8-12 Test Method - Bending Strength 1 of 1

1. Scope of Test

Etched Foils and Formed Foils

2. Test Equipment

Testing Device : MIT automatic bending device as specified in JIS P 8115

3. Test Specimen

Test Specimen :

In accordance with *8–2 Selecting Test Specimens* for Mechanical Strength Measurements.

4. Bending Strength Test Method

- 1) Mounting of Test Specimen
 - Refer to Figure 47 for mounting test specimen.
- 2) Bending Angle 90±2°
- Bending Speed
 times/sec.
- 4) Load
 - $2.5 \pm 0.05 N$
- 5) Bending Strength

The bending strength shall be determined by the minimum number of bends before the test specimen breaks.

- 6) Unit of Measurement Number of bends
- 7) Radius of Mandrel

In accordance with values in table below:

Foil Category		R(mm)
Low Voltage	Etched Foil	0.5 ± 0.05
	Formed Foil	
Middle to High Voltage	Etched Foil	1.0 ± 0.1
	Formed Foil	3.5 ± 0.35
Formed Foil for Photoflash	Formed Foil	3.5±0.35
Cathode Foil	Etched Foil	0.5 ± 0.05
	Formed Foil	



5. Counting the Number of Bends

The clipping point of the automatic bending tester must be fixed, and the clipping point of the die (at the other end of the test piece) must be able to move 90° to the right and to the left, or a total of 180° . As shown in Figure 48, each 90°

the left, or a total of 180° . As shown in Figure 48, each 90° bend shall be counted; consequently, when the test piece moves within the 180° , 4 bends are counted.



6.Bending Strength Measurement

 Etched and Formed Foil for Anode, Low Voltage, Etched and Formed for Cathode The bending strength value shall be measured by

using one test specimen taken from one location.

 Etched and Formed Foil for Anode, Middle to High Voltage Formed Foil for Photo Flash

The bending strength value shall be measured by using the minimum measured value after using four specimens taken from four locations.