

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.

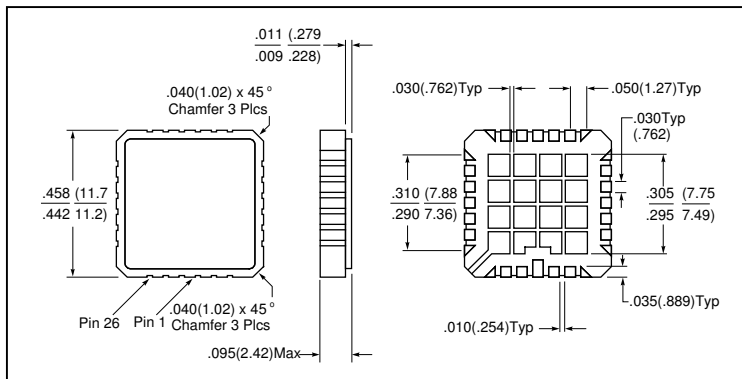
RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	$V_{GS}$	-	-	$\pm 20$	Volts
ON-STATE DRAIN CURRENT @ $T_C = 100^\circ\text{C}$	$I_D$	-	-	-3.5	Amps
PULSED DRAIN CURRENT (10ms)	$I_{DM}$	-	-	-10	Amps
OPERATING AND STORAGE TEMPERATURE	$T_{OP}/T_{STG}$	-55	-	+150	$^\circ\text{C}$
TOTAL DEVICE DISSIPATION @ $T_C = 25^\circ\text{C}$	$P_D$	-	-	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	$\Omega$
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	$\mu\text{A}$
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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