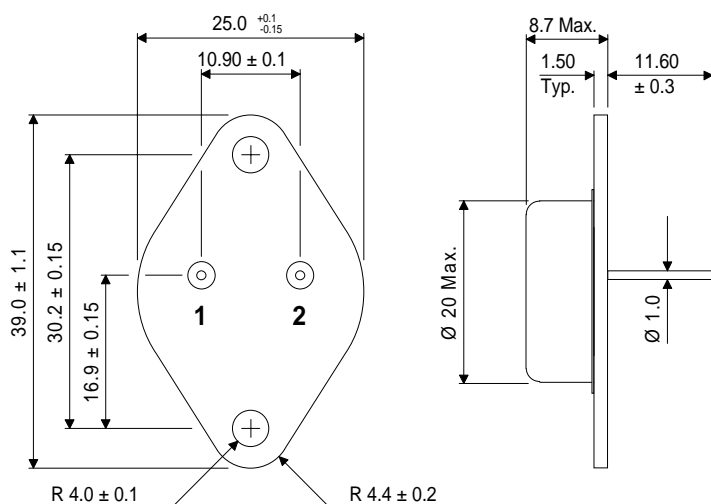


**BUZ907D**  
**BUZ908D**

## MECHANICAL DATA

Dimensions in mm



### TO-3

Pin 1 – Gate

Pin 2 – Drain

Case – Source

## P-CHANNEL POWER MOSFET

### POWER MOSFETS FOR AUDIO APPLICATIONS

#### FEATURES

- HIGH SPEED SWITCHING
- SEMEFAB DESIGNED AND DIFFUSED
- HIGH VOLTAGE (220V & 250V)
- HIGH ENERGY RATING
- ENHANCEMENT MODE
- INTEGRAL PROTECTION DIODES
- COMPLIMENTARY N-CHANNEL BUZ902D & BUZ903D

#### ABSOLUTE MAXIMUM RATINGS

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

		<b>BUZ907D</b>	<b>BUZ908D</b>
$V_{DSX}$	Drain – Source Voltage	-220V	-250V
$V_{GSS}$	Gate – Source Voltage	±14V	
$I_D$	Continuous Drain Current	-16A	
$I_{D(PK)}$	Body Drain Diode	-16A	
$P_D$	Total Power Dissipation @ $T_{case} = 25^{\circ}C$	250W	
$T_{stg}$	Storage Temperature Range	-55 to 150°C	
$T_j$	Maximum Operating Junction Temperature	150°C	
$R_{\theta JC}$	Thermal Resistance Junction – Case	0.5°C/W	

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

Characteristic		Test Conditions		Min.	Typ.	Max.	Unit
BV <sub>DSX</sub>	Drain – Source Breakdown Voltage	V <sub>GS</sub> = 10V	BUZ907D	-220			V
		I <sub>D</sub> = -10mA	BUZ908D	-250			V
BV <sub>GSS</sub>	Gate – Source Breakdown Voltage	V <sub>DS</sub> = 0	I <sub>G</sub> = ±100µA	±14			V
V <sub>GS(OFF)</sub>	Gate – Source Cut-Off Voltage	V <sub>DS</sub> = -10V	I <sub>D</sub> = -100mA	-0.10		-1.5	V
V <sub>DS(SAT)</sub> *	Drain – Source Saturation Voltage	V <sub>GD</sub> = 0	I <sub>D</sub> = -16A			-12	V
R <sub>DS(on)</sub> *	Static – Source Resistance	V <sub>GS</sub> = -10	I <sub>D</sub> = -16A			0.75	Ω
I <sub>DSX</sub>	Drain – Source Cut-Off Current	V <sub>GS</sub> = 10V	V <sub>DS</sub> = -220V BUZ907D			-10	mA
			V <sub>DS</sub> = -250V BUZ908D			-10	mA
y <sub>fs</sub> *	Forward Transfer Admittance	V <sub>DS</sub> = -10V	I <sub>D</sub> = -3A	0.7		4	S

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

Characteristic		Test Conditions		Min.	Typ.	Max.	Unit
C <sub>iSS</sub>	Input Capacitance	V <sub>DS</sub> = -10V f = 1MHz			TBA		pF
C <sub>oss</sub>	Output Capacitance				TBA		
C <sub>rSS</sub>	Reverse Transfer Capacitance				TBA		
t <sub>on</sub>	Turn-on Time	V <sub>DS</sub> = -20V			TBA		ns
t <sub>off</sub>	Turn-off Time	I <sub>D</sub> = -5A			TBA		

\* Pulse Test: Pulse Width = 300µs , Duty Cycle ≤ 2%.

