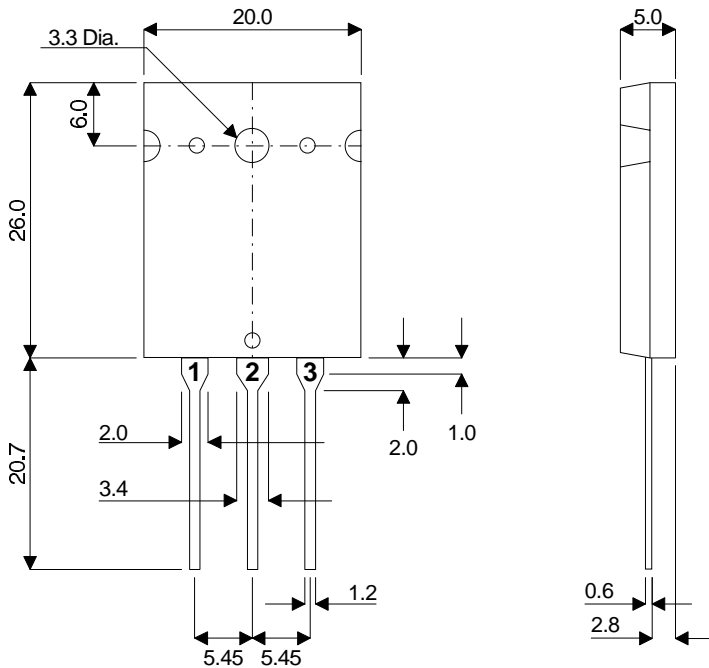


MECHANICAL DATA
Dimensions in mm

**P-CHANNEL
POWER MOSFET**

**POWER MOSFETS FOR
AUDIO APPLICATIONS**



TO-3PBL

Pin 1 – Gate

Pin 2 – Source
Case – Source

Pin 3 – Drain

FEATURES

- HIGH SPEED SWITCHING
- SEMEFAB DESIGNED AND DIFFUSED
- HIGH VOLTAGE (220V & 250V)
- HIGH ENERGY RATING
- ENHANCEMENT MODE
- INTEGRAL PROTECTION DIODES
- COMPLIMENTARY N-CHANNEL BUZ902DP & BUZ903DP

ABSOLUTE MAXIMUM RATINGS

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

		BUZ907DP	BUZ908DP
V_{DSX}	Drain – Source Voltage	-220V	-250V
V_{GSS}	Gate – Source Voltage	$\pm 14V$	
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_{DSX} Drain – Source Breakdown Voltage	$V_{GS} = 10V$ $I_D = -10mA$	BUZ907DP	-220			V
		BUZ908DP	-250			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	$V_{DS} = -10V$	$I_D = -100mA$	-0.10		-1.5	V
$V_{DS(SAT)}^*$ Drain – Source Saturation Voltage	$V_{GD} = 0$	$I_D = -16A$			-12	V
$R_{DS(on)}^*$ Static – Source Resistance	$V_{GS} = -10$	$I_D = -16A$			0.75	Ω
I_{DSX} Drain – Source Cut-Off Current	$V_{GS} = 10V$	$V_{DS} = -220V$ BUZ907DP			-10	mA
		$V_{DS} = -250V$ BUZ908DP			-10	mA
y_{fs}^* Forward Transfer Admittance	$V_{DS} = -10V$	$I_D = -3A$	0.7		4	S

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

Characteristic	Test Conditions		Min.	Typ.	Max.	Unit
C_{iss} Input Capacitance	$V_{DS} = -10V$ $f = 1MHz$			TBA		pF
C_{oss} Output Capacitance				TBA		
C_{rss} Reverse Transfer Capacitance				TBA		
t_{on} Turn-on Time	$V_{DS} = -20V$ $I_D = -5A$			TBA		ns
t_{off} Turn-off Time				TBA		

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

