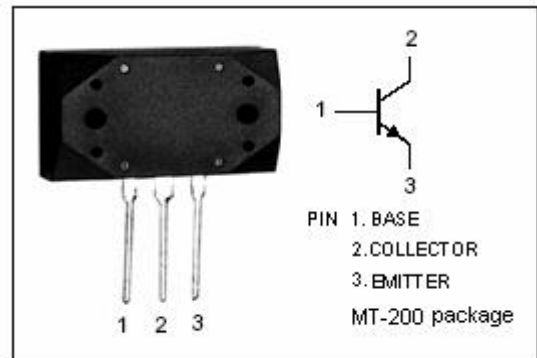


isc Silicon NPN Power Transistor

2SC2922

DESCRIPTION

- High Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = 180V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SA1216
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

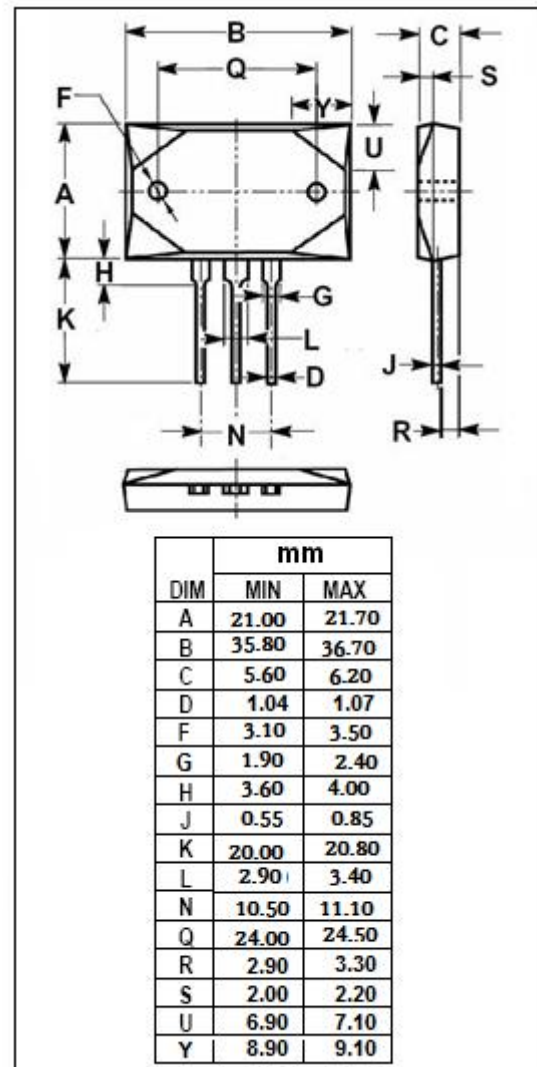


APPLICATIONS

- 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	$^\circ\text{C}$



isc Silicon NPN Power Transistor

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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 25mA ; I _B = 0	180			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 8A; I _B = 0.8A			2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 180V; I _E = 0			100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C =0			100	μ A
h _{FE}	DC Current Gain	I _C = 8A; V _{CE} = 4V	30		180	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1.0MHz		250		pF
f _T	Current-Gain—Bandwidth Product	I _E = -2A; V _{CE} = 12V	10			MHz

Switching times

t _{on}	Turn-on Time	I _C = 10A ,R _L = 4 Ω , I _{B1} = -I _{B2} = 1A, V _{CC} = 40V		0.2		μ s
t _{stg}	Storage Time			1.3		μ s
t _f	Fall Time			0.45		μ s

◆ h_{FE} Classifications

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

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