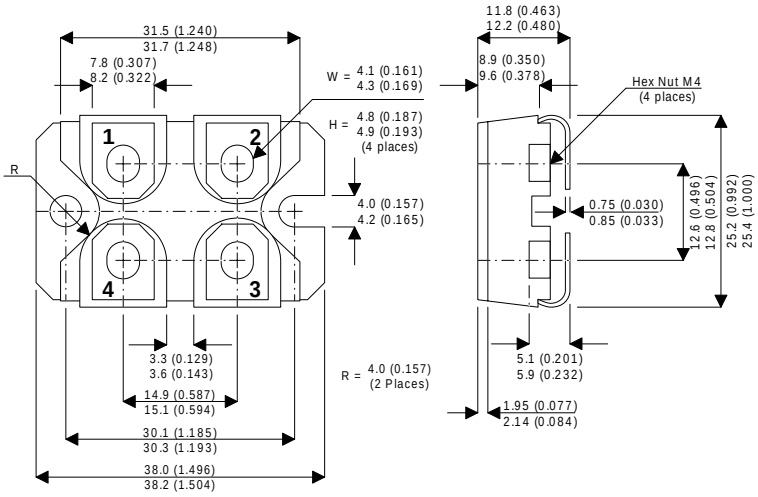
BUZ900X4S
BUZ901X4S

NEW PRODUCT UNDER DEVELOPMENT

MECHANICAL DATA
Dimensions in mm (inches)

N–CHANNEL POWER MOSFET



SOT227
Pin 1 – Drain
Pin 2 – Source
Pin 3 – Gate
Pin 4 – Drain

POWER MOSFETS FOR AUDIO APPLICATIONS

FEATURES

- **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**

ABSOLUTE MAXIMUM RATINGS

(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	
$R_{\theta JC}$	Thermal Resistance Junction – Case		0.3°C/W	

MAGNA TEC

BUZ900X4S
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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					
		V_{DS} = 160V	BUZ900X4S			10	mA
		V_{DS} = 200V	BUZ901X4S			10	mA
yfs*	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%