HERMETIC POWER MOSFET
N-CHANNEL

DESCRIPTION: 100 VOLT, 33 AMP, 0.06 OHM MOSFET IN A HERMETIC TO-257 PACKAGE.

MAXIMUM RATINGS

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

RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	V_{GS}	-	-	±20	Volts
CONTINUOUS DRAIN CURRENT V_{GS}=10V, T_C = 25°C V_{GS}=10V, T_C = 100°C	I_D	-	-	33 20	Amps
PULSED DRAIN CURRENT @ T_C = 25°C	I_{DM}	-	-	99	Amps(pk)
OPERATING AND STORAGE TEMPERATURE	T_{OP}/T_{STG}	-55	-	+150	°C
TERMAL RESISTANCE JUNCTION TO CASE	$R_{\theta JC}$	-	-	0.80	°C/W
TOTAL DEVICE DISSIPATION @ T_C = 25°C	P_D	-	-	150	Watts

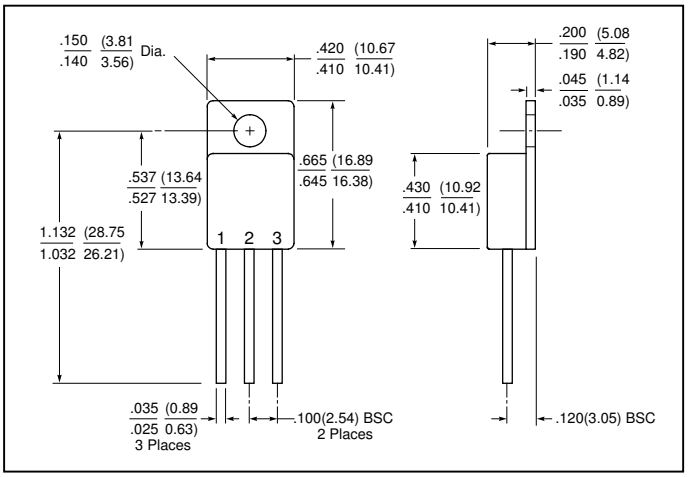
ELECTRICAL CHARACTERISTICS

DRAIN TO SOURCE BREAKDOWN VOLTAGE V_{GS} = 0V, I_D = 250µA	BV_{DSS}	100	-	-	Volts
DRAIN TO SOURCE ON STATE RESISTANCE I_D = 16.5A, V_{GS} = 10V@T_J = 25°C	$R_{DS(ON)}$	-	-	0.06	Ω
FORWARD TRANSCONDUCTANCE V_{DS} = 80Vdc, I_{DS} = 16.5A	g_{fs}	8.0	-	-	S(1/Ω)
ZERO GATE VOLTAGE DRAIN CURRENT V_{DS} = 100Vdc, V_{GS} = 0Vdc V_{DS} = 100Vdc V_{GS} = 0Vdc, T_J = 125°C	I_{DSS}	-	-	 10 100	µA
GATE TO BODY LEAKAGE CURRENT V_{GS} = ±20Vdc, V_{DS} = 0Vdc	I_{GSS}	-	-	+100 -100	nA
TOTAL GATE CHARGE (V_{GS} = 10 Vdc, GATE TO SOURCE CHARGE V_{DS} = 80Vdc, GATE TO DRAIN CHARGE I_D = 33Adc)	Q_g Q_{gs} Q_{gd}		52 12 32	110	nC
TURN ON DELAY TIME (V_{DD} = 50V, RISE TIME I_D = 33Adc, TURN OFF DELAY TIME V_{GS} = 10 Vdc, FALL TIME R_G = 9.1Ω)	$t_{d(ON)}$ t_r $t_{d(ON)}$ t_f	-	18 164 48 83	40 330 100 170	nsec
FORWARD VOLTAGE, (I_S = 33Adc, V_{GS} = 0V) (I_S = 33Adc, V_{GS} = 0Vdc, T_J = 125°C)	V_{SD}	-	1.0 0.98	2.0	Volts
REVERSE RECOVERY TIME (I_S = 33Adc, V_{GS} = 0Vdc REVERSE RECOVERY CHARGE di/dt = 100A/µsec)	t_{rr} Q_{rr}	-	-	144 .93	nsec µC
INPUT CAPACITANCE (V_{DS} = 25 Vdc, OUTPUT CAPACITANCE V_{GS} = 0 Vdc, REVERSE TRANSFER CAPACITANCE f = 1 MHz)	C_{iss} C_{oss} C_{rss}	-	1830 678 559	2500 1200 1100	pF

SENSITRON

DATA SHEET 370
REVISION A

MECHANICAL DIMENSIONS: in Inches / mm



TO-257

PINOUT TABLE

DEVICE TYPE	PIN 1	PIN 2	PIN 3
MOSFET IN A TO-257 PACKAGE STANDARD VERSION	DRAIN	SOURCE	GATE
'R' VERSION	GATE	DRAIN	SOURCE

TECHNICAL DATA

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