

TECHNICAL DATA
DATA SHEET 579, REV -

HERMETIC POWER MOSFET N-CHANNEL

FEATURES:

- 500 Volt, 0.85, Ohm, 5.5Amp MOSFET
- Isolated and Hermetically Sealed
- Surface Mount Package

MAXIMUM RATINGSALL RATINGS ARE AT $T_A = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

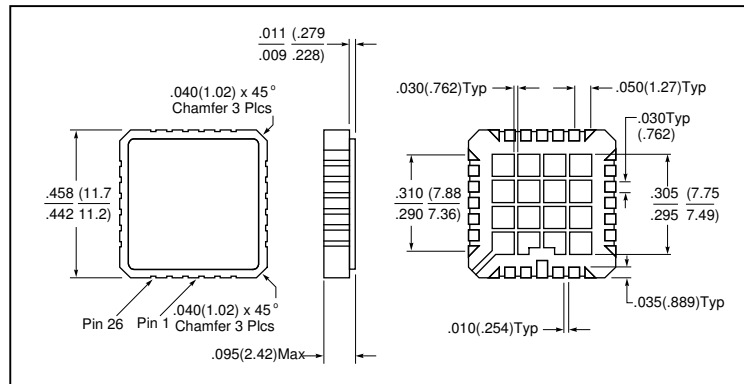
RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	V_{GS}	-	-	± 20	Volts
CONTINUOUS DRAIN CURRENT $T_C = 25^\circ\text{C}$	I_D	-	-	5.5	Amps
PULSED DRAIN CURRENT @ $T_C = 25^\circ\text{C}$	I_{DM}	-	-	22	Amps
OPERATING AND STORAGE TEMPERATURE	T_{OP}/T_{STG}	-55	-	+150	$^\circ\text{C}$
TERMAL RESISTANCE JUNCTION TO CASE	$R_{\theta JC}$	-	-	2.1	$^\circ\text{C/W}$
TOTAL DEVICE DISSIPATION @ $T_C = 25^\circ\text{C}$	P_D	-	-	60	Watts

ELECTRICAL CHARACTERISTICS

DRAIN TO SOURCE BREAKDOWN VOLTAGE $V_{GS} = 0V, I_D = 1.0mA$	BV_{DSS}	500	-	-	Volts
DRAIN TO SOURCE ON STATE RESISTANCE $V_{GS} = 10V, I_D = 3.5A$	$R_{DS(ON)}$	-	-	0.85	Ω
GATE THRESHOLD VOLTAGE $V_{DS} = V_{GS}, I_D = 250\mu A$	$V_{GS(th)}$	2.0	-	4.0	Volts
FORWARD TRANSCONDUCTANCE $V_{DS} \geq 15V, I_D = 3.5A$	g_{fs}	4.7	-	-	$S(1/\Omega)$
ZERO GATE VOLTAGE DRAIN CURRENT, $T_J = 25^\circ\text{C}$ ($V_{DS} = 0.8 \times \text{Max. Rating}, V_{GS} = 0V$), $T_J = 125^\circ\text{C}$	I_{DSS}	-	-	25 250	μA
GATE TO SOURCE LEAKAGE FORWARD $V_{GS} = 20V$ GATE TO SOURCE LEAKAGE REVERSE $V_{GS} = -20V$	I_{GSS}	-	-	100 -100	nA
TOTAL GATE CHARGE $V_{GS} = 10V,$ GATE TO SOURCE CHARGE $V_{DS} = 250V,$ GATE TO DRAIN CHARGE $I_D = 5.5A$	Q_g Q_{gs} Q_{gd}	-	-	68.5 12.5 40.5	nC
TURN ON DELAY TIME $V_{DD} = 250V,$ RISE TIME $I_D = 5.5A,$ TURN OFF DELAY TIME $R_G = 9.1\Omega,$ FALL TIME $V_{GS} = 10V$	$t_{d(ON)}$ t_r $t_{d(OFF)}$ t_f	-	21 73 72 51	-	nsec
CONTINUOUS SOURCE CURRENT	I_S	-	5.5	-	Amps
DIODE FORWARD VOLTAGE $T_J = 25^\circ\text{C}, I_S = 5.5V$ $V_{GS} = 0V$	V_{SD}	-	-	1.5	Volts
REVERSE RECOVERY TIME $T_J = 25^\circ\text{C},$ $I_S = 5.5A,$ $di/dt \leq -100A/\mu\text{sec},$	t_{rr}	-	-	700	nsec
REVERSE RECOVERY CHARGE $V_{DD} \leq 50V$	Q_{rr}	-	-	8.9	μC
INPUT CAPACITANCE $V_{GS} = 0V, V_{DS} = 25V,$ OUTPUT CAPACITANCE $f = 1.0MHz$ REVERSE TRANSFER CAPACITANCE	C_{iss} C_{oss} C_{rss}	-	1300 310 120	-	pF

SENSITRON
DATA SHEET 579
REVISION -

MECHANICAL DIMENSIONS: in Inches / mm



LCC-28T

PINOUTS

DEVICE TYPE	PIN(S) 1 & 15~28	PINS 5~11	PINS 2, 3, 13, 14
MOSFET - LCC-28T	SOURCE	DRAIN	GATE

TECHNICAL DATA

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