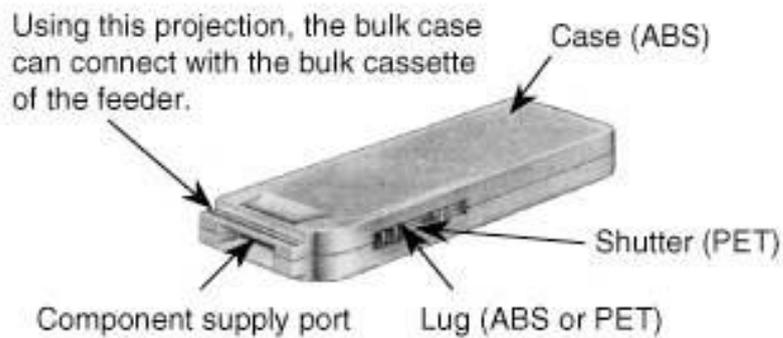


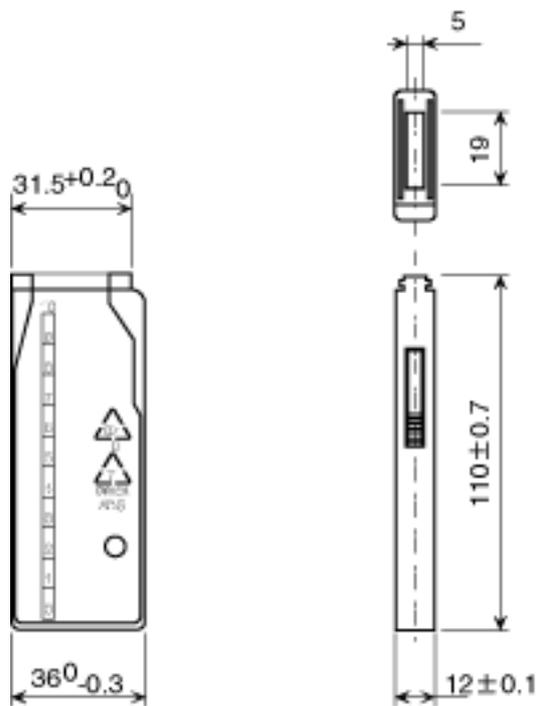
Bulk Case application :

Bulk case :

The bulk case is the packaging material for electronic components used in the bulk feeding system, and may contain electronic components in bulk. Unlike taping packaging, however, electronic components need not be lined up. The case has a volume of 110 x 36 x 12mm, and can contain a large number of electronic components



Bulk case specifications

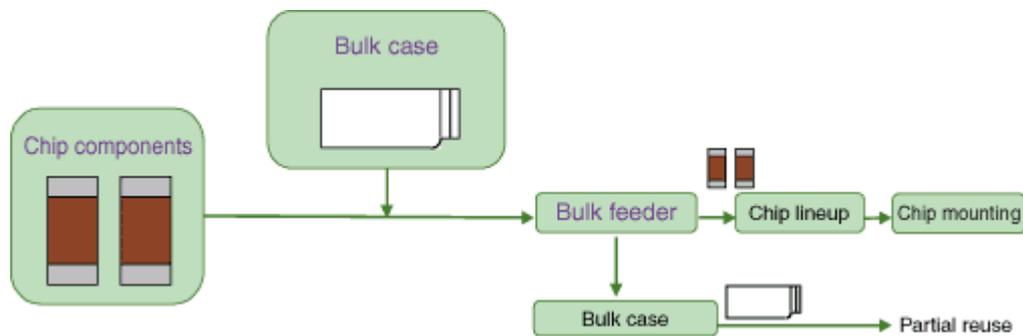


[in : mm]

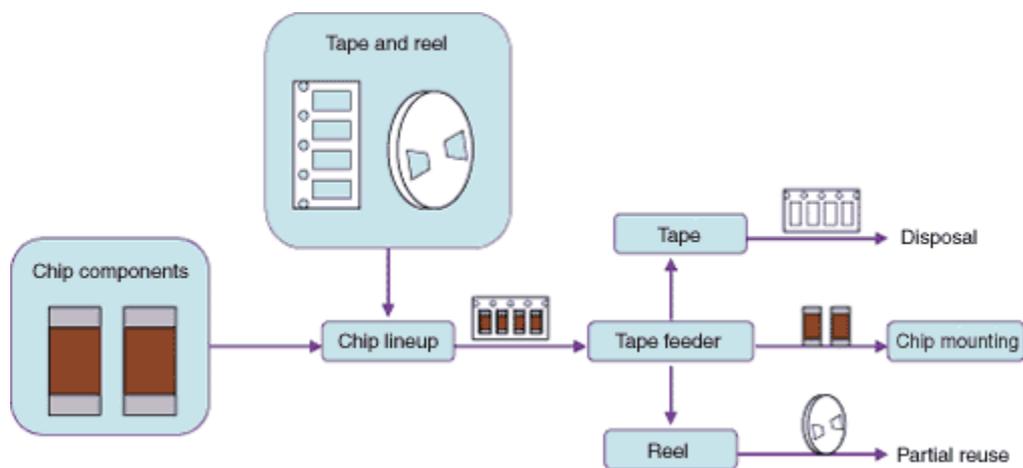
Bulk Feeding System

The bulk feeding system is an efficient production system that takes care of all required packaging materials -- from supplying electronic components to mounting them.

A bulk case is first used to package electronic components. A bulk feeder is then used to line up the components contained in bulk in the bulk case and feed them to a chip mounter. Consequently, chip components applicable to the bulk feeding system are necessary.



Bulk feeding system

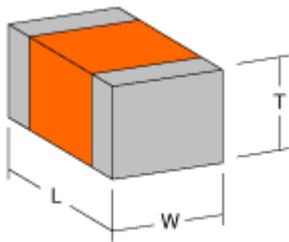


Conventional feeding system

Chip Components Applicable to the Bulk Feeding System

Electronic components best suited to bulk feeding systems are simple-shaped components that have no polarity and that require no differentiation between their top and bottom faces. Chip monolithic ceramic capacitors (GRM Series manufactured by our company) fall into this category.

Square type component



Dimensions of GRM Series

EIA Size Code	Part Number	Dimensions [mm]		
		L	W	T
0402C	GRM15	1.0 +/- 0.05	0.5 +/- 0.05	0.5 +/- 0.05
0603C	GRM18	1.6 +/- 0.07	0.8 +/- 0.07	0.8 +/- 0.07
0805C	GRM21	2.0 +/- 0.1	1.25 +/- 0.1	0.6 +/- 0.1
				1.25 +/- 0.1

Chip component		No. of components (Qty/P)	
EIA size code	Dimensions (mm)	Bulk case packaging	Taping packaging
0402C	1.0 x 0.5 x 0.5	50,000	10,000
0603C	1.6 x 0.8 x 0.8	15,000	4,000
0805C	2.0 x 1.25 x 0.6	10,000	4,000
	2.0 x 1.25 x 1.25	5,000	3,000

Other chip components applicable to the bulk feeding system

- When differentiation between the top and bottom faces is required, resistors are sometimes not applicable to bulk feeding systems. The dimensions of resistors are different from those of chip monolithic ceramic capacitors.
- Currently, electronic components that have polarity, such as diodes, are not applicable to the bulk feeding system.
- The technology for using the bulk feeding system for leaded electronic components with lead terminals has not yet been established.

貫潔有限公司

TEL :+886-7-3552156 , +886-7-6118848 FAX :+886-7-3552158

E-mail: Daniel.liu@krownjie.com.tw