

TECHNICAL DATA
DATA SHEET 318, REV. A

**HERMETIC POWER MOSFET
P-CHANNEL QUAD**

FEATURES:

- -100 Volt, 0.60 Ohm, -3.5A MOSFET
- Fast Switching
- Low $R_{DS(on)}$
- Equivalent to IRF9120 Series

MAXIMUM RATINGS

ALL RATINGS ARE AT $T_C = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

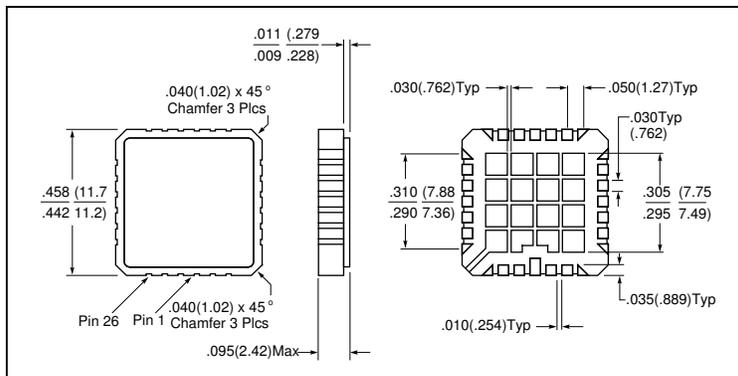
| RATING | SYMBOL | MIN. | TYP. | MAX. | UNITS |
|---|------------------|------|------|----------|---------------------------|
| GATE TO SOURCE VOLTAGE | V_{GS} | - | - | ± 20 | Volts |
| ON-STATE DRAIN CURRENT @ $T_C = 100^\circ\text{C}$ | I_D | - | - | -3.5 | Amps |
| PULSED DRAIN CURRENT (10ms) | I_{DM} | - | - | -10 | Amps |
| OPERATING AND STORAGE TEMPERATURE | T_{OP}/T_{STG} | -55 | - | +150 | $^\circ\text{C}$ |
| TOTAL DEVICE DISSIPATION @ $T_C = 25^\circ\text{C}$ | P_D | - | - | 31 | Watts |
| THERMAL RESISTANCE, JUNCTION TO CASE | R_{thJC} | - | - | 4.0 | $^\circ\text{C}/\text{W}$ |

ELECTRICAL CHARACTERISTICS

| CHARACTERISTIC | SYMBOL | MIN. | TYP. | MAX. | UNITS |
|--|-----------------------|------|------|-------------|----------------------|
| DRAIN TO SOURCE BREAKDOWN VOLTAGE $V_{GS} = 0\text{V}, I_D = -1.0\text{mA}$ | BV_{DSS} | -100 | - | - | Volts |
| STATIC DRAIN TO SOURCE ON STATE RESISTANCE $V_{GS} = -10\text{V}, I_D = 2.2\text{A}$ | $R_{DS(ON)}$ | - | - | 0.60 | Ω |
| GATE THRESHOLD VOLTAGE $V_{DS} = V_{GS}, I_D = -250\mu\text{A}$ | $V_{GS(th)}$ | -2.0 | - | 4.0 | Volts |
| FORWARD TRANSCONDUCTANCE $V_{DS} \geq 15\text{V}, I_{DS} = -2.2\text{A}$ | g_{fs} | 1.25 | - | - | $\text{S}(1/\Omega)$ |
| ZERO GATE VOLTAGE DRAIN CURRENT $V_{DS} = 0.8 \times \text{Max. Rating}, V_{GS} = 0\text{V}$ $V_{DS} = 0.8 \times \text{Max. Rating}, V_{GS} = 0\text{V}, T_J = 125^\circ\text{C}$ | I_{DSS} | - | - | -25 -250 | μA |
| GATE TO SOURCE LEAKAGE FORWARD $V_{GS} = 20\text{V}$ GATE TO SOURCE LEAKAGE REVERSE $V_{GS} = -20\text{V}$ | I_{GSS} | - | - | 100 -100 | nA |
| TURN ON DELAY TIME $V_{DD} = -50\text{V},$ RISE TIME $I_D = -3.5\text{A},$ | $t_{d(ON)}$ t_r | - | - | 60 100 | nsec |
| TURN OFF DELAY TIME $R_G = 7.5\Omega,$ FALL TIME $V_{GS} = 10\text{V}$ | $t_{d(OFF)}$ t_f | - | - | 50 70 | nsec |
| DIODE FORWARD VOLTAGE $T_C = 25^\circ\text{C}, I_S = -3.5\text{A},$ $V_{GS} = 0\text{V}$ | V_{SD} | - | - | -4.8 | Volts |
| REVERSE RECOVERY TIME $T_J = 25^\circ\text{C},$ $I_f = -3.5\text{A},$ $V_{DD} \leq -50 \text{ diF/ds} = 100\text{A}/\mu\text{sec}$ | t_{rr} | - | - | 200 | nsec |
| INPUT CAPACITANCE $V_{GS} = 0\text{V}$ | C_{iss} | - | 380 | - | pF |
| OUTPUT CAPACITANCE $V_{DS} = -25\text{V}$ | C_{oss} | - | 170 | - | pF |
| REVERSE TRANSFER CAPACITANCE $f = 1.0\text{MHz}$ | C_{rss} | - | 45 | - | pF |

SENSITRON
DATA SHEET 318
REVISION A

MECHANICAL DIMENSIONS: in Inches / m



LCC-28T

PINOUT TABLE

| QUAD MOSFET LCC-28T | GATE | DRAIN | SOURCE |
|--------------------------------|-------------|-----------------|-----------------|
| MOSFET 1 | PIN 1 | PINS 5, 6, 7 | PINS 2, 3, 4 |
| MOSFET 2 | PIN 8 | PINS 9, 10, 11 | PINS 12, 13, 14 |
| MOSFET 3 | PIN 15 | PINS 19, 20, 21 | PINS 16, 17, 18 |
| MOSFET 4 | PIN 22 | PINS 23, 24, 25 | PINS 26, 27, 28 |

TECHNICAL DATA

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