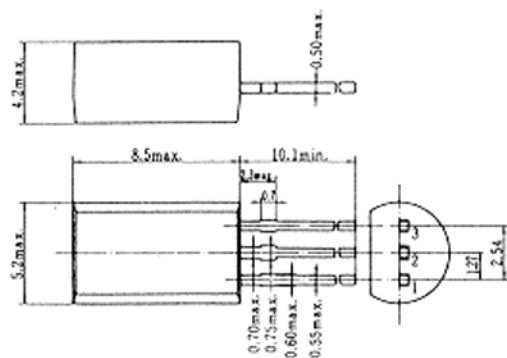


## 2SC1921

SILICON NPN TRIPLE DIFFUSED

HIGH FREQUENCY HIGH VOLTAGE AMPLIFIER  
VIDEO OUTPUT



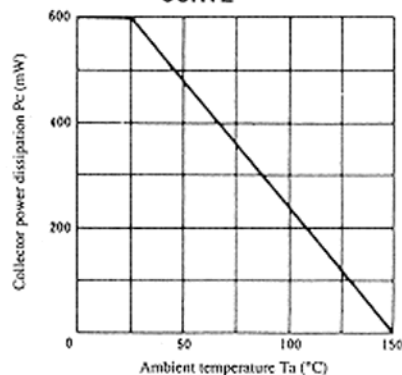
1. Emitter
  2. Collector
  3. Base
- (Dimensions in mm)

(JEDEC TO-92 MOD.)

### ■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC1921	Unit
Collector to base voltage	V <sub>CB0</sub>	250	V
Collector to emitter voltage	V <sub>CE0</sub>	200	V
Emitter to base voltage	V <sub>EB0</sub>	5	V
Collector current	I <sub>C</sub>	50	mA
Collector power dissipation	P <sub>C</sub>	600	mW
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

### MAXIMUM COLLECTOR DISSIPATION CURVE

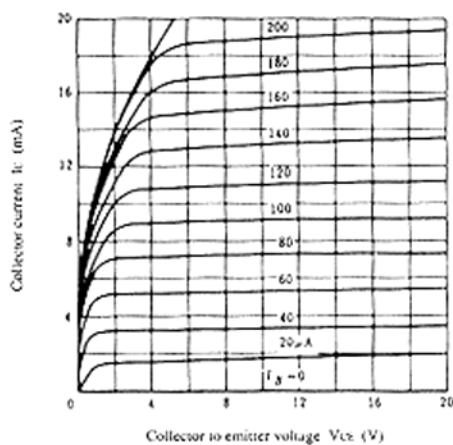


### ■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

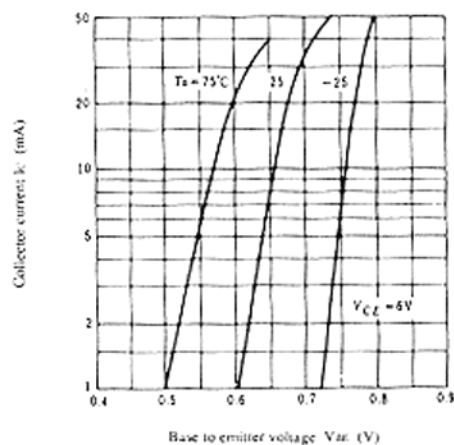
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	V <sub>(BR)CB0</sub>	I <sub>C</sub> = 10μA, I <sub>E</sub> = 0	250	—	—	V
Collector to emitter breakdown voltage	V <sub>(BR)CE0</sub>	I <sub>C</sub> = 1mA, R <sub>BE</sub> = ∞	200	—	—	V
Emitter to base breakdown voltage	V <sub>(BR)EB0</sub>	I <sub>E</sub> = 10μA, I <sub>C</sub> = 0	5	—	—	V
Collector cutoff current	I <sub>CE0</sub>	V <sub>CE</sub> = 120V, R <sub>BE</sub> = ∞	—	—	1.0	μA
DC current transfer ratio	h <sub>FE</sub>	V <sub>CE</sub> = 6V, I <sub>C</sub> = 10mA	30	—	300	
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 10mA, I <sub>B</sub> = 1mA	—	—	1.0	V
Gain bandwidth product	f <sub>T</sub>	V <sub>CE</sub> = 6V, I <sub>C</sub> = 10mA	60	130	—	MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 6V, I <sub>E</sub> = 0, f = 1MHz	—	3	4	pF

## 2SC1921

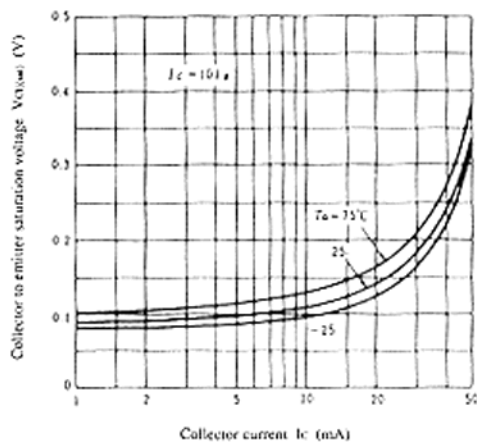
TYPICAL OUTPUT CHARACTERISTICS



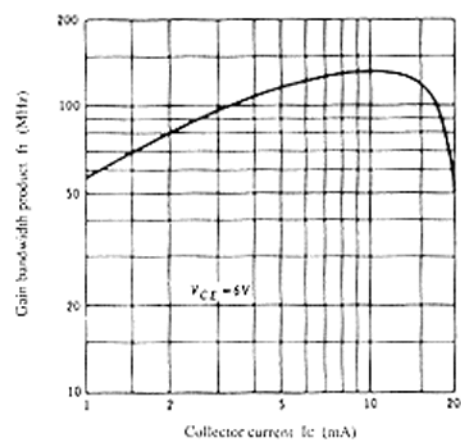
TYPICAL TRANSFER CHARACTERISTICS



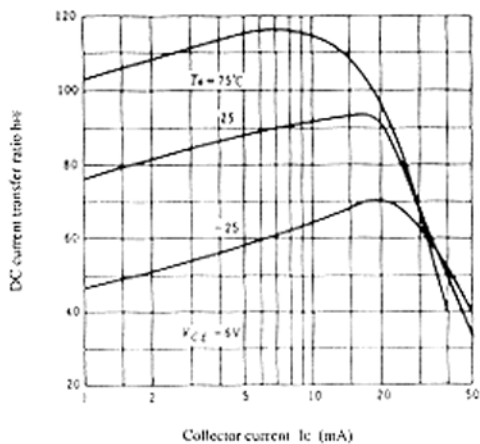
COLLECTOR TO EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT VS. COLLECTOR CURRENT



DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR TO BASE VOLTAGE

