

TECHNICAL DATA
DATA SHEET 622, REV. -

HERMETIC POWER MOSFET N-CHANNEL

- 200 VOLT, 0.4 OHM, 9.0A MOSFET
- Fast Switching
- Low $R_{DS(on)}$
- Equivalent to IRFY230M

MAXIMUM RATINGS

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

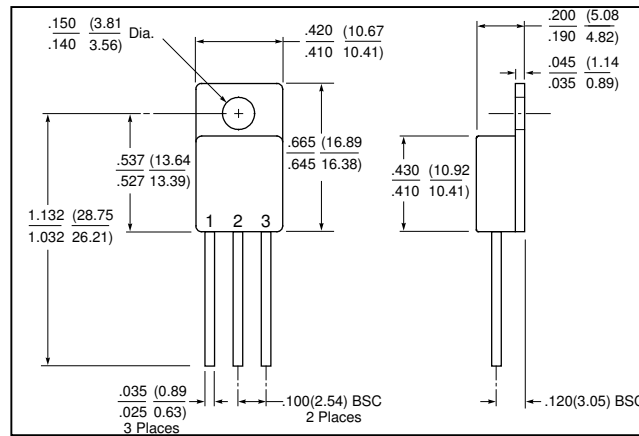
RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	V_{GS}	-	-	± 20	Volts
CONTINUOUS DRAIN CURRENT @ $T_C = 25^\circ\text{C}$	I_D	-	-	9.0	Amps
PULSED DRAIN CURRENT @ $T_C = 25^\circ\text{C}$	I_{DM}	-	-	36	Amps(pk)
OPERATING AND STORAGE TEMPERATURE	T_{OP}/T_{STG}	-55	-	+150	$^\circ\text{C}$
TERMAL RESISTANCE JUNCTION TO CASE	$R_{\theta JC}$	-	-	1.4	$^\circ\text{C}/\text{W}$
TOTAL DEVICE DISSIPATION @ $T_C = 25^\circ\text{C}$	P_D	-	-	89	Watts

ELECTRICAL CHARACTERISTICS

DRAIN TO SOURCE BREAKDOWN VOLTAGE $V_{GS} = 0\text{V}, I_D = 1.0\text{mA}$	BV_{DSS}	200	-	-	Volts
GATE THRESHOLD VOLTAGE $V_{DS} = V_{GS}, I_D = 250\mu\text{A}$	$V_{GS(th)}$	2.0	-	4.0	Volts
DRAIN TO SOURCE ON STATE RESISTANCE $V_{GS} = 10\text{Vdc}, I_D = 6.0\text{A}$ $I_D = 9.0\text{A}$	$R_{DS(ON)}$	-	-	0.4 0.49	Ω
ZERO GATE VOLTAGE DRAIN CURRENT $V_{DS} = 0.8 \times \text{Max. Rating}, V_{GS} = 0\text{Vdc}$ $V_{DS} = 0.8 \times \text{Max. Rating}$ $V_{GS} = 0\text{Vdc}, T_J = 125^\circ\text{C}$	I_{DSS}	-	-	25 250	μA
GATE TO BODY LEAKAGE CURRENT $V_{GS} = \pm 20\text{Vdc}$	I_{GSS}	-	-	± 100	nA
TOTAL GATE CHARGE GATE TO SOURCE CHARGE GATE TO DRAIN CHARGE $V_{GS} = 10\text{Vdc}$ $V_{DS} = 0.5\text{V Max. Rating},$ $I_D = 9.0\text{A}$	Q_g Q_{gs} Q_{gd}	16 3.0 5.5	-	39 5.7 20	nC
TURN ON DELAY TIME RISE TIME TURN OFF DELAY TIME FALL TIME $V_{DD} = 100\text{V},$ $I_D = 9.0\text{A},$ $R_G = 7.5\Omega$ $V_{GS} = 10\text{V}$	$t_{d(ON)}$ t_r $t_{d(OFF)}$ t_f	-	-	35 80 60 40	nsec
FORWARD VOLTAGE $T_J = 125^\circ\text{C}, I_S = 9.0\text{A}, V_{GS} = 0\text{V}$	V_{SD}	-	-	1.4	Volts
REVERSE RECOVERY TIME REVERSE RECOVERY CHARGE $I_S = 9.0\text{A},$ $di/dt \leq 100\text{A}/\mu\text{sec},$ $V_{DD} \leq 50\text{V}$	t_{rr}	-	-	500	nsec
INPUT CAPACITANCE OUTPUT CAPACITANCE REVERSE TRANSFER CAPACITANCE $V_{DS} = 25\text{Vdc},$ $V_{GS} = 0\text{Vdc},$ $f = 1\text{MHz}$	C_{iss} C_{oss} C_{rss}	-	600 250 80	-	pF

SENSITRON

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MECHANICAL DIMENSIONS: in Inches / mm**TO-257****PINOUT TABLE**

DEVICE TYPE	PIN 1	PIN 2	PIN 3
N CHANNEL MOSFET IN A TO-257 PACKAGE	DRAIN	SOURCE	GATE

TECHNICAL DATA

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