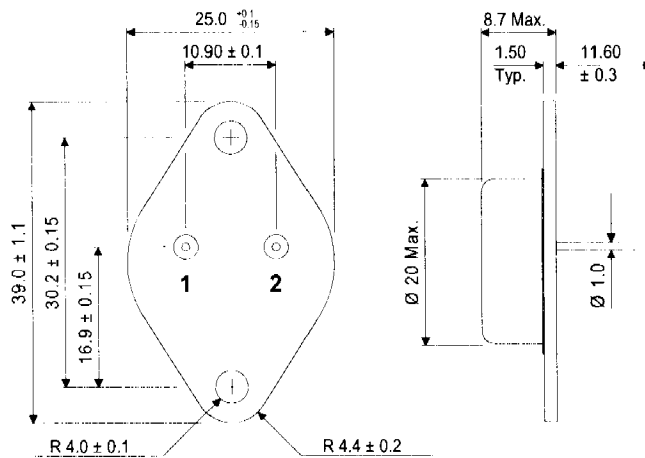


BUZ900
BUZ901

MECHANICAL DATA

Dimensions in mm



TO-3

Pin 1 – Gate

Pin 2 – Drain

Case – Source

**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 AS BUZ905 & BUZ906

ABSOLUTE MAXIMUM RATINGS

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

		BUZ900	BUZ901
V_{DSX}	Drain – Source Voltage	160V	200V
V_{GSS}	Gate – Source Voltage		$\pm 14V$
I_D	Continuous Drain Current		8A
$I_{D(PK)}$	Body Drain Diode		8A
P_D	Total Power Dissipation @ $T_{case} = 25^{\circ}C$		125W
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		$1^{\circ}C/W$

BUZ900 BUZ901

STATIC CHARACTERISTICS (T_{case} = 25°C unless otherwise stated)

Characteristic	Test Conditions	Min.	Typ.	Max.	Unit
BV _{DSX} Drain – Source Breakdown Voltage	V _{GS} = -10V I _D = 10mA	160			V
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	0.15		1.5	V
V _{DS(SAT)} * Drain – Source Saturation Voltage	V _{GD} = 0 I _D = 8A			12	V
I _{DSX} Drain – Source Cut-Off Current	V _{GS} = -10V V _{DS} = 160V BUZ900 V _{DS} = 200V BUZ901			10	mA
yfs* Forward Transfer Admittance	V _{DS} = 10V I _D = 3A	0.7		2	S

DYNAMIC CHARACTERISTICS (T_{case} = 25°C unless otherwise stated)

Characteristic	Test Conditions	Min.	Typ.	Max.	Unit
C _{iSS} Input Capacitance	V _{DS} = 10V		500		pF
C _{oSS} Output Capacitance	f = 1MHz		300		pF
C _{rSS} Reverse Transfer Capacitance			10		pF
t _{on} Turn-on Time	V _{DS} = 20V		100		ns
t _{off} Turn-off Time	I _D = 5A		50		ns

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

