Specification	Products	Type
	Zener Diode	PTZ Series

1. PRODUCT Zener Diode

2. TYPE PTZ Series (3.6V ~ 43V)

3. APPLICATION Voltage regulation

4. FEATURE Small power mold type

5. ABSOLUTE MAXIMUM RATING (Ta=25℃)

Power dissipation	P	1000 mW
Junction temperature	Tj	150 ℃
Storage temperature	Tstg	-55~150 ℃

6. ELECTRICAL CHARACTERISTIC (Ta=25℃)

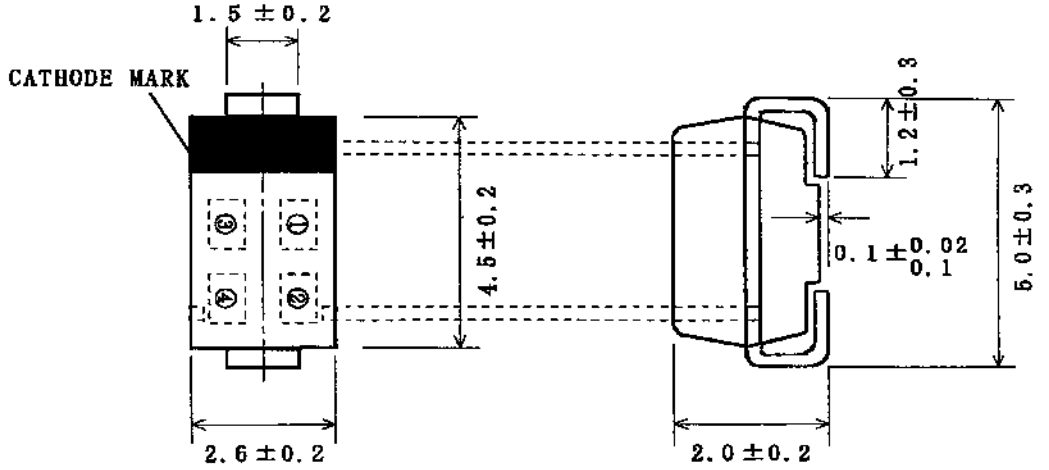
Type No.		Zener voltage Vz (V)			Dynamic impedance Zz (Ω)		Reverse current IR (μA)	
		MIN.	MAX.	Iz (mA)	MAX.	Iz (mA)	MAX.	VR (V)
PTZ 3.6	A	3.400	3.800	40	15	40	60	1.0
	B	3.600	4.000					
PTZ 3.9	A	3.700	4.100	40	15	40	40	1.0
	B	3.900	4.400					
PTZ 4.3	A	4.000	4.500	40	15	40	20	1.0
	B	4.300	4.800					
PTZ 4.7	A	4.400	4.900	40	10	40	20	1.0
	B	4.700	5.200					
PTZ 5.1	A	4.800	5.400	40	8	40	20	1.0
	B	5.100	5.700					
PTZ 5.6	A	5.300	6.000	40	8	40	20	1.5
	B	5.600	6.300					
PTZ 6.2	A	5.800	6.600	40	6	40	20	3.0
	B	6.200	7.000					
PTZ 6.8	A	6.400	7.200	40	6	40	20	3.5
	B	6.800	7.700					
PTZ 7.5	A	7.000	7.900	40	4	40	20	4.0
	B	7.500	8.400					
PTZ 8.2	A	7.700	8.700	40	4	40	20	5.0
	B	8.200	9.300					

Type No.		Zener voltage Vz (V) MIN.	Vz (V) MAX.	Iz (mA)	Dynamic impedance Zz (Ω) MAX.	Zz (Ω) Iz (mA)	Reverse current IR (μA) MAX.	IR (μA) VR (V)
PTZ 9.1	A	8.500	9.600	40	6	40	20	6.0
	B	9.100	10.200					
PTZ 10	A	9.400	10.600	40	6	40	10	7.0
	B	10.000	11.200					
PTZ 11	A	10.400	11.600	20	8	20	10	8.0
	B	11.000	12.300					
PTZ 12	A	11.400	12.600	20	8	20	10	9.0
	B	12.000	13.500					
PTZ 13	A	12.400	14.100	20	10	20	10	10.0
	B	13.300	15.000					
PTZ 15	A	13.800	15.600	20	10	20	10	11.0
	B	14.700	16.500					
PTZ 16	A	15.300	17.100	20	12	20	10	12.0
	B	16.200	18.300					
PTZ 18	A	16.800	19.100	20	12	20	10	13.0
	B	18.000	20.300					
PTZ 20	A	18.800	21.200	20	14	20	10	15.0
	B	20.000	22.400					
PTZ 22	A	20.800	23.300	10	14	10	10	17.0
	B	22.000	24.500					
PTZ 24	A	22.800	25.600	10	16	10	10	19.0
	B	24.000	27.600					
PTZ 27	A	25.100	28.900	10	16	10	10	21.0
	B	27.000	30.800					
PTZ 30	A	28.000	32.000	10	18	10	10	23.0
	B	30.000	34.000					
PTZ 33	A	31.000	35.000	10	18	10	10	25.0
	B	33.000	37.000					
PTZ 36	A	34.000	38.000	10	20	10	10	27.0
	B	36.000	40.000					

