

TECHNICAL DATA
DATA SHEET 4001, REV -

HERMETIC POWER MOSFET
P-CHANNEL

FEATURES:

- -200 Volt, 0.5 Ohm, -11A MOSFET
- Electrically Isolated Hermetically Sealed
- Low $R_{DS(on)}$
- Equivalent to IRF9240 Series

MAXIMUM RATINGS

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

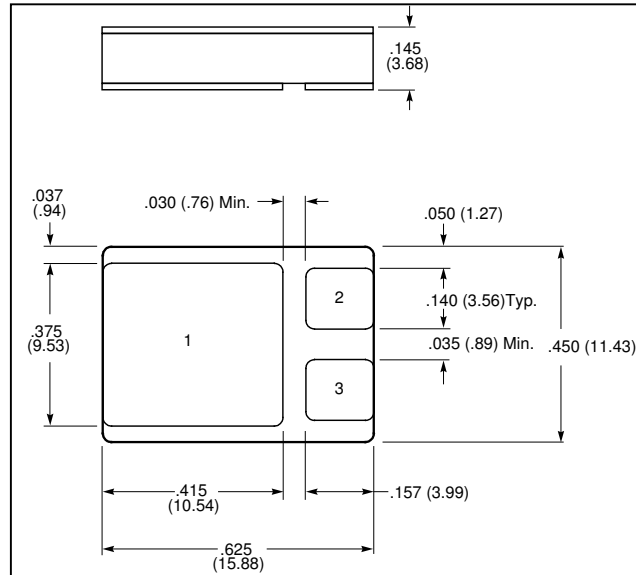
RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	V_{GS}	-	-	± 20	Volts
CONTINUOUS DRAIN CURRENT $V_{GS}=10\text{V}, T_C=25^\circ\text{C}$ $V_{GS}=10\text{V}, T_C=100^\circ\text{C}$	I_D	-	-	-11 -7	Amps
PULSED DRAIN CURRENT @ $T_C=25^\circ\text{C}$	I_{DM}	-	-	-44	Amps
OPERATING AND STORAGE TEMPERATURE	T_{OP}/T_{STG}	-55	-	+150	$^\circ\text{C}$
TERMAL RESISTANCE JUNCTION TO CASE	$R_{\theta JC}$	-	-	0.78	$^\circ\text{C}/\text{W}$
TOTAL DEVICE DISSIPATION @ $T_C=25^\circ\text{C}$	P_D	-	-	74	Watts

ELECTRICAL CHARACTERISTICS

DRAIN TO SOURCE BREAKDOWN VOLTAGE $V_{GS}=0\text{V}, I_D=1.0\text{mA}$	BV_{DSS}	-200	-	-	Volts
DRAIN TO SOURCE ON STATE RESISTANCE $V_{GS}=-10\text{V}, I_D=-7\text{A}$ $V_{GS}=-10\text{V}, I_D=-11\text{A}$	$R_{DS(ON)}$	-	-	0.50 0.58	Ω
GATE THRESHOLD VOLTAGE $V_{DS}=V_{GS}, I_D=-250\mu\text{A}$	$V_{GS(th)}$	-2.0	-	-4.0	Volts
FORWARD TRANSCONDUCTANCE $V_{DS}\geq-15\text{V}, I_{DS}=-7\text{A}$	g_{fs}	4.0	-	-	S(1/ Ω)
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
TOTAL GATE CHARGE $V_{GS}=-10\text{V}$ GATE TO SOURCE CHARGE $V_{DS}=\text{Max. Rating}\times 0.5$ GATE TO DRAIN CHARGE $I_D=-11\text{A}$	Q_g Q_{gs} Q_{gd}	28 3.0 4.5	-	60 15 38	nC
TURN ON DELAY TIME RISE TIME TURN OFF DELAY TIME FALL TIME $V_{DD}=-100\text{V}, I_D=-11\text{A}, R_G=9.1\Omega$	$t_{d(on)}$ t_r $t_{d(off)}$ t_f	-	-	35 85 85 65	nsec
DIODE FORWARD VOLTAGE $T_J=25^\circ\text{C}, I_S=-11\text{A}, V_{GS}=0\text{V}$	V_{SD}	-	-	-4.6	Volts
DIODE REVERSE RECOVERY TIME REVERSE RECOVERY CHARGE $T_J=25^\circ\text{C}, I_F=-11\text{A}, di/dt=-100\text{A}/\mu\text{sec}, V_{DD}\leq-50\text{V}$	t_{rr} Q_{rr}	-	-	440 3.6	nsec μC
INPUT CAPACITANCE OUTPUT CAPACITANCE REVERSE TRANSFER CAPACITANCE DRAIN TO CASE CAPACITANCE $V_{GS}=0\text{V}, V_{DS}=25\text{V}, f=1.0\text{MHz}$	C_{iss} C_{oss} C_{rss} C_{DC}	-	1200 570 81 12	-	pF

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MECHANICAL DIMENSIONS: in Inches / mm



PINOUT TABLE

DEVICE TYPE	PIN 1	PIN 2	PIN 3
MOSFET LCC-3P PACKAGE	DRAIN	SOURCE	GATE

TECHNICAL DATA

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