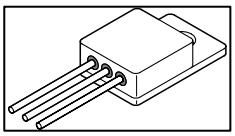
TECHNICAL DATA
DATA SHEET 171, REV. B
Formerly Part Number SHD2263

HERMETIC POWER MOSFET - N-CHANNEL

FEATURES:



- **200 Volt, 0.21 Ohm, 14A MOSFET**
- **Isolated Hermetic Metal Package**
- **Fast Switching**
- **Low $R_{DS\ (on)}$**
- **Ceramic Seals available (Add a "C" to the part number, i.e. SHDC226403)**
- **Similar to IRFY240**

MAXIMUM RATINGS

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

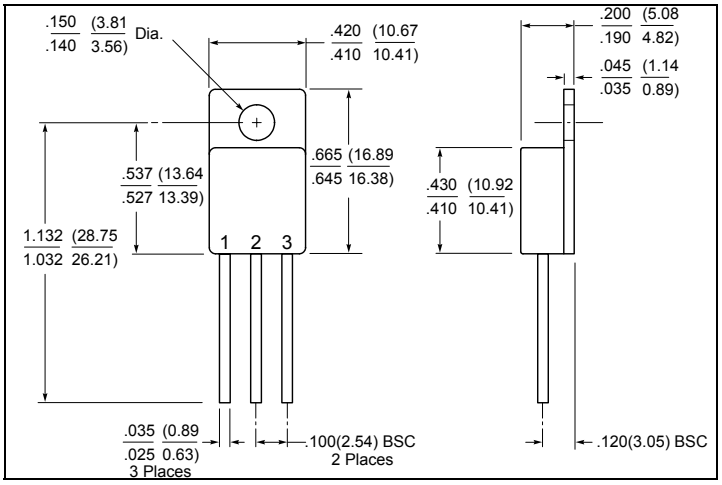
RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	V_{GS}	-	-	±20	Volts
ON-STATE DRAIN CURRENT $V_{DS} \geq 2V_{DS(on)}$, V_{GS} = 10V	$I_{D\ (on)}$	-	-	14	Amps
PULSED DRAIN CURRENT @ T_C = 25°C	I_{DM}	-	-	±56	Amps
OPERATING AND STORAGE TEMPERATURE	T_{OP}/T_{STG}	-55	-	+150	°C
THERMAL RESISTANCE, JUNCTION TO CASE	$R_{\theta JC}$	-	-	2.1	°C/W
TOTAL DEVICE DISSIPATION @ T_C = 25°C	P_D	-	-	60	Watts

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNITS
DRAIN TO SOURCE BREAKDOWN VOLTAGE V_{GS} = 0V, I_D = 250 μA	BV_{DSS}	200	-	-	Volts
DRAIN TO SOURCE ON-STATE VOLTAGE V_{GS} = 10V, I_D = 10A	$V_{DS(ON)}$	-	1.8	2.1	Volts
STATIC DRAIN TO SOURCE ON STATE RESISTANCE V_{GS} = 10V, I_D = 10A V_{GS} = 10V, I_D = 10A, T_C = 125°C	$R_{DS(ON)}$	-	-	 0.21 0.40	Ω
GATE THRESHOLD VOLTAGE V_{DS} = V_{GS}, I_D = 250μA	$V_{GS(th)}$	2.0	-	4.0	Volts
FORWARD TRANSCONDUCTANCE $V_{DS} \geq 2V_{DS(on)}$, I_D = 10A	g_{fs}	6.0	-	-	S(1/Ω)
ZERO GATE VOLTAGE DRAIN CURRENT V_{DS} = 0.8xMax. Rating, V_{GS} = 0V V_{DS} = 0.8xMax. Rating, V_{GS} = 0V, T_C = 125°C	I_{DSS}	-	 0.1 0.2	 0.25 1.0	mA
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 RISE TIME TURN OFF DELAY TIME FALL TIME V_{DD} = 100V, I_D =14A, R_G = 5.0Ω, V_{GS} = 10V	$t_{d(ON)}$ t_r $t_{d(OFF)}$ t_f	-	17 52 36 30	-	nsec
DIODE FORWARD VOLTAGE T_C = 25°C, I_S = -14A, V_{GS} = 0V	V_{SD}	-	-	-1.5	Volts
REVERSE RECOVERY TIME T_J = 150°C, I_f = I_S, di_F/ds = 100A/μsec,	t_{rr}	-	350	-	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}	-	1300 400 130	-	pF

SENSITRON
DATA SHEET 171
REVISION B

MECHANICAL DIMENSIONS: in Inches / mm



TO-257

PINOUT TABLE

DEVICE TYPE	PIN 1	PIN 2	PIN 3
SHD226403	DRAIN	SOURCE	GATE
SHD226403R	GATE	DRAIN	SOURCE