Type No.		Zener voltage			Dynamic impedance		Reverse current	
		Vz (V)			Zz (Ω)		IR (μA)	
		MIN.	MAX.	Iz (mA)	MAX.	Iz (mA)	MAX.	VR (V)
PTZ 39	A	37.000	41.000	10	50	10	10	30.0
PTZ 43	A	40.000	46.000	10	50	10	5	33.0

(1) Small classification of zener voltage(Vz) shall be measured at 40ms after loading current.
(2) Dynamic resistance(Zz, Zzk)shall be measured by appliying very small AC current and specified current(Iz) simultaneously.

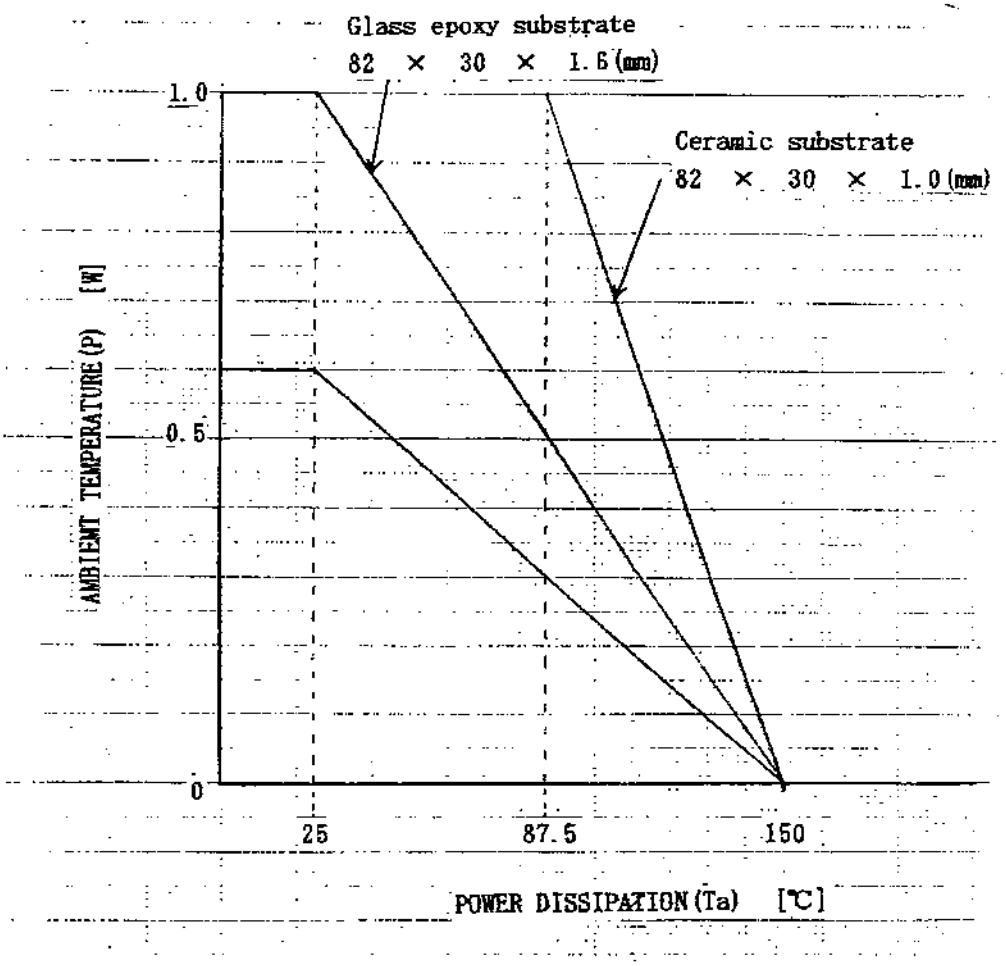
7. DIMENSION (UNIT:mm)



