

TECHNICAL DATA
DATA SHEET 721, REV -

HERMETIC POWER MOSFET P-CHANNEL

FEATURES:

- -100 Volt, 0.22 Ohm MOSFET
- Isolated and Hermetically Sealed
- Simple Drive Requirements

MAXIMUM RATINGS

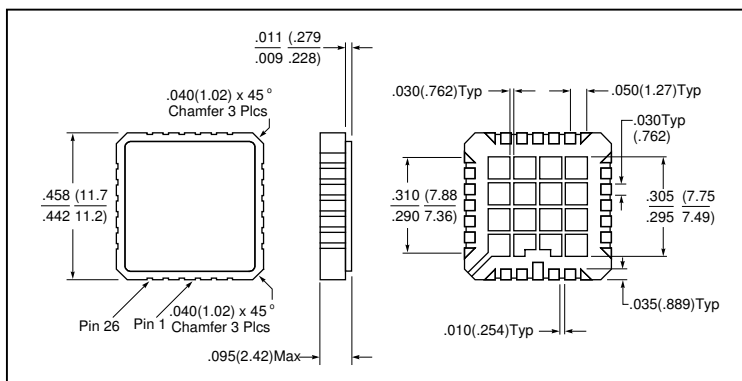
ALL RATINGS ARE AT $T_A = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	V_{GS}	-	-	± 20	Volts
CONTINUOUS DRAIN CURRENT $V_{GS}=10\text{V}, T_C = 25^\circ\text{C}$ $V_{GS}=10\text{V}, T_C = 100^\circ\text{C}$	I_D	-	-	-14 -9.5	Amps
OPERATING AND STORAGE TEMPERATURE	T_{OP}/T_{STG}	-55	-	150	$^\circ\text{C}$
TERMAL RESISTANCE JUNCTION TO CASE	$R_{\theta JC}$	-	-	1.36	$^\circ\text{C}/\text{W}$
TOTAL DEVICE DISSIPATION @ $T_C = 25^\circ\text{C}$	P_D	-	-	90	Watts

ELECTRICAL CHARACTERISTICS

DRAIN TO SOURCE BREAKDOWN VOLTAGE $V_{GS} = 0\text{V}, I_D = 1.0\text{mA}$	BV_{DSS}	-100	-	-	Volts
DRAIN TO SOURCE ON STATE RESISTANCE $V_{GS} = -10\text{V}, I_D = -9.5\text{A}$ $V_{GS} = -10\text{V}, I_D = -14\text{A}$	$R_{DS(ON)}$	-	-	0.22 0.24	Ω
GATE THRESHOLD VOLTAGE $V_{DS} = V_{GS}, I_D = -250\mu\text{A}$	$V_{GS(th)}$	-2.0	-	-4.0	Volts
FORWARD TRANSCONDUCTANCE $V_{DS} \geq -15\text{V}, I_{DS} = -9.5\text{A}$	g_{fs}	6.2	-	-	$\text{S}(1/\Omega)$
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 @ RATED GATE TO SOURCE LEAKAGE REVERSE V_{GS}	I_{GSS}	-	-	100 -100	nA
TOTAL GATE CHARGE $V_{GS} = -10\text{V}$, GATE TO SOURCE CHARGE $V_{DS} = .5X \text{ max. rating}$, GATE TO DRAIN CHARGE $I_D = .5 \times \text{rated } I_D$	Q_g Q_{gs} Q_{gd}	31 3.7 7.0	-	60 13 35.2	nC
TURN ON DELAY TIME $V_{DD} = -50\text{V}$ RISE TIME $I_D = 14\text{A}$ TURN OFF DELAY TIME $R_G = 9.1\Omega$ FALL TIME	$t_{d(ON)}$ t_r $t_{d(OFF)}$ t_f	- - - -	- - - -	35 85 85 65	nsec
DIODE FORWARD VOLTAGE $T_J = 25^\circ\text{C}, I_S = 14\text{A}$, $V_{GS} = 0\text{V}$	V_{SD}	-	-	-4.2	Volts
DIODE REVERSE RECOVERY TIME $T_J = 25^\circ\text{C}$ REVERSE RECOVERY CHARGE $I_f = 14\text{A}$ $di/dt = -100\text{A}/\text{sec}$	t_{rr} Q_{rr}	- -	- -	280 3.6	nsec μC
INPUT CAPACITANCE $V_{GS} = 0\text{ Volts}$ OUTPUT CAPACITANCE $V_{DS} = 25\text{ Volts}$ REVERSE TRANSFER CAPACITANCE $f = 1\text{ MHz}$	C_{iss} C_{oss} C_{rss}	- - -	1400 600 200	- - -	pF

MECHANICAL DIMENSIONS: in Inches / m



LCC-28T

PINOUT TABLE

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

TECHNICAL DATA

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