TECHNICAL DATA
DATA SHEET 4167, REV -

HERMETIC POWER MOSFET
N-CHANNEL

FEATURES:

- **400 Volt, .20 Ohm, 23A MOSFET**
- **Isolated Hermetic Metal Package**
- **Fast Switching**
- **Low $R_{DS\ (on)}$**
- **Similar to IRFM360**

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	I_D	-	-	23	Amps
PULSED DRAIN CURRENT @ T_C = 25°C	I_{DM}	-	-	92	Amps
OPERATING AND STORAGE TEMPERATURE	T_J/T_{STG}	-55	-	+150	°C
TOTAL DEVICE DISSIPATION @ T_C = 25°C	P_D	-	-	250	Watts

ELECTRICAL CHARACTERISTICS

DRAIN TO SOURCE BREAKDOWN VOLTAGE V_{GS} = 0V, I_D = 1.0 mA	BV_{DSS}	400	-	-	Volts
STATIC DRAIN TO SOURCE ON STATE RESISTANCE V_{GS} = 10V, I_D = 14A V_{GS} = 10V, I_D = 23A	$R_{DS(ON)}$	-	-	0.20 0.23	Ω
GATE THRESHOLD VOLTAGE V_{DS} = V_{GS}, I_D = 250μA	$V_{GS(th)}$	2.0	-	4.0	Volts
FORWARD TRANSCONDUCTANCE V_{DS} ≥ 15V, I_{DS} = 14A	g_{fs}	1.4	-	-	S(1/Ω)
ZERO GATE VOLTAGE DRAIN CURRENT V_{DS} = 0.8 x Max. 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

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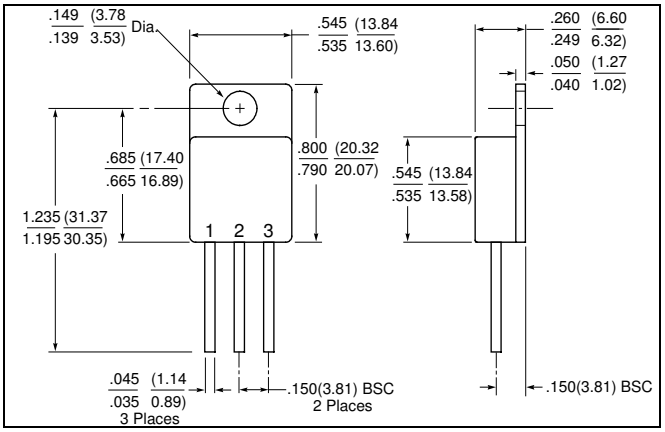
ELECTRICAL CHARACTERISTICS (Continued)

RATING		SYMBOL	MIN.	TYP.	MAX.	UNITS
TURN ON DELAY TIME 200V, RISE TIME TURN OFF DELAY TIME 10V FALL TIME	V_{DD} = I_D = 23A, V_{GS} =	$t_{d(ON)}$ t_r $t_{d(OFF)}$ t_f	-	18 79 100 67	33 140 120 100	nsec
DIODE FORWARD VOLTAGE % Pulse test, t ≤ 300 μs, duty cycle d ≤ 2	I_S = 23A, V_{GS} = 0V	V_{SD}	-	-	1.8	Volts
REVERSE RECOVERY TIME	T_J = 25°C, I_f = 23A di/dt = 100A/μsec	t_{rr} Q_{rr}	-	420	630 8.4	nsec μC
INPUT CAPACITANCE OUTPUT CAPACITANCE REVERSE TRANSFER CAPACITANCE	V_{GS} = 0 V V_{DS} = 25 V f = 1.0MHz	C_{iss} C_{oss} C_{rss}	-	4500 1100 490	-	pF
THERMAL RESISTANCE, JUNCTION TO CASE		R_{thJC}	-	-	0.83	°C/W

MECHANICAL DIMENSIONS: in Inches / mm



TO-254

DEVICE TYPE	PIN-1	PIN-2	PIN-3
N-CHANNEL MOSFET TO-254 PACKAGE	DRAIN	SOURCE	GATE

TECHNICAL DATA

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