※ ①,② ····· Type No. EX. PTZ3.6A → 3.6 , A
③,④ ····· Manufacturing date EX. 1993. 7 → 3 , 7

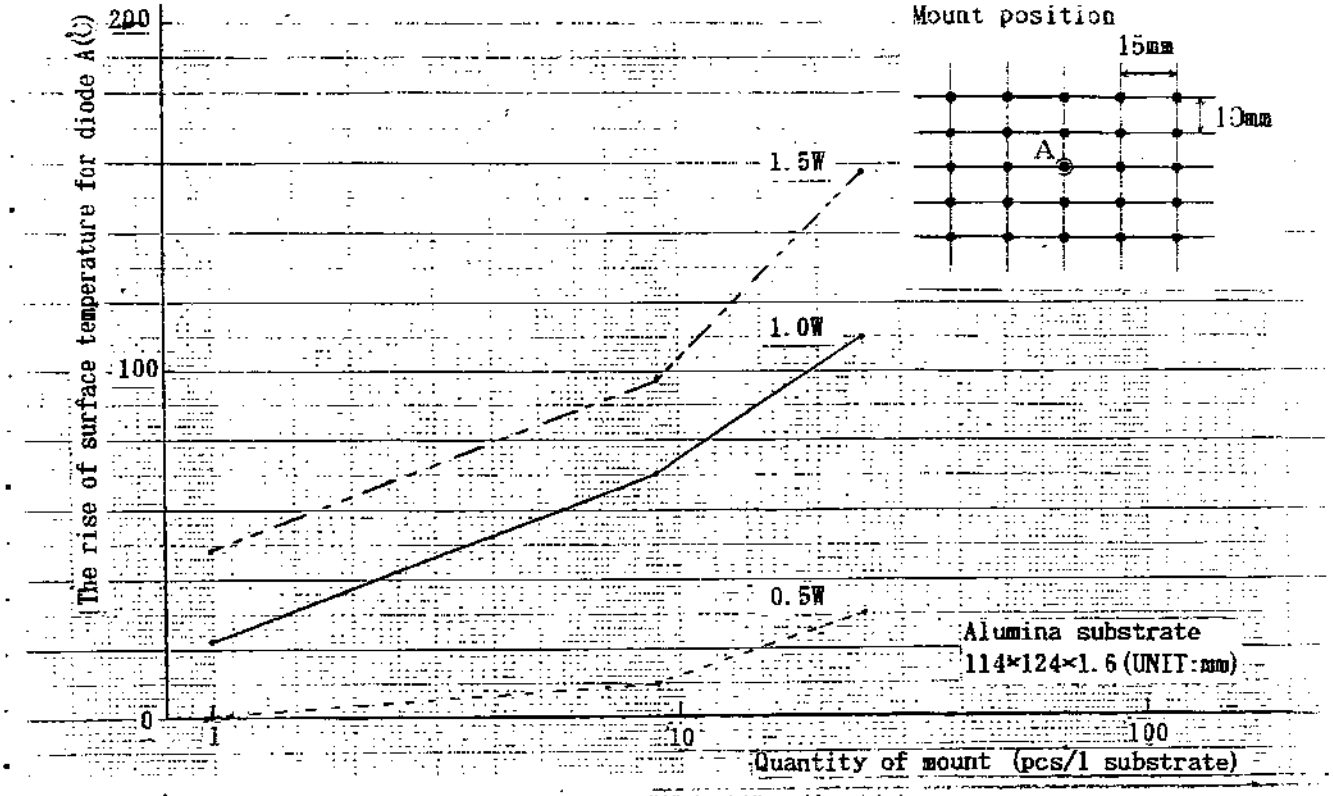
8. Mass per piece 69 mg / pcs

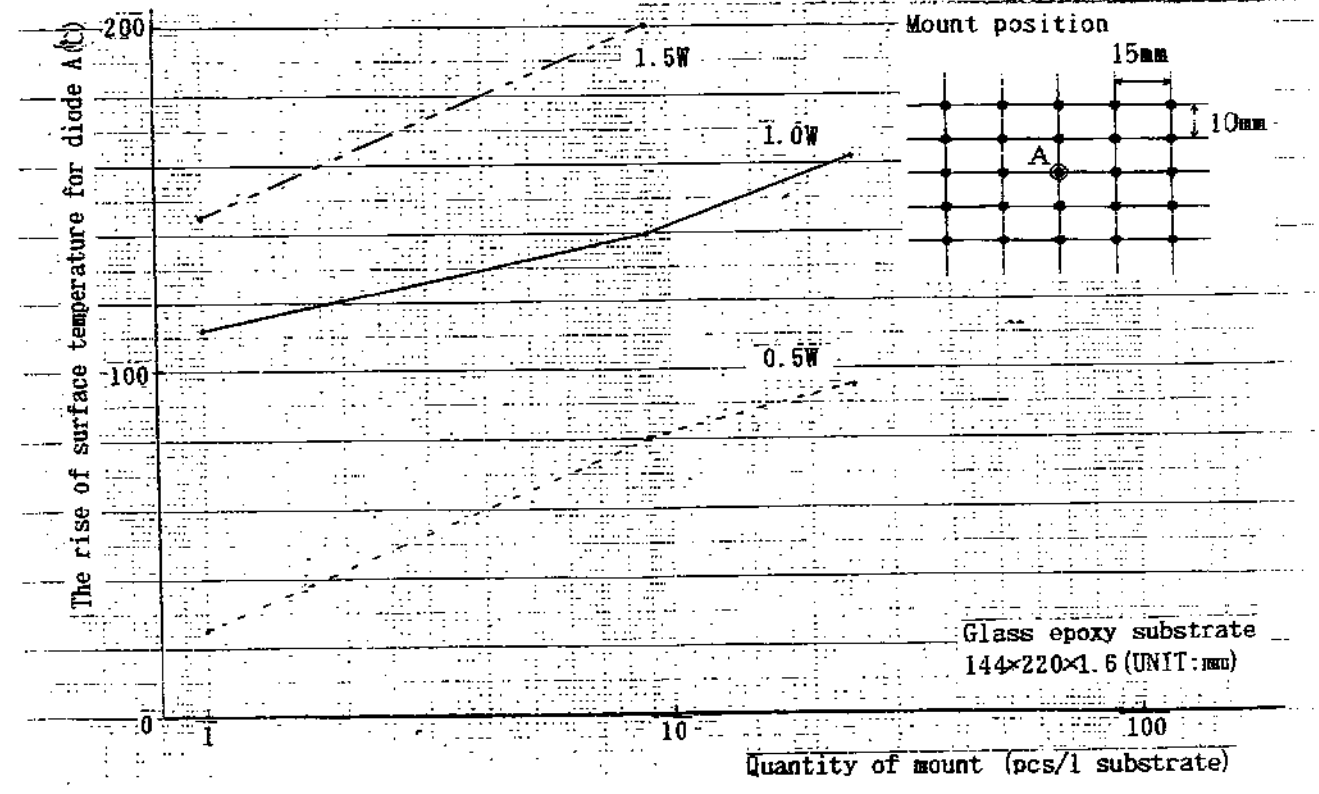
9. Power dissipation



(NOTES) Pay much attention to the mounting density of power-drive divices when use.
Please refere to attached mounting density data of PTZ Series.

○ Mounting density data of PTZ Series.





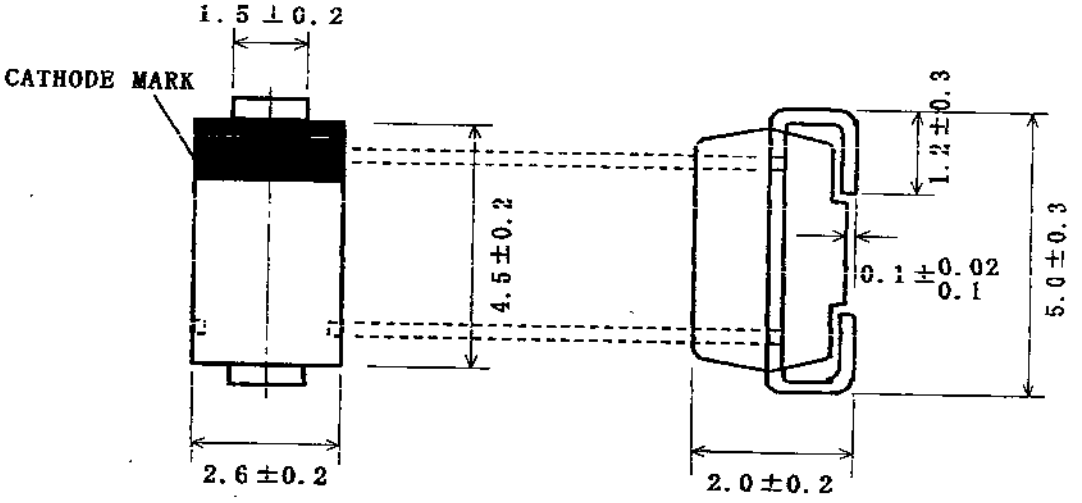
The product described in this specification is designed to be used with ordinary electronic equipment or devices (such as audio-visual equipment, office-automation equipment, communications devices, electrical appliances, and electronic toys).
Should you intend to use this product with equipment or devices which require an extremely high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult sith our sales representative in advance.

