TECHNICAL DATA
DATA SHEET 4066, REV.-

HERMETIC POWER MOSFET N-CHANNEL

FEATURES:

- **400 Volt, 0.3 Ohm, 14A MOSFET**
- **Low $R_{DS\ (on)}$**
- **Electrically Equivalent to IRF350 Series**

MAXIMUM RATINGS

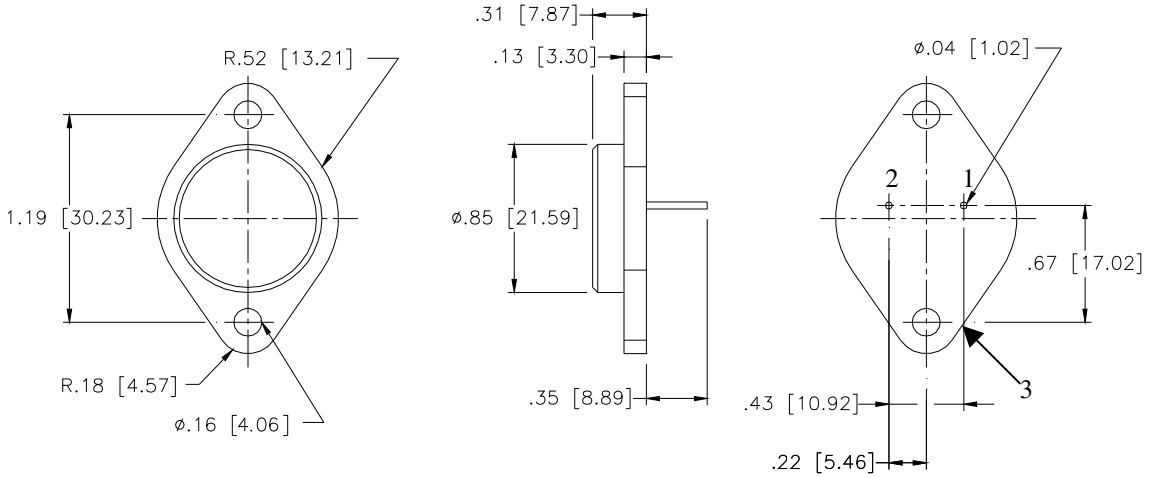
ALL RATINGS ARE AT T_C = 25°C UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	V_{GS}	-	-	±20	Volts
ON-STATE DRAIN CURRENT @ T_C = 25°C	I_D	-	-	14	Amps
ON-STATE DRAIN CURRENT @ T_C = 100°C	I_D	-	-	9.0	Amps
PEAK DRAIN CURRENT @ T_C = 25°C	I_{DM}	-	-	56	Amps
OPERATING AND STORAGE TEMPERATURE	T_{OP}/T_{STG}	-55	-	+150	°C
TOTAL DEVICE DISSIPATION @ T_C = 25°C	P_D	-	-	150	Watts
THERMAL RESISTANCE, JUNCTION TO CASE	R_{thJC}	-	-	0.83	°C/W

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNITS
DRAIN TO SOURCE BREAKDOWN VOLTAGE V_{GS} = 0V, I_D = 1.0mA	BV_{DSS}	400	-	-	Volts
STATIC DRAIN TO SOURCE ON STATE RESISTANCE V_{GS} = 10V, I_D = 9.0A V_{GS} = 10V, I_D = 14A	$R_{DS(ON)}$	-	-	 0.3 0.4	Ω
GATE THRESHOLD VOLTAGE V_{DS} = V_{GS}, I_{DS} = 0.25mA	$V_{GS(th)}$	2	-	4	Volts
FORWARD TRANSCONDUCTANCE V_{DS} ≥ 15V, I_{DS} = 9.0A	g_{fs}	6.0	-	-	S(1/Ω)
ZERO GATE VOLTAGE DRAIN CURRENT V_{DS} = Max. Rating, V_{GS} = 0V T_J = 25°C V_{DS} = 0.8xMax. Rating, V_{GS} = 0V, T_J = 125°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
TURN ON DELAY TIME V_{DD} = 200V, RISE TIME I_D = 14A, TURN OFF DELAY TIME R_G = 2.35Ω FALL TIME	$t_{d(ON)}$ t_r $t_{d(OFF)}$ t_f	-	-	35 190 170 130	nsec
TOTAL GATE CHARGE I_D = 14A,	Q_g	52	-	110	nC
GATE TO SOURCE CHARGE V_{GS} = 10V,	Q_{gs}	5	-	18	nC
GATE TO DRAIN CHARGE V_{DS} =0.5xMax. Rating	Q_{gd}	25	-	65	nC
DIODE FORWARD VOLTAGE T_C = 25°C, I_S = 14A, V_{GS} = 0V	V_{SD}	-	-	1.7	Volts
REVERSE RECOVERY CHARGE T_J = 25°C, di/dt ≤ 100A/µsec, V_{DD} ≤ 50V	Q_{RR}	-	-	250	µC
REVERSE RECOVERY TIME T_J = 25°C, I_F = 14A, di/dt ≤ 100A/µsec, V_{DD} ≤ 50V	t_{rr}	-	-	1200	nsec
INPUT CAPACITANCE V_{GS} = 0 V OUTPUT CAPACITANCE V_{DS} = 25 V REVERSE TRANSFER CAPACITANCE f = 1.0MHz	C_{iss} C_{oss} C_{rss}	-	2600 680 250	-	pF

MECHANICAL DIMENSIONS: in Inches / mm



PINOUT TABLE

DEVICE TYPE	PIN 1	PIN 2	PIN 3
MOSFET TO-3 / TO-204 AA PACKAGE	SOURCE	GATE	DRAIN

TECHNICAL DATA

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