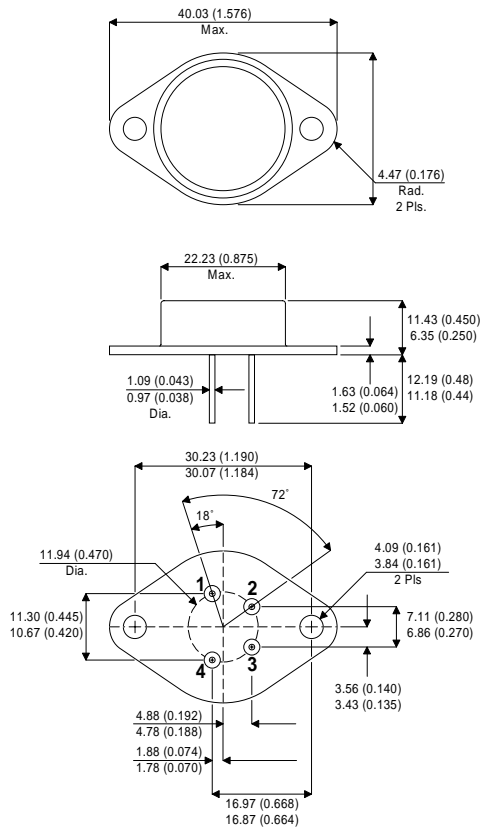


MECHANICAL DATA
Dimensions in mm



TO-3 (4 PIN Header)

Pin 1 - P-Ch Drain Pin 3 - N-Ch Gate
Pin 2 - N-Ch Drain Pin 4 - P-Ch Gate
Case - Source (common)

COMPLIMENTARY PAIR DUAL CHANNEL POWER MOSFET

POWER MOSFETS FOR AUDIO APPLICATIONS

FEATURES

- HIGH SPEED SWITCHING
- SEMEFAB DESIGNED AND DIFFUSED
- HIGH VOLTAGE (160V & 200V)
- HIGH ENERGY RATING
- ENHANCEMENT MODE
- INTEGRAL PROTECTION

ABSOLUTE MAXIMUM RATINGS

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

		MAG90X95	MAG91X96
V_{DSX}	Drain – Source Voltage	±160V	±200V
V_{GSS}	Gate – Source Voltage		±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°C
T_j	Maximum Operating Junction Temperature		150°C
$R_{\theta JC}$	Thermal Resistance Junction – Case		1°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	MAG90X95	160			V
			MAG91X96	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	0.15		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 MAG90X95			10	mA
			V _{DS} = 200V MAG91X96			10	
yfs*	Forward Transfer Admittance	V _{DS} = 10V	I _D = 3A	0.7		2	S

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

Characteristic		Test Conditions		TYP.	TYP	Unit
				N-Ch	P-Ch	
C _{iss}	Input Capacitance	V _{DS} = ±10V f = 1MHz		500	734	pF
C _{oss}	Output Capacitance			300	300	
C _{rss}	Reverse Transfer Capacitance			10	26	
t _{on}	Turn-on Time	V _{DS} = 20V		100	12	ns
t _{off}	Turn-off Time	I _D = 5A		50	60	

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

