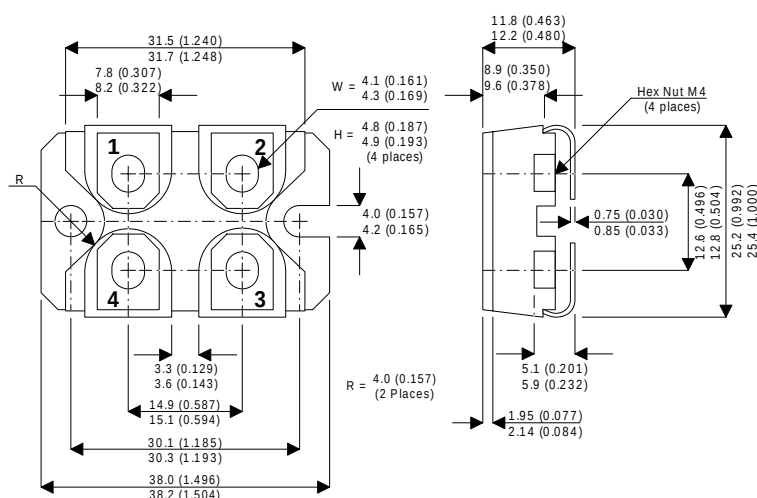


Dimensions in mm (inches)

POWER MOSFETS FOR AUDIO APPLICATIONS

- **HIGH SPEED SWITCHING**
- **N-CHANNEL POWER MOSFET**
- **SEMEFAB DESIGNED AND DIFFUSED**
- **HIGH VOLTAGE (160V & 200V)**
- **HIGH ENERGY RATING**
- **ENHANCEMENT MODE**
- **INTEGRAL PROTECTION DIODE**
- **P-CHANNEL ALSO AVAILABLE**



Pin 1 – Drain
Pin 2 – Source
Pin 3 – Gate
Pin 4 – Drain

($T_{\text{case}} = 25^{\circ}\text{C}$ unless otherwise stated)

(T _{case} = 25°C unless otherwise stated)		BUZ900X4S	BUZ901X4S
V _{DSX}	Drain – Source Voltage	160V	200V
V _{GS}	Gate – Source Voltage	±14V	
I _D	Continuous Drain Current	32A	
I _{D(PK)}	Body Drain Diode	32A	
P _D	Total Power Dissipation @ T _{case} = 25°C	500W	
T _{stg}	Storage Temperature Range	–55 to 150°C	
T _j	Maximum Operating Junction Temperature	150°C	
R _{θJC}	Thermal Resistance Junction – Case	0.3°C/W	

ELECTRICAL RATINGS (T_{case} = 25°C unless otherwise stated)

	Characteristic	Test Conditions		Min.	Typ.	Max.	Unit
BV _{DSX}	Drain – Source Breakdown Voltage	V _{GS} = -10V	BUZ900X4S	160			V
		I _D = 10mA	BUZ901X4S	200			
BV _{GSS}	Gate – Source Breakdown Voltage	V _{DS} = 0	I _G = ±100μA	±14			V
V _{GS(OFF)}	Gate – Source Cut-Off Voltage	V _{DS} = 10V	I _D = 100mA	0.1		1.5	V
V _{DS(SAT)} *	Drain – Source Saturation Voltage	V _{GD} = 0	I _D = 32A			12	V
I _{DSX}	Drain – Source Cut-Off Current	V _{GS} = -10V				10	mA
		V _{DS} = 160V	BUZ900X4S			10	
		V _{DS} = 200V	BUZ901X4S			10	mA
y _{fs} *	Forward Transfer Admittance	V _{DS} = 10V	I _D = 5A	2		6	S
C _{iss}	Input Capacitance	V _{DS} = 10V	f = 1MHz		TBE		pF
C _{oss}	Output Capacitance				TBE		
C _{rss}	Reverse Transfer Capacitance				TBE		
t _{on}	Turn-on Time	V _{DS} = 20V	I _D = 7A		TBE		nS
t _{off}	Turn-off Time				TBE		

* Pulse Test: Pulse Width = 300μS , Duty Cycle ≤ 2%

