



BUZ900X4S
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NEW PRODUCT UNDER DEVELOPMENT

MECHANICAL DATA

Dimensions in mm (inches)

N-CHANNEL POWER MOSFET

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

SOT227

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

ABSOLUTE MAXIMUM RATINGS

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

		BUZ900X4S	BUZ901X4S
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 $150^{\circ}C$	
T_j	Maximum Operating Junction Temperature	$150^{\circ}C$	
$R_{\theta JC}$	Thermal Resistance Junction – Case	$0.3^{\circ}C/W$	



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	BUZ900X4S			10	mA
		V _{DS} = 160V				10	mA
		V _{DS} = 200V				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%

