

TECHNICAL DATA
DATA SHEET 4965, REV. -

HERMETIC POWER MOSFET N-CHANNEL QUAD

FEATURES:

- 100 Volt, 0.18 Ohm, 5A MOSFET
- Fast Switching
- Low $R_{DS(on)}$
- Characterized at V_{GS} of 6V

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	I_D	-	-	5	Amps
PULSED DRAIN CURRENT @ $T_C = 25^\circ\text{C}$	I_{DM}	-	-	20	Amps
OPERATING AND STORAGE TEMPERATURE	T_J/T_{STG}	-55	-	+150	$^\circ\text{C}$
TOTAL DEVICE DISSIPATION @ $T_C = 25^\circ\text{C}$	P_D	-	-	27	Watts
THERMAL RESISTANCE, JUNCTION TO CASE	R_{thJC}	-	-	4.7	$^\circ\text{C/W}$

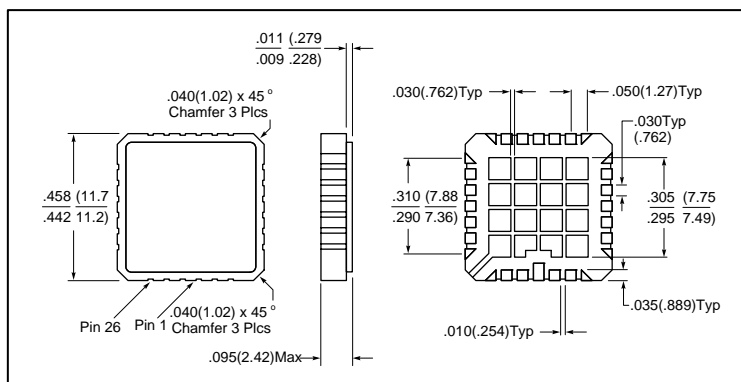
ELECTRICAL CHARACTERISTICS

DRAIN TO SOURCE BREAKDOWN VOLTAGE $V_{GS} = 0V, I_D = 250\mu\text{A}$	BV_{DSS}	100	-	-	Volts
STATIC DRAIN TO SOURCE ON STATE RESISTANCE $V_{GS} = 10V, I_D = 3.6A$	$R_{DS(ON)}$	-	-	0.18	Ω
STATIC DRAIN TO SOURCE ON STATE RESISTANCE $V_{GS} = 6V, I_D = 2.4A$	$R_{DS(ON)}$	-	-	0.20	Ω
GATE THRESHOLD VOLTAGE $V_{DS} = V_{GS}, I_D = 250\mu\text{A}$	$V_{GS(th)}$	2.0	-	4.0	Volts
FORWARD TRANSCONDUCTANCE $V_{DS} = 15V; I_{DS} = 3.6A$	g_{fs}	-	7	-	$S(1/\Omega)$
ZERO GATE VOLTAGE DRAIN CURRENT $V_{DS} = 0.8 \times \text{Max. rating}, V_{GS} = 0V$ $T_J = 125^\circ\text{C}$	I_{DSS}	-	-	1 100	μA
GATE TO SOURCE LEAKAGE FORWARD $V_{GS} = 20V$ GATE TO SOURCE LEAKAGE REVERSE $V_{GS} = -20V$	I_{GSS}	-	-	100 -100	nA
TURN ON DELAY TIME RISE TIME TURN OFF DELAY TIME FALL TIME $V_{DD} = 50V,$ $I_D = 3.6A,$ $R_G = 6\Omega$	$t_{d(ON)}$ t_r $t_{d(OFF)}$ t_f	-	-	30 30 40 30	nsec
DIODE FORWARD VOLTAGE $I_S = 7.4A, V_{GS} = 0V$ Pulse test, $t \leq 300 \mu\text{s}$, duty cycle $d \leq 2\%$	V_{SD}	-	-	1.5	Volts
REVERSE RECOVERY TIME $T_J = 25^\circ\text{C}$ $I_f = 3.6A$ $di/dt \leq 100A/\mu\text{sec}$	t_{rr}	-	-	80	nsec
INPUT CAPACITANCE OUTPUT CAPACITANCE REVERSE TRANSFER CAPACITANCE $V_{GS} = 0V$ $V_{DS} = 25V$ $f = 1.0\text{MHz}$	C_{iss} C_{oss} C_{rss}	-	370 60 30	-	pF

SENSITRON

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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

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