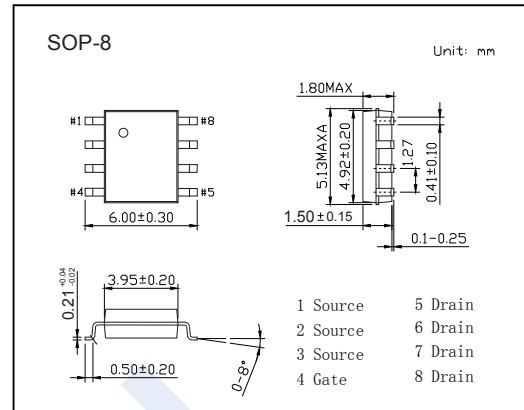


P-Channel MOSFET

KI10P40DY

■ Features

- $V_{DS} = -40V$
- $I_D = -15A$
- $R_{DS(on)} = 42m\Omega @ V_{GS} = -10V, I_D = -1A$
- $R_{DS(on)} = 70m\Omega @ V_{GS} = -4.5V, I_D = -1A$



■ Absolute Maximum Ratings $T_a = 25^\circ C$

| Parameter | Symbol | Rating | Unit | |
|---------------------------|-----------|--------------------|------------|---|
| Drain-Source Voltage | V_{DS} | -40 | V | |
| Gate-Source Voltage | V_{GS} | ± 20 | | |
| Continuous Drain Current | I_D | $T_A = 25^\circ C$ | -15 | A |
| | | $T_A = 70^\circ C$ | -10 | |
| Pulsed Drain Current | I_{DM} | -30 | | |
| Power Dissipation | P_D | $T_A = 25^\circ C$ | 1.3 | W |
| | | $T_A = 70^\circ C$ | 0.8 | |
| Junction Temperature | T_J | 150 | $^\circ C$ | |
| Storage Temperature Range | T_{stg} | -55 to 150 | | |

■ Electrical Characteristics $T_a = 25^\circ C$

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|-----------------------------------|--------------|--|-----|-----|-----------|------------|
| Drain-Source Breakdown Voltage | V_{DSS} | $I_D = -250 \mu A, V_{GS} = 0V$ | -40 | | | V |
| Zero Gate Voltage Drain Current | I_{DSS} | $V_{DS} = -32V, V_{GS} = 0V, T_J = 25^\circ C$ | | | -1 | μA |
| Gate-Body Leakage Current | I_{GSS} | $V_{DS} = 0V, V_{GS} = \pm 20V$ | | | ± 100 | nA |
| Gate Threshold Voltage | $V_{GS(th)}$ | $V_{DS} = V_{GS}, I_D = -250 \mu A$ | 1 | | 3 | V |
| Static Drain-Source On-Resistance | $R_{DS(on)}$ | $V_{GS} = -10V, I_D = -1A$ | | | 42 | m Ω |
| | | $V_{GS} = -10V, I_D = -10A$ | | | 45 | |
| | | $V_{GS} = -4.5V, I_D = -1A$ | | | 70 | |

■ Marking

| | |
|---------|-----------------|
| Marking | 10P40 KC**** |
|---------|-----------------|