Specification	Products POWER MOLD DIODE -S	Type TE25

1. SCOPE

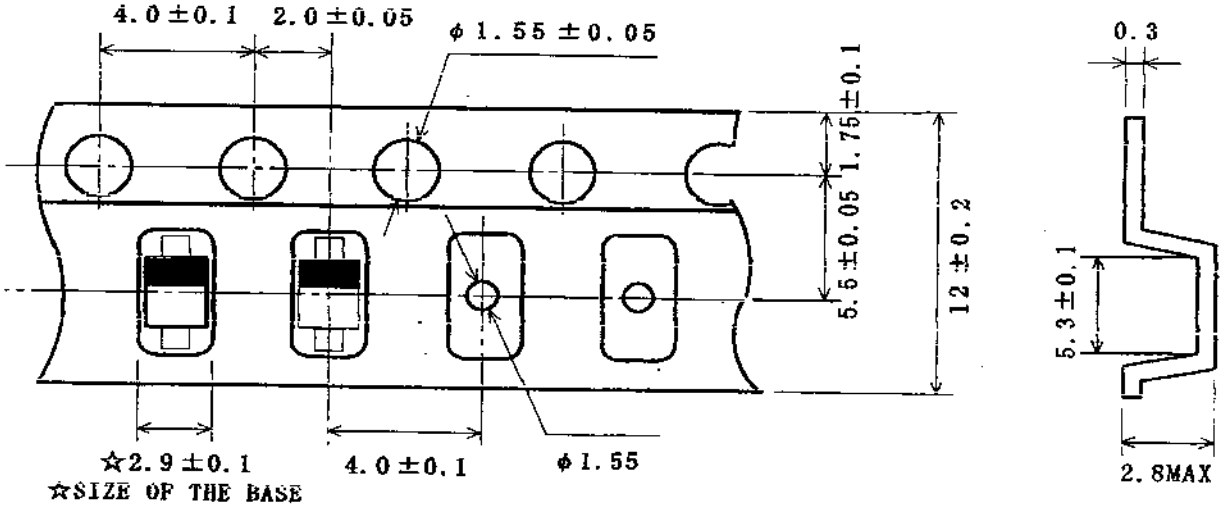
This specification covers the tape packing requerements for power mold diode -S(The package style is PMDS). For individual diode the applicable specification shall be reffered to.

2. COMPONENTS DESCRIPTION OF PMDS (UNIT:mm)



NOTE) The applicable specification discribes in detail for individual diode. This figure is only for reference.

3. TAPING DIMENSION (UNIT:mm)



4. TAPING PACKAGING SPECIFICATION

4-1 Direction of tape winding.

The direction shall be one in a reel.

4-2 Cumulative pitch tolerance.

The cumulative pitch tolerance of the mold for producing the carrier tape shall be within 0.2mm per 10 pitches.

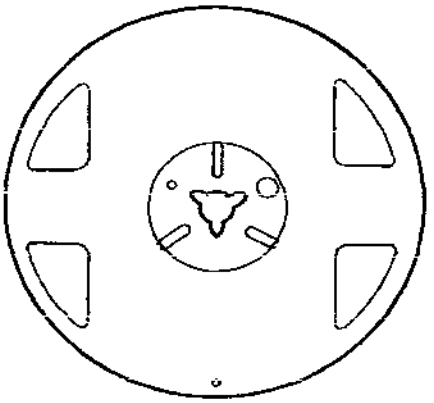
4-3 The minimum redious to bend the carrier tape.

