

1. Scope :

- 1-1. This specification applies to N channel silicon MOSFET chips,
Device no. PM-0109
- 1-2. Built-in g-s protection diode

2. Structure :

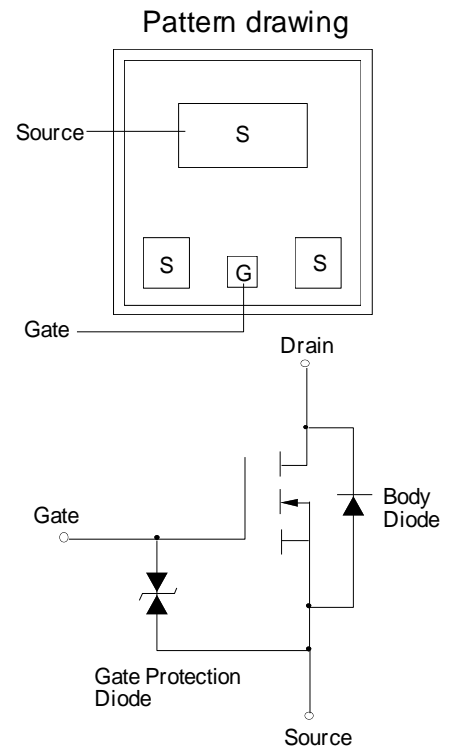
- 2-1. Planar type.
- 2-2. Electrodes.
Source : Aluminum alloy .
Gate : Aluminum alloy .
Drain : Gold alloy

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 : 5.5 mils × 5.5 mils (0.140 mm × 0.140 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 _{GS} =5V	I _{D(m)}	1.0	A
Drain-source Voltage	V _{DSS}	60	V
Gate-source Voltage	V _{GS}	±10	V
Operating junction and storage temperature range	T _J T _{STG}	-40to+150	°C



5. Electrical characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Drain to source breakdown voltage	BV _{DSS}	V _{GS} = 0V I _D = 100µA	60			V
Gate threshold voltage	V _{GS(th)}	V _{DS} = V _{GS} I _D = 1mA	1.0	1.5	2.5	V
Gate to source leakage current	I _{GSS}	V _{GS} = ±10V V _{DS} = 0V		± 0.07	± 1	µA
Drain to source leakage current	I _{DSS}	V _{GS} = 0V V _{DS} = 60V			1	µA
Drain to source on resistance	R _{DS(on)}	V _{GS} = 5V I _D = 500mA		0.4	0.7	Ω
Diode forward voltage drop	V _{SD}	V _{GS} = 0V I _{SD} = 200mA		0.84	1.8	V