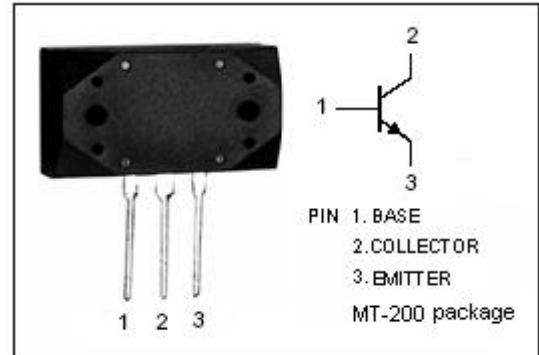


**isc Silicon NPN Power Transistor**
**2SC2921**
**DESCRIPTION**

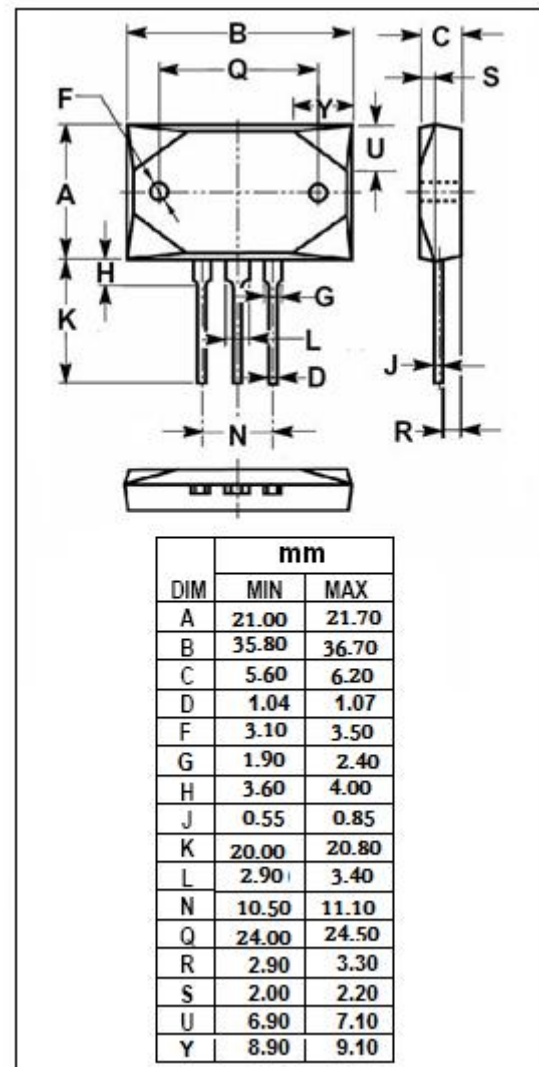
- Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = 160V(\text{Min})$
- High Power Dissipation
- Complement to Type 2SA1215
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- For audio and general purpose applications


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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	160	V
$V_{CEO}$	Collector-Emitter Voltage	160	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	15	A
$I_B$	Base Current-Continuous	4	A
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	150	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



## isc Silicon NPN Power Transistor

## 2SC2921

## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 25mA; I <sub>B</sub> = 0	160			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 0.5A			2.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 160V; I <sub>E</sub> = 0			100	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> = 0			100	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 5A; V <sub>CE</sub> = 4V	50		180	
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = 10V; f <sub>test</sub> = 1.0MHz		200		pF
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>E</sub> = -2A; V <sub>CE</sub> = 12V	10			MHz

## Switching times

t <sub>on</sub>	Turn-on Time	I <sub>C</sub> = 5A; R <sub>L</sub> = 12Ω, I <sub>B1</sub> = -I <sub>B2</sub> = 0.5A, V <sub>CC</sub> = 60V		0.2		μ s
t <sub>stg</sub>	Storage Time			1.5		μ s
t <sub>f</sub>	Fall Time			0.35		μ s

◆ h<sub>FE</sub> Classifications

O	P	Y
50-100	70-140	90-180

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