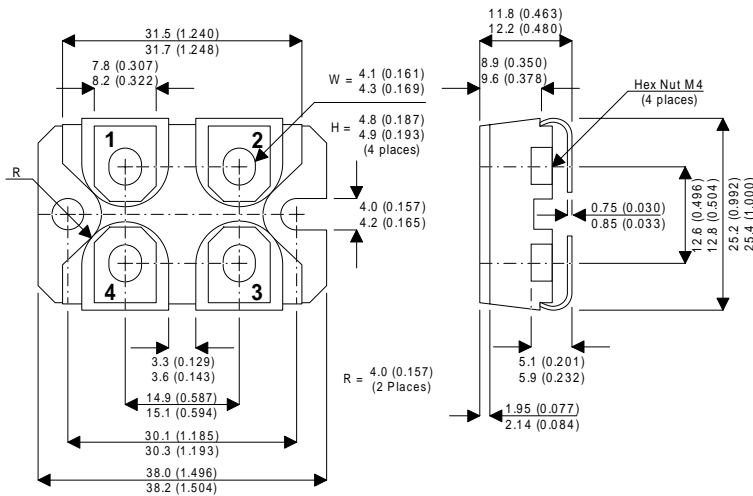


MECHANICAL DATA

Dimensions in mm (inches)

**P-CHANNEL
POWER MOSFET**

**POWER MOSFETS FOR
AUDIO APPLICATIONS**



FEATURES

- 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

SOT227

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

ABSOLUTE MAXIMUM RATINGS

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

		BUZ905X4S	BUZ906X4S
V_{DSX}	Drain – Source Voltage	-160V	-200V
V_{GS}	Gate – Source Voltage	$\pm 14V$	
I_D	Continuous Drain Current	-32A	
$I_{D(PK)}$	Body Drain Diode	-32A	
P_D	Total Power Dissipation @ $T_{case} = 25^{\circ}C$	500W	
T_{stg}	Storage Temperature Range	-55 to 150°C	
T_j	Maximum Operating Junction Temperature	150°C	
$R_{\theta JC}$	Thermal Resistance Junction – Case	0.3°C/W	

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

	Characteristic	Test Conditions	Min.	Typ.	Max.	Unit
BV_{DSX}	Drain – Source Breakdown Voltage	$V_{GS} = 10V$ $I_D = -10mA$	-160 -200			V
BV_{GSS}	Gate – Source Breakdown Voltage	$V_{DS} = 0$ $I_G = \pm 100\mu A$	± 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	$V_{GS} = 10V$ $V_{DS} = -160V$ $V_{DS} = -200V$			-10 -10	mA mA
y_{fs}^*	Forward Transfer Admittance	$V_{DS} = -10V$ $I_D = -5A$	2		6	S
C_{iss}	Input Capacitance			TBE		pF
C_{oss}	Output Capacitance	$V_{DS} = -10V$ $f = 1MHz$		TBE		
C_{riss}	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 = $300\mu S$, Duty Cycle $\leq 2\%$

