

**1. Scope :**

- 1-1. This specification applies to N channel silicon MOSFET chips,  
Device no. PM-0107
- 1-2. Built-in g-s protection diode

**2. Structure :**

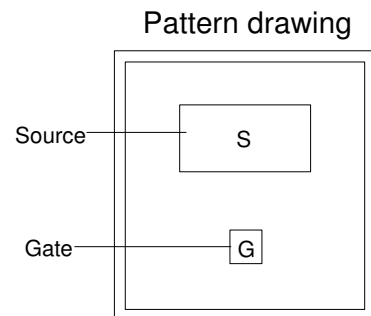
- 2-1. Planar type.
- 2-2. Electrodes.  
Source : Aluminum alloy .  
Gate : Aluminum alloy .  
Drain : Gold alloy

**3. Size :**

- 3-1. Chip size : 48 mils × 48 mils (1.220 mm × 1.220 mm ).
- 3-2. Chip thickness : 12 ± 1.5mils ( 0.305± 0.038mm).
- 3-3. Pad size :  
Source : 25.1 mils × 12.8 mils (0.638 mm × 0.326mm ).  
Gate : 7.1 mils × 7.1 mils (0.180 mm × 0.180 mm ).
- 3-4. Pattern drawing : Refer to the attached drawing.

**4. Absolute maximum rating (Ta = 25 °C)**

Parameter	Symbol	Rating	Unit
Continuous drain current V <sub>GS</sub> =5v	I <sub>D(m)</sub>	0.3	A
Drain-source Voltage	V <sub>DSS</sub>	400	V
Gate-source Voltage	V <sub>GS</sub>	±10	V
Operating junction and storage temperature range	T <sub>J</sub> T <sub>STG</sub>	-40to+150	°C



**5. Electrical characteristics (Ta = 25 °C)**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Drain to source breakdown voltage	BV <sub>DSS</sub>	V <sub>GS</sub> = 0V I <sub>D</sub> = 100uA	400			V
Gate threshold voltage	V <sub>GS(th)</sub>	V <sub>DS</sub> = V <sub>GS</sub> I <sub>D</sub> = 1mA	1.0	1.8	2.5	V
Gate to source leakage current	I <sub>GSS</sub>	V <sub>GS</sub> = ±10V V <sub>DS</sub> = 0V		± 0.07	± 1	μA
Drain to source leakage current	I <sub>DSS</sub>	V <sub>GS</sub> = 0V V <sub>DS</sub> = 400V			1	μA
Drain to source on resistance	R <sub>DS(on)</sub>	V <sub>GS</sub> = 5V I <sub>D</sub> = 150mA		11	15	Ω
On state drain current	I <sub>D(on)</sub>	V <sub>GS</sub> = 5V V <sub>DS</sub> = 15V	0.3	0.6		A
Diode forward voltage drop	V <sub>SD</sub>	V <sub>GS</sub> = 0V I <sub>SD</sub> = 200mA		0.86	1.8	V

