

TECHNICAL DATA
DATA SHEET 222, REV. B
Formerly Part Number SHD22632

HERMETIC POWER MOSFET N-CHANNEL

FEATURES:

- 100 Volt, .19 Ohm, 11A MOSFET
- Isolated Hermetic Metal Package
- Fast Switching
- Low $R_{DS(on)}$
- Equivalent to IRFY130M

MAXIMUM RATINGS

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

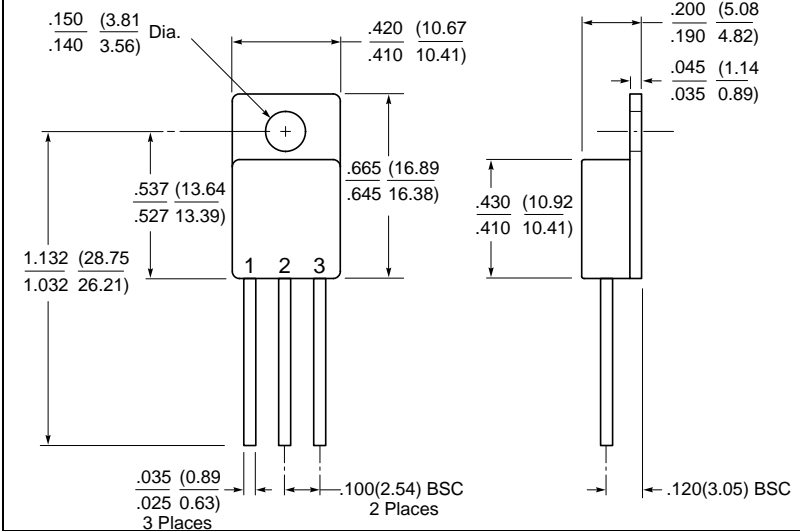
RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	V_{GS}	-	-	± 20	Volts
ON-STATE DRAIN CURRENT	I_D	-	-	11	Amps
PULSED DRAIN CURRENT	I_{DM}	-	-	44	Amps
OPERATING AND STORAGE TEMPERATURE	T_J/T_{STG}	-55	-	+150	$^\circ\text{C}$
TOTAL DEVICE DISSIPATION	P_D	-	-	45	Watts

ELECTRICAL CHARACTERISTICS

DRAIN TO SOURCE BREAKDOWN VOLTAGE $V_{GS} = 0V, I_D = 1.0\text{ mA}$	BV_{DSS}	100	-	-	Volts
STATIC DRAIN TO SOURCE ON STATE RESISTANCE $V_{GS} = 10V, I_D = 7.0A$	$R_{DS(ON)}$	-	-	.19	Ω
GATE THRESHOLD VOLTAGE $V_{DS} = V_{GS}, I_D = 250\mu A$	$V_{GS(th)}$	2.0	-	4.0	Volts
FORWARD TRANSCONDUCTANCE $V_{DS} \geq 15V, I_D = 7.0A$	g_{fs}	3.0	-	-	S(1/ Ω)
ZERO GATE VOLTAGE DRAIN CURRENT $V_{DS} = 0.8 \times \text{Max. rating}, V_{GS} = 0V$ $T_J = 25^\circ\text{C}$	I_{DSS}	-	-	25 250	μA
GATE TO SOURCE LEAKAGE FORWARD 20V $V_{GS} =$	I_{GSS}	-	-	100 -100	nA
GATE TO SOURCE LEAKAGE REVERSE $V_{GS} = -20V$					
TURN ON DELAY TIME RISE TIME $V_{DD} = 50V,$ $I_D = 11A$	$t_{d(ON)}$ t_r	-	-	30 75	nsec
TURN OFF DELAY TIME FALL TIME $R_G = 7.5\Omega$	$t_{d(OFF)}$ t_f			40 45	
DIODE FORWARD VOLTAGE $I_S = 14A, V_{GS} = 0V$ Pulse test, $t \leq 300\ \mu s$, duty cycle $d \leq 2\%$	V_{SD}	-	1.0	1.5	Volts
REVERSE RECOVERY TIME $T_J = 25^\circ\text{C},$ $V_{DD} \leq 50V$ $di/dt = 100A/\mu\text{sec}$	t_{rr}	-	-	300	nsec
INPUT CAPACITANCE OUTPUT CAPACITANCE REVERSE TRANSFER CAPACITANCE $V_{GS} = 0V$ $V_{DS} = 25V$ $f = 1.0\text{MHz}$	C_{iss} C_{oss} C_{rss}	-	650 240 44	-	pF
THERMAL RESISTANCE, JUNCTION TO CASE	R_{thJC}	-	-	2.8	$^\circ\text{C/W}$

SENSITRON
DATA SHEET 222 REV. B
REVISION -

MECHANICAL DIMENSIONS: in Inches / mm



TO-257

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

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