

Silicon NPN Power Transistor

2SC2922

DESCRIPTION

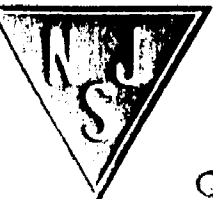
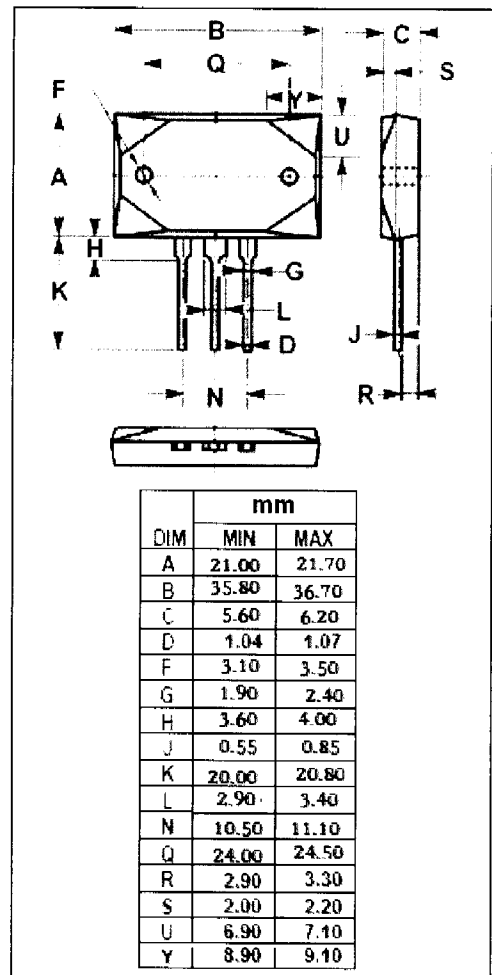
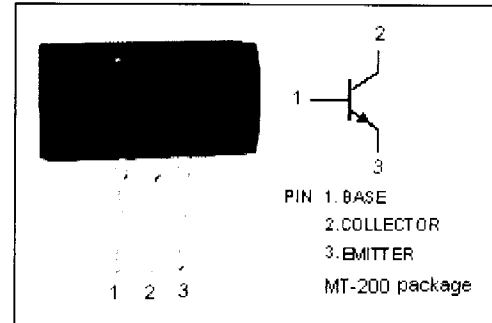
- High Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = 180V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SA1216

APPLICATIONS

- Designed for audio and general purpose applications.

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	180	V
V_{CEO}	Collector-Emitter Voltage	180	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	17	A
I_B	Base Current-Continuous	5	A
P_C	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	200	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Silicon NPN Power Transistor

2SC2922

ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = 25\text{mA}; I_B = 0$	180			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 8\text{A}; I_B = 0.8\text{A}$			2.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = 180\text{V}; I_E = 0$			100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 5\text{V}; I_C = 0$			100	μA
h_{FE}	DC Current Gain	$I_C = 8\text{A}; V_{CE} = 4\text{V}$	30		180	
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = 10\text{V}; f_{test} = 1.0\text{MHz}$		250		pF
f_T	Current-Gain—Bandwidth Product	$I_E = -2\text{A}; V_{CE} = 12\text{V}$	10			MHz

Switching times

t_{on}	Turn-on Time	$I_C = 10\text{A}, R_L = 4\Omega,$ $I_{B1} = -I_{B2} = 1\text{A}, V_{CC} = 40\text{V}$		0.2		μs
t_{stg}	Storage Time			1.3		μs
t_f	Fall Time			0.45		μs

◆ h_{FE} Classifications

O	Y	P	G
30-60	50-100	70-140	90-180