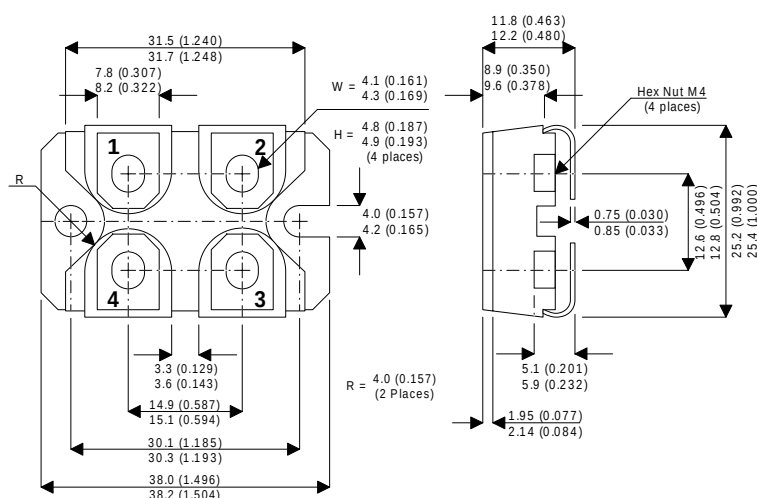


Dimensions in mm (inches)

POWER MOSFETS FOR AUDIO APPLICATIONS

- HIGH SPEED SWITCHING
- P-CHANNEL POWER MOSFET
- SEMEFAB DESIGNED AND DIFFUSED
- HIGH VOLTAGE (160V & 200V)
- HIGH ENERGY RATING
- ENHANCEMENT MODE
- INTEGRAL PROTECTION DIODE
- N-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)		BUZ905X4S	BUZ906X4S
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 ($T_{\text{case}} = 25^{\circ}\text{C}$ unless otherwise stated)

	Characteristic	Test Conditions	Min.	Typ.	Max.	Unit
BV_{DSX}	Drain – Source Breakdown Voltage	$V_{\text{GS}} = 10\text{V}$ $I_{\text{D}} = -10\text{mA}$	-160 -200			V
BV_{GSS}	Gate – Source Breakdown Voltage	$V_{\text{DS}} = 0$ $I_{\text{G}} = \pm 100\mu\text{A}$	± 14			V
$V_{\text{GS(OFF)}}$	Gate – Source Cut-Off Voltage	$V_{\text{DS}} = -10\text{V}$ $I_{\text{D}} = -100\text{mA}$	-0.1		-1.5	V
$V_{\text{DS(SAT)}}^*$	Drain – Source Saturation Voltage	$V_{\text{GD}} = 0$ $I_{\text{D}} = -32\text{A}$			-12	V
I_{DSX}	Drain – Source Cut-Off Current	$V_{\text{GS}} = 10\text{V}$ $V_{\text{DS}} = -160\text{V}$ $V_{\text{DS}} = -200\text{V}$			-10 -10	mA mA
y_{fs}^*	Forward Transfer Admittance	$V_{\text{DS}} = -10\text{V}$ $I_{\text{D}} = -5\text{A}$	2		6	S
C_{iss}	Input Capacitance	$V_{\text{DS}} = -10\text{V}$ $f = 1\text{MHz}$		TBE		pF
C_{oss}	Output Capacitance			TBE		
C_{rss}	Reverse Transfer Capacitance			TBE		
t_{on}	Turn-on Time	$V_{\text{DS}} = -20\text{V}$ $I_{\text{D}} = -7\text{A}$		TBE		nS
t_{off}	Turn-off Time			TBE		

* Pulse Test: Pulse Width = $300\mu\text{s}$, Duty Cycle $\leq 2\%$

