

2N1416

**GENERAL DESCRIPTION**

PNP, Medium Power, alloy junction transistors for audio output applications.

**ABSOLUTE MAXIMUM RATINGS (Note 1)**

Storage Temperature .....	-40 to +75	°C
Junction Temperature .....	-40 to +75	°C
Junction Temperature Rise (without heat sink)	0.20	°C/mw
Junction Temperature Rise (with infinite heat sink)	0.12	°C/mw
Collector to Emitter Voltage, $V_{OE}$ .....	-18	volts
Collector Current, $I_O$ .....	-150	ma
Collector Dissipation at 25°C ambient temperature .....	250	mw

**ELECTRICAL CHARACTERISTICS (T = 25°C)**

**Static Characteristics**

	<i>Min.</i>	<i>Typ.</i>	<i>Max.</i>	
Collector Cutoff Current, $I_{CO}$ ( $V_{CE} = -9v$ ) .....		7	20	$\mu a$
Collector Current, $I_{C22}$ ( $R_B = 1000$ ohms, $V_{OB} = -9v$ ) ..		50	150	$\mu a$

**Small Signal Parameters**

( $V_O = -4.5v$ ,  $I_O = -2ma$ )

Input Resistance, $h_{ib}$ .....		15	35	ohms
Output Conductance, $h_{ob}$ .....		1	5	$\mu mhos$
Current Amplification Factor, $h_{fe}$ .....	70	110	150	
Voltage Feedback Ratio, $h_{rb}$ .....		$2.5 \times 10^{-4}$		
Cutoff Frequency, $f_{cb}$ .....		600		kc
Output Capacitance, $C_{ob}$ .....		90		$\mu\mu f$

**TO-1**