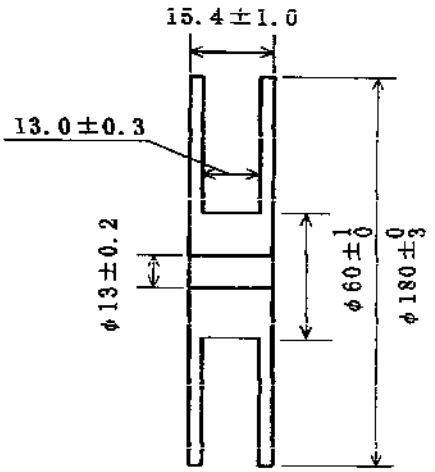
Carrier tape shall be flexible enough to protect from no component and damage under a minimum radious of 15mm. However, it shall be definded only inside of carrier tape.

4-4 The material of carrier tape.

Conductive brack

5. REEL DIMENSION (UNIT:mm)

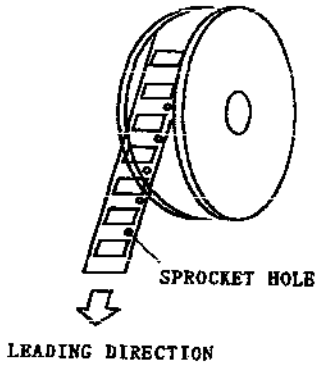




6. REELING SPECIFICATION

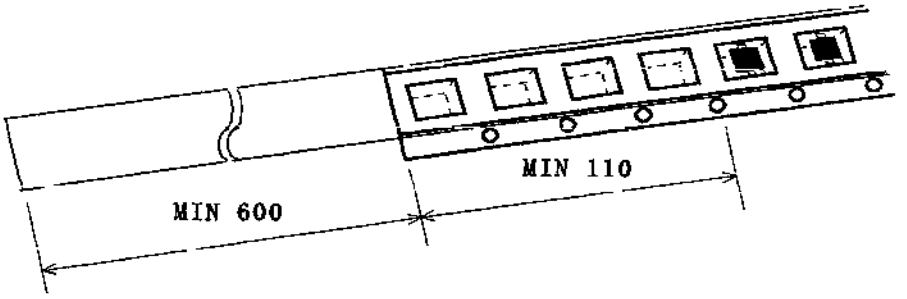
2-1 Leading direction

Leading direction of carrier tape shall be indicated as below.



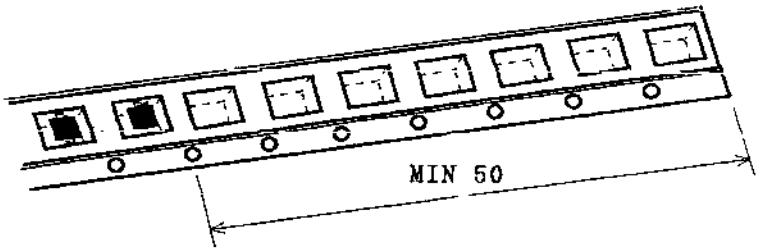
6-2 Leader (UNIT:mm)

Leader tape shall be separeated into two parts - an adhesive tape at first part and carrier tape without products.



6-3 Trail (UNIT:mm)

Trail tape shall remain with no product and trail tape shall not be sticked directly on a reel.



7. TYPE

Product code of taping shall be composed as indicated below.

EX: 1SR154-400 (Type code) TE25 (Taping code)

EX: PTZ (Type code) TE25 (Taping code) 2.2B (Small classification of zener volt)

8. Quantity

Quantity per one package is 1,500pcs.

9. Marking

Each reel shall be legibly marked with the following items.

1. Type
2. Quantity
3. Lot No.
4. Inspector No.
5. Trademark.

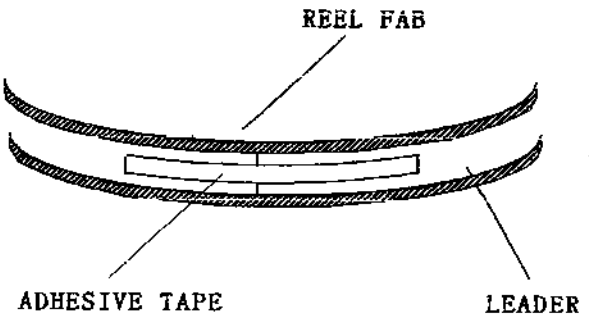
* Bar Code is displayed, too.

10. Package

The reel shall be packed in the paper case or plastic case.

11. Treatment for end of tape

The end of leader tape shall be fixed with the white adhesive tape.



Specification	Products	Part for automatic mounting	Type

< Missing parts >

Accordint to the automatic mounting, the number of missing part should be defined as the larger number whether less than 0.1% or 1 piece at a reel or a box.

However, the missing part should not be continuous.