^6$	$10^4 - 10^6$	$10^4 - 10^6$	10 <sup>14</sup> <	$10^9 - 10^{11}$
Haze	%	JIS K 7105	_	_	_	20	10
Tensile @ yield	MPa		21	44	54	39	38
Tensile @ break	MPa	JIS K 7127*	25	36	40	28	35
Modulus	MPa		1360	1730	2010	1520	1490

<sup>\*1999</sup> Version (Correspond to the newest version of ISO)

103-8338 Japan

	Active	LSI	0	0	0		
	Compo	Discreet	0	0	0		
Usage	Pa	ssive Compo				0	0
	High Weight Devices		0	0	0	0	0
	V	acuum Trays	0	0	0		

<sup>&</sup>lt;Note>

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<sup>\*</sup> The above data are typical values obtained in our internal tests and not guaranteed specification

<sup>\*</sup> Thorough testing is required before start usage to confirm the product to meet applications and safety standards at customers' responsibilities.