

## 1. Scope :

- 1-1. This specification applies to N channel depletion MOSFET chips,  
Device no. PM-0307

## 2. Structure :

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

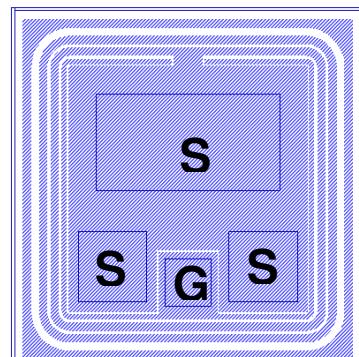
## 3. Size :

- 3-1. Chip size : 48 mils  $\times$ 48 mils (1.220 mm  $\times$ 1.220 mm ).  
3-2. Chip thickness :  $12 \pm 1.5$  mils ( 0.305 $\pm$  0.038mm).  
3-3. Pad size :  
Source : 25.1 mils  $\times$  12.8 mils (0.638 mm  $\times$  0.326mm ).  
Gate : 6.5 mils  $\times$  6.5 mils (0.164mm  $\times$  0.164 mm ).  
3-4. Pattern drawing : Refer to the attached drawing.

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

Parameter	Symbol	Rating	Unit
Continuous drain current $V_{GS}=0V$	$I_{D(m)}$	0.3	A
Drain-source Voltage	$V_{DSS}$	400	V
Gate-source Voltage	$V_{GS}$	$\pm 10$	V
Operating junction and storage temperature range	$T_j$ $T_{STG}$	-40to+150	°C

Pattern drawing



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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Drain to source breakdown voltage	$BV_{DSS}$	$V_{GS} = -5V$ $I_D = 100\mu A$	400			V
Gate to source off voltage	$V_{GS(off)}$	$V_{DS} = 25V$ $I_{DS} = 10\mu A$	-1.8	-2.3	-3.5	V
Gate to source leakage current	$I_{GSS}$	$V_{GS} = \pm 10V$ $V_{DS} = 0V$		$\pm 0.07$	$\pm 1$	$\mu A$
Drain to source leakage current	$I_{D(OFF)}$	$V_{GS} = -5V$ $V_{DS} = 400V$			1	$\mu A$
Drain to source on resistance	$R_{DS(on)}$	$V_{GS} = 0V$ $I_D = 120mA$		14	25	$\Omega$
Diode forward voltage drop	$V_{SD}$	$V_{GS} = -10V$ $I_{SD} = 120mA$		0.84	1.8	V

