

TECHNICAL DATA DATA SHEET 817, REV -

HERMETIC POWER MOSFET P-CHANNEL

FEATURES:

- -60 Volt, 0.4 Ohm, -18 A MOSFET
- Isolated Hermetic Metal Package
- Fast Switching
- Low R_{DS (on)}

MAXIMUM RATINGS

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

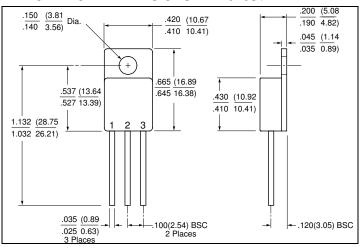
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RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	V _{GS}	-	-	±20	Volts
ON-STATE DRAIN CURRENT @ $T_c = 25^{\circ}C$	I _{D (on)}	-	-	-18	Amps
PULSED DRAIN CURRENT @ T _C = 25°C	I _{DM}	-	-	-72	Amps
OPERATING AND STORAGE TEMPERATURE	T _{OP} /T _{STG}	-55	-	+175	°C
THERMAL RESISTANCE, JUNCTION TO CASE	$R_{ ext{ heta}JC}$	-	-	1.32	°C/W
TOTAL DEVICE DISSIPATION @ $T_c = 25^{\circ}C$	PD	-	-	110	Watts

ELECTRICAL CHARACTERISTICS

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DRAIN TO SOURCE BREAKDOWN VOLTAGE	BV _{DSS}	-60	-	-	Volts
$V_{GS} = 0V, I_D = 250 \mu A$					
STATIC DRAIN TO SOURCE ON STATE RESISTANCE		-	-		
$V_{GS} = -10V, I_{D} = -11A$	R _{DS(ON)}			0.14	Ω
	- 103(ON)				
GATE THRESHOLD VOLTAGE $V_{DS} = V_{GS}$, $I_D = -250 \mu A$	V _{GS(th)}	-2.0	-	-4.0	Volts
FORWARD TRANSCONDUCTANCE	g _{fs}	5.9	-	-	S(1/Ω)
$V_{DS} = -25V_{DS(on)}, I_{D} = -11A$	0.0				- (· ·)
ZERO GATE VOLTAGE DRAIN CURRENT		-	-		
$V_{DS} = -60, V_{GS} = 0V$	I _{DSS}			-100	μA
$V_{DS} = -48, V_{GS} = 0V, T_J = 150^{\circ}C$	-000			-500	port
GATE TO SOURCE LEAKAGE FORWARD $V_{GS} = 20V$	I _{GSS}	-	_	100	nA
GATE TO SOURCE LEAKAGE REVERSE $V_{GS} = -20V$	GSS			-100	10.4
TURN ON DELAY TIME $V_{DD} = -30V$,	+		18	100	
RISE TIME $I_D = -18A$,	t _{d(ON)}	-	120	-	nsec
	t _r		20		11360
TURN OFF DELAY TIME $R_G = 12\Omega$,	t _{d(OFF)}				
FALL TIME $V_{GS} = -10V$	t _f		58		
TOTAL GATE CHARGE	Q_g	-	-	34	nC
$V_{GS} = -10V, I_D = -18A V_{DS} = -48$					
GATE TO SOURCE ON-STATE VOLTAGE	Q_gs	-	-	9.9	nC
$V_{GS} = -10V, I_D = -18A V_{DS} = -48$					
GATE DRAIN CHARGE	Q_{gd}	-	-	16	nC
$V_{GS} = -10V, I_D = -18A V_{DS} = -48$					
DIODE FORWARD VOLTAGE $T_c = 25^{\circ}C, I_s = -18A,$	V _{SD}	-	-	-6.3	Volts
$V_{GS} = 0V$					
REVERSE RECOVERY TIME $T_J = 25^{\circ}C$,	t _{rr}	-	-		
$I_{\rm F} = -18$ A, di/dt = -100A/µsec,				440	nsec
INPUT CAPACITANCE $V_{GS} = 0 V$,	Ciss	-	1100	-	
OUTPUT CAPACITANCE $V_{DS} = 25 V$,	C _{oss}		620		pF
REVERSE TRANSFER CAPACITANCE f = 1.0MHz			100		۳.
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SENSITRON DATA SHEET 817 REVISION -



MECHANICAL DIMENSIONS: in Inches / mm

<u>TO-257</u>

PINOUT TABLE

DEVICE TYPE	PIN 1	PIN 2	PIN 3
MOSFET	DRAIN	SOURCE	GATE
TO-257 PACKAGE			



TECHNICAL DATA

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