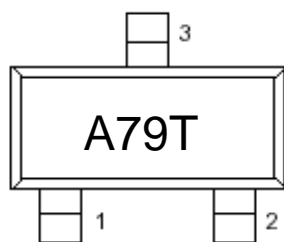


Kingtronics®**CDL3407A-ME****MOSFET**

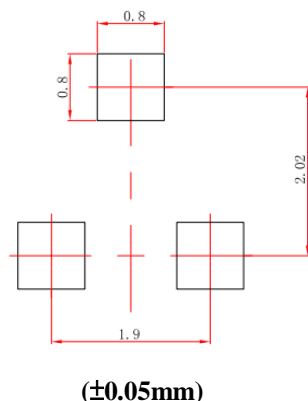
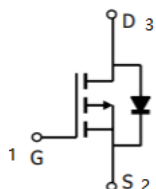
Marking: A79T

Suggested Layout

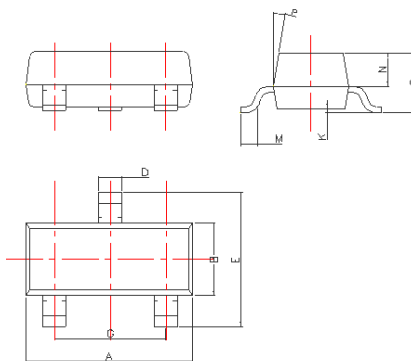
SOT-23



Top view



Dimension



| DIM | Millimeters |
|-----|-------------|
| A | 2.85~3.04 |
| B | 1.30±0.10 |
| C | 1.00±0.10 |
| D | 0.45±0.05 |
| E | 2.25~2.55 |
| G | 1.90±0.1 |
| K | 0.00-0.10 |
| M | 0.20 min |
| N | 0.60±0.10 |
| P | 7±2° |

MAXIMUM RATINGS (Ta=25°C)

| Characteristic | Symbol | Rating | Unit |
|--------------------------|-----------|--------|------|
| Drain-Source Voltage | V_{DSS} | -30 | Vdc |
| Gate-Source Voltage | V_{GSS} | ±20 | Vdc |
| Drain Current—Continuous | I_D | -4.1 | Adc |

THERMAL CHARACTERISTICS

| Characteristic | Symbol | Max | Unit |
|---|----------------------|---------------------|------|
| Total Device Dissipation FR-5 Board(1) $T_A=25^\circ\text{C}$ | PD | 225 | mW |
| Total Device Dissipation Alumina Substrate,(2) $T_A=25^\circ\text{C}$ | P_D | 300 | mW |
| Junction and Storage Temperature | T_J , T_{stg} | 150, -55 to +150 | °C |

- FR-5=1.0×0.75×0.062in, printed-circuit board.
- Alumina=0.4×0.3×0.024in, 99.5%alumina

ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

| Characteristic | Symbol | Test Condition | Min | Type | Max | Unit |
|---|---------------|---|-----|----------|----------|------|
| Drain-Source Breakdown Voltage | $V_{(BR)DSS}$ | $V_{GS}=0V, I_D=-250\mu A$ | -30 | - | - | V |
| Zero Gate Voltage Drain Current | I_{DSS} | $V_{DS}=-24V, V_{GS}=0V$ | - | - | -1 | μA |
| Gate-Body Leakage Current,Forward | I_{GSS} | $V_{GS}=\pm 20V$ | - | - | ±100 | nA |
| Gate Threshold Voltage | $V_{GS(th)}$ | $V_{DS}=V_{GS}, I_D=-250\mu A$ | -1 | - | -3 | V |
| Static Drain-Source On-State Resistance | $R_{DS(on)}$ | $V_{GS}=-10V, I_D=-4.1A$ $V_{GS}=-4.5V, I_D=-3A$ | - | 48 60 | 65 95 | mΩ |
| Forward Transconductance | g_{fs} | $V_{DS}=-5V, I_D=-4A$ | 5.5 | - | - | S |
| Diode Forward On-Voltage | V_{SD} | $V_{GS}=0V, I_S=-1A$ | - | - | -1.2 | V |

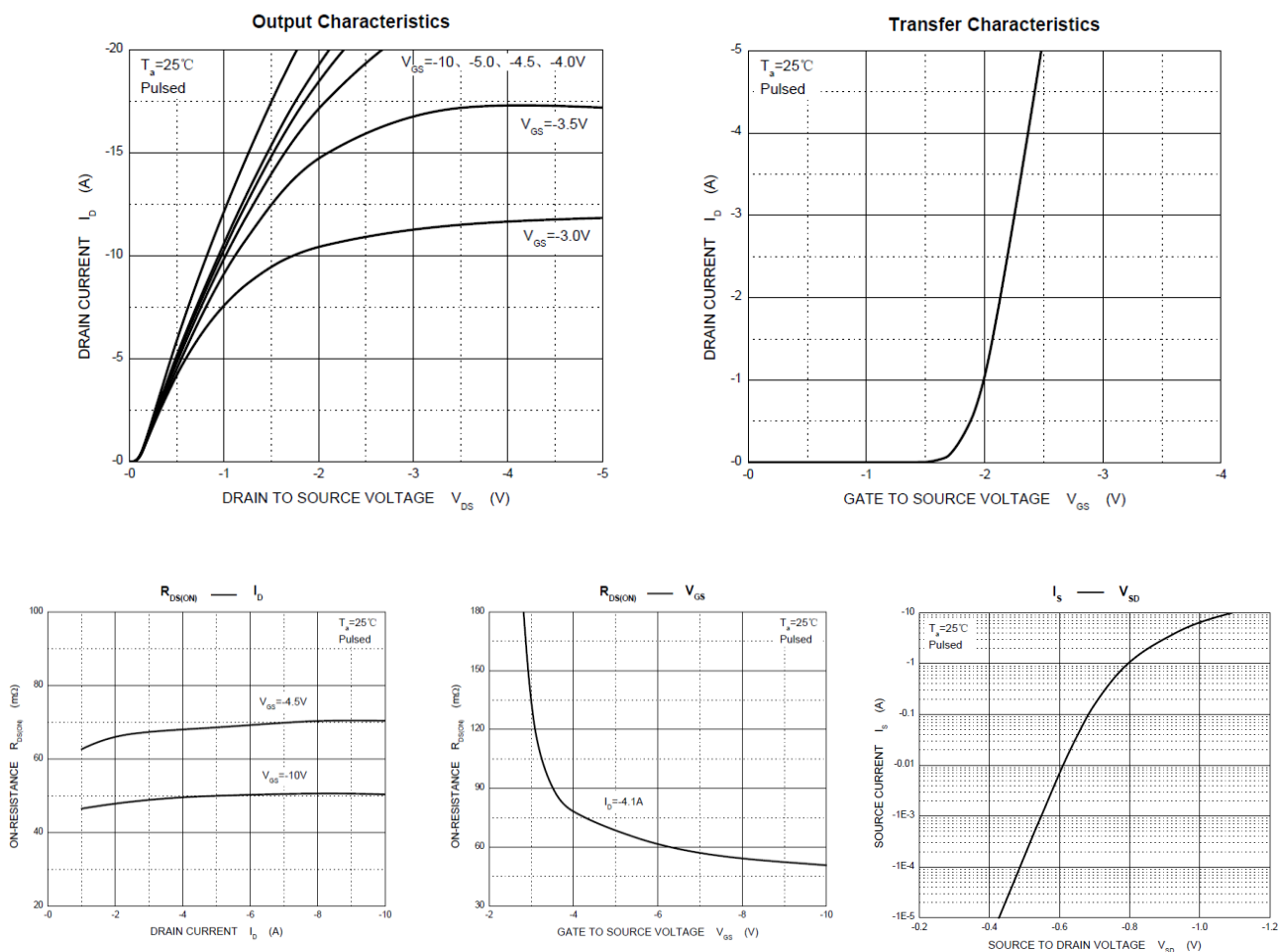
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| | | | | | | |
|------------------------------|--------------|--|---|------|---|----|
| Turn-On Delay Time | $t_{d(on)}$ | VDD = -6V, ID = -1A, VGS = -4.5V, RGEN = 6Ω | - | 8.5 | - | ns |
| Turn-On Time | tr | | - | 4.5 | - | |
| Turn-Off Delay Time | $t_{d(off)}$ | | - | 26 | - | |
| Turn-On Fall Time | t_f | | - | 12.5 | - | |
| Input Capacitance | Ciss | VDS = -6V, VGS = 0V, f = 1.0 MHz | - | 700 | - | pF |
| Output Capacitance | Coss | | - | 120 | - | |
| Reverse Transfer Capacitance | Crss | | - | 75 | - | |

Typical Performance Characteristics



Note: Specifications are subject to change without notice